



**UNDERGRADUATE CATALOG
2008-2010**

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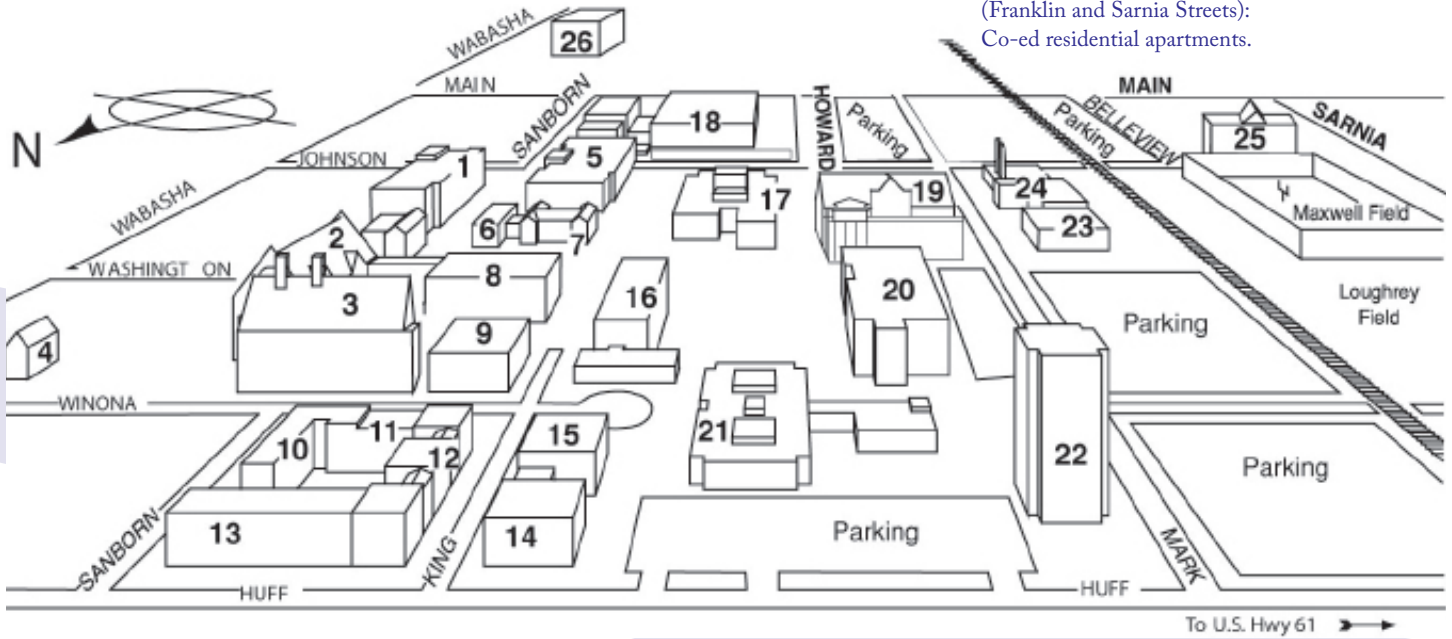
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The University reserves the right to make changes of an editorial nature to correct or amend the text of this catalog.

CAMPUS MAP

UNIVERSITY APARTMENTS AT EAST LAKE
(Franklin and Sarnia Streets):
Co-ed residential apartments.

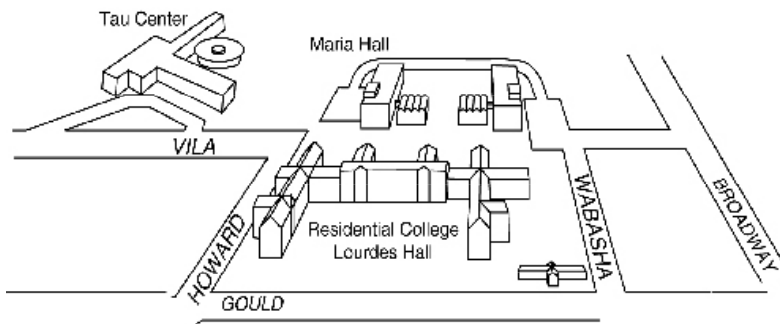


1. Maxwell Hall: Conference Center; Children's Center; One-Stop Center; Career Services; Department of Health, Exercise & Rehabilitative Sciences; and administrative offices.
2. Stark Hall: College of Nursing and Health Sciences, Departments of Nursing and Engineering
3. Science Laboratory Center
4. Alumni House: Emeriti Center
5. Somsen Hall: College of Business; Departments of Business Administration, Economics & Finance, Foreign Languages, Management of Information Systems & Operations, Marketing; and administrative offices.
6. Howell Hall: Television Studio
7. Phelps Hall: Departments of Mass Communication and Psychology
8. Pasteur Hall: College of Science & Engineering; Departments of Biology, Chemistry, Geoscience, and Physics
9. Watkins Hall: Departments of Computer Science and Art
10. Conway Hall: Women's residence hall
11. Shepard Hall: Co-ed residence hall
12. Morey Hall: Co-ed residence hall

13. Richards Hall: Co-ed residence hall
14. Lucas Hall: Women's residence hall
15. Prentiss Hall: Men's residence hall
16. Gildemeister Hall: College of Education; Departments of Counselor Education, Education, Mathematics & Statistics, Special Education
17. Performing Arts Center: Departments of Communication Studies, Music, Theatre and Dance
18. Memorial Hall: Departments of Physical Education & Sport Science; Recreation, Tourism & Therapeutic Recreation; Dance Studio
19. Darrell W. Krueger Library: Student Support Services, Tutoring Services, and University Archives
20. Minné Hall: College of Liberal Arts; Departments of English, History, Philosophy, Political Science, Social Work, and Sociology
21. Kryzsko Commons and Student Center
22. Sheehan Hall: Women's residence hall
23. Maintenance Building
24. Heating Plant
25. Maxwell Field at Alltel Stadium
26. Wabasha Hall: Counseling Center, Fitness Center, and Student Health

WEST CAMPUS

- Lourdes Hall: Co-ed residence hall; Residential College
- Maria Hall: Co-ed residence hall
- Tau Center: Co-ed residence hall; conferencing facility



Note: All buildings and parking lots accessible to the handicapped. All buildings except the Alumni House (5) are equipped with elevators. Call (507) 457-5008 to pre-arrange access.

WELCOME!

It is my pleasure to welcome you to Winona State University! I have been here three years now, and I am more excited than ever about what we have to offer our students and the community we serve. You join us as we are completing the celebration of our Sesquicentennial Year. A lot has happened since 1858 when the University was founded. We are exploring what our history can teach us, and we are looking ahead and thinking about what the next century will bring. We are glad to welcome you to WSU at such a special time.

WSU is recognized as a national leader in higher education. We continually strive for inclusive excellence in every aspect of University life. Our mission is to educate and enlighten our citizenry as a distinctive institution: A community of learners improving our world. I encourage you to become familiar with our mission statement. You will see it on banners all around campus. Pause a moment as you walk by those banners—now carrying our sesquicentennial flame—and think about helping us become a community of learners who can, indeed, make a difference in the lives of others. I believe that this mission will inspire you and guide you along your exciting journey at WSU.

We set high expectations for ourselves—administrators, faculty, staff, and students. We expect students to be dedicated to active learning, standards of excellence, cooperative learning, and personal growth and development. We expect you to take your education seriously. By incorporating these fundamental expectations into your daily life, you will contribute to your own success as well as the success of the University. In return, you can expect our faculty and staff to take you seriously and to help you find your own path that will bring meaning and purpose to your experience here. (To learn more about the University's expectations, visit www.winona.edu/handbook/expectations.htm.)

You are joining WSU as we undertake a grand challenge, to enhance the experience of all our students. For three years, the campus community has been thinking about what it means to be educated in the 21st century, what you will need to know as you prepare for life in a rapidly changing world, and how we can join you in that journey. By our own actions and how we live out our values, we want to show you what it means to live responsible, productive, and creative lives, inspired by what we learn and by the people we meet.

I hope your time at WSU will be both challenging and inspiring. May your time here offer you many wonderful experiences that you will cherish in the years to come, as you, in turn, reach out to enrich the lives of others.

Best regards,



Judith A. Ramaley, President



From Minneapolis/St. Paul

Take U.S. Hwy. 61 south into Winona. Stay on 61 to Huff Street. Turn left on Huff; then take a right on Sarnia Street. Turn left onto Main Street at four-way stop. Cross the railroad tracks, go one block, turn left on Mark Street. **You are on campus.**

From the west via Interstate 90

Take I-90 east to the Hwy. 43 North exit (252). Turn left on Hwy. 43, which brings you into Winona. At the stoplight, take a left on Hwy. 17 (Homer Rd.) and go to the stoplights. Turn left on U.S. Hwy. 14/61. Follow 61 to Huff Street. Turn right on Huff; then take a right on Sarnia Street at stoplight. Turn left on Main Street at four-way stop. Cross the railroad tracks, go one block, turn left on Mark Street. **You are on campus.**

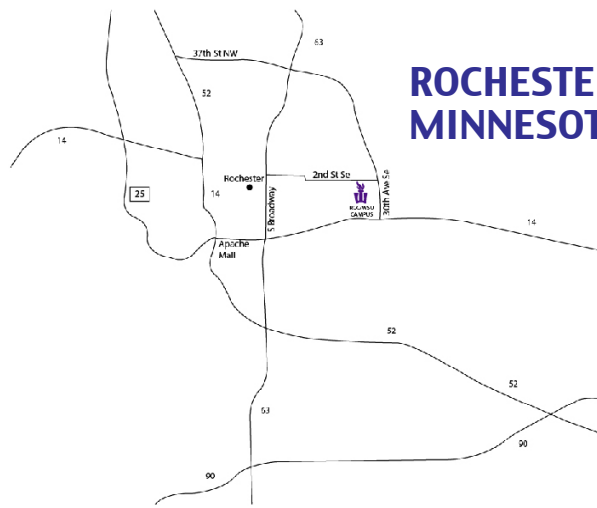
From La Crosse, Madison, Milwaukee, Chicago

Take Interstate 90/94 west to La Crosse and into Minnesota. Take the "to Winona" exit on U.S. Hwy. 61 and follow into Winona. Stay on 61 to Huff Street. Turn left on Huff; then take a right on Sarnia Street. Turn left onto Main Street. at four-way stop. Cross the railroad tracks, go one block, turn left on Mark Street. **You are on campus.**

From Rochester, Owatonna, Mankato, and other communities

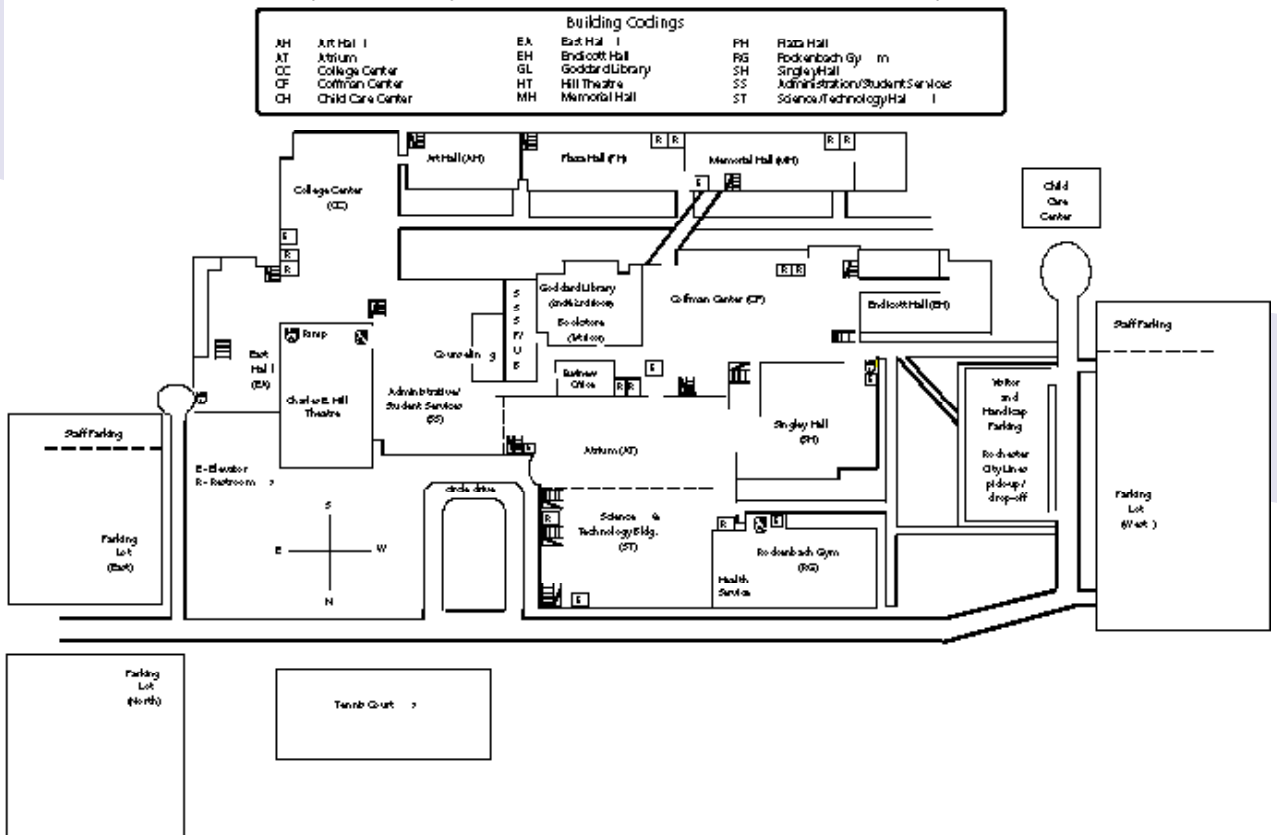
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ROCHESTER, MINNESOTA



ROCHESTER CAMPUS

Rochester Community College • University of Minnesota Rochester Center • Winona State University-Rochester Center



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INTRODUCTION

Winona State University is a comprehensive university that offers academically-inspired students an opportunity to obtain an education in the liberal arts and contemporary professions and to explore the application of knowledge to today's world. The University prepares students to be skilled, competent, and active citizens with a strong sense of personal responsibility and motivation to contribute to the communities where they live and work.

Founded in 1858 and located in the beautiful Upper Mississippi River Valley, Winona State University is built on a powerful sense of place and compassion for the human condition. The University offers distinctive graduate and undergraduate programs that reflect the special character of the communities it serves and that contribute to the quality of life in Minnesota and the region through thoughtful research, service, and unique collaborations with the community. Winona State University prepares the leaders of the 21st century to apply their knowledge to effectively solve complex and ever-changing problems. Winona State University is "a community of learners improving our world."

HISTORICAL VIEW—150 YEARS OF SERVICE

In 2008, Winona State University celebrates its sesquicentennial, marking 150 years of service to students, the community, and the world. The University was founded in 1858 when the first Minnesota State Legislature established normal schools "to prepare teachers for the common schools of the state." The first tax-supported school west of the Mississippi River was established at Winona to train teachers for the new frontier. Citizens of Winona quickly showed their support with donations of more than \$7,000 in money and land.

Classes began in 1860; however, the school closed for nearly three years during the Civil War. It reopened in November 1864 to continue its mission of preparing teachers for the new state of Minnesota. Construction of the school's first building was approved and completed in 1866, and classes were held in College Hall by 1869.

Phelps Hall opened in 1909 with a kindergarten teaching lab, gymnasium, and library. The State Normal School became Winona Teachers College in 1921 and was authorized to grant the bachelor's degree. In 1926, four students, two men and two women, graduated with the four-year teaching degree. From the 1920s until World War II, significant curriculum changes enhanced the academic quality of teacher education. New courses were added, and departments emerged to organize a growing institution. Intramural and extramural athletics, social organization, and co-curricular activities grew with the student population.

The boom following World War II saw rapid growth. In 1957, the institution became Winona State College; this new name reflected an expanded mission, which included the addition of Bachelor of Arts, Master of Science in Education, and Associate in Arts degrees. In 1975, the school became Winona State University.

Today, the University is structured into five colleges spread across three campuses in Winona and Rochester. It is a member of the Minnesota State Colleges and Universities system. The original Main campus and the West campus in Winona primarily serve traditional students; whereas the Rochester campus focuses primarily on non-traditional students, graduate programs, and the Institute for Lifelong Education.

WINONA STATE UNIVERSITY-ROCHESTER

Since 1917, Winona State University has served students in Rochester and the surrounding area. In 1993, the University entered into a partnership with Rochester Community and Technical College (RCTC) and the University of Minnesota to establish the University Center Rochester (UCR). Since its inception, over 5,000 bachelor's and master's students have graduated from UCR programs. Today, WSU-Rochester and RCTC offer degree programs from the associate through doctoral level.

On an annual basis, WSU-Rochester serves 2,000 students. Approximately 40 resident faculty and an additional 20 Winona campus faculty are dedicated to the Rochester campus each academic term. Because of the Rochester location, WSU-Rochester offers unique opportunities to collaborate with businesses, schools, and organizations in the area through specialized programs in computer science, health care, business, and education.

SESQUICENTENNIAL OBSERVANCE

In celebration of its sesquicentennial year, the University commissioned a special logo that captures the essence of the WSU journey. Elements of WSU's sesquicentennial logo recall the powerful legacy associated with the University logo. These elements are integrated into a modern design that reinforces the University's reputation as innovative and forward-looking.

The prominent flame echoes that of the University logo and represents the enduring "Light of Knowledge." The flame also suggests light shining the way to future hope and promise. The words "150 years" remind us of the academic excellence forged by the University's faculty, staff, and students over a century and a half. The line under the name and historical dates reflects the kettle from which the flame rises in the University logo. It suggests a strong foundation and conveys prominence to the words "Winona State University, 1858-2008."

WSU CAMPUSES

Three campuses make up Winona State University: the original Main Campus in Winona, the West Campus in Winona, and Winona State University-Rochester.

Main Campus

The original Main Campus provides a serene, yet stimulating collegiate environment in the heart of the city of Winona. Tree-lined walkways, fountains, prominent sculpture, and benches invite students and visitors to a learning community in tune with the natural beauty of southeast Minnesota.

The Main Campus provides students ample facilities for educational activities that combine traditional charm with convenience and state-of-the-art technology. All academic buildings

are extensively wired for computer access, and wireless Internet access is available throughout the campus. As a feature of the WSU Laptop Program, many classrooms offer data and power connections for each student.

In recent years, WSU has aggressively upgraded facilities and added new buildings specifically designed to support its academic initiatives.



Recent enhancements include:

- **Darrell W. Krueger Library:** Designed to provide a wealth of information resources and services to the WSU community and beyond. The library holds more than 350,000 volumes and provides access to approximately 50,000 electronic periodicals and texts and over 1 million microfilm documents.
- **Kryzsko Commons:** Expanded and renovated to increase the space available for meeting rooms and to provide additional food venues. Kryzsko Commons is the Student Center; it houses dining facilities, lounge and recreation areas, offices for student organizations, and meeting rooms.
- **Pasteur Hall:** Extensively renovated to support teaching, learning, and discovery in the sciences; the renovation created state-of-the-art dry laboratory, classroom, and office space.
- **Science Laboratory Center (SLC):** Designed to create much needed, modern academic space. The SLC has 118,000 square feet of space devoted to laboratories, a multimedia-equipped auditorium, student study spaces, and a vast atrium where even the floor and massive rock wall promote learning opportunities.
- **University Apartments at East Lake:** Constructed as an apartment complex, East Lake consists of 100 apartments and is home to over 2,500 students. In addition to East Lake, the University complex includes nine residence halls.

West Campus

The West Campus is located about one mile from the Main Campus. West Campus is home to the Residential College, which is located in Lourdes Hall, Maria Hall, and the Tau Center. The Residential College offers a unique living and learning experience with a strong sense of community. Students can take classes, meet with professors, and enjoy cultural experiences on the West Campus while still actively participating in university life on the Main Campus.

Lourdes Hall includes residential, dining, and recreational space. The Tau Center offers 120 completely wired single rooms and conference space with picturesque views of the bluffs and a peaceful setting by Gilmore Creek.

Winona State University-Rochester

Housed with RCTC in a modern, integrated building on the University Center Rochester (UCR) campus, WSU-Rochester features modern classroom facilities and technology-enhanced classrooms. The campus includes a new state-of-the-art Health Sciences building, which has several “smart” rooms, clinical nursing laboratory areas, and high fidelity simulation. Sophisticated technology links WSU-Rochester students with the Winona campuses and the world.

WSU students have access to the Goddard Library, which houses 57,000 volumes, a computer lab, and a laptop rental center. The College Center includes a cafeteria and snack bar and lounge areas. The UCR also includes a recently constructed fitness and recreation center with indoor courts and a running track.

THE COMMUNITIES

Winona

The city of Winona (population 27,000) is nestled among the bluffs of the beautiful Hiawatha Valley on the banks of the Mississippi River—one of the most scenic areas in Minnesota. Once one of the Midwest’s wealthiest cities because of its location on the river, Winona enjoys a rich legacy of historic buildings and vintage homes. The Main Campus and the West Campus are located in the heart of the city, giving students convenient access to shopping, recreation, social activities, and community resources. Additional cultural opportunities are available in La Crosse, Wisconsin (30 miles away), Rochester (45 miles away), and Minneapolis-St. Paul (120 miles away).

In addition to WSU, the city of Winona is home to two other institutions of higher education: Saint Mary’s University of Minnesota and Minnesota State College—Southeast Technical. WSU cooperates with these institutions, as well as institutions throughout the Minnesota State Colleges and Universities system and the University of Minnesota, to enrich the educational and cultural opportunities for students at all institutions by sharing their programs and resources.

Rochester

WSU-Rochester is located on the eastern edge of the city of Rochester, which is a cosmopolitan city of over 100,000 residents. Rochester is consistently branded as one of “America’s most livable cities.” It is home to the world-renowned Mayo Clinic and the largest IBM Corporation facility under one roof. The city offers extensive cultural, dining, shopping, recreational, and sports opportunities; it has the second largest airport in Minnesota.

In addition to WSU-Rochester, several other institutions offer programs in Rochester, including University of Minnesota—Rochester, Saint Mary’s University of Minnesota, Augsburg College, and the Mayo School of Health Sciences.

ACADEMIC MISSION AND GOALS

Winona State University is an exemplary arts and sciences institution with select professional and graduate programs anchored in a general education core. With an enrollment of approximately 8,200 undergraduate and graduate students, WSU is a mid-sized public university committed to small class sizes and challenging, rigorous academic standards.

Faculty and administration are involved with students, facilitate cooperative and active learning, and provide respect for diverse talents and ways of knowing. Faculty are dedicated to creating an optimal learning environment for students by using contemporary technology and by building learning communities, which help students maximize their post-graduation successes. Students acquire disciplinary expertise, enabling them to pursue careers or to enter graduate or professional schools. They learn the value of aesthetics and ethical integrity as well as the importance of becoming community leaders and furthering the public good.

Winona State University recognizes that many learning experiences occur outside the classroom. Therefore, the University is committed to building and maintaining a caring community. Community members strive for amicable relationships based on shared values and an affirmation of the principle of freedom of speech within an atmosphere of civility and mutual respect. Governed by collective bargaining agreements and guided by principled leadership, the University community respects diversity and collaborates to resolve issues that affect all. We celebrate our common successes and our distinctive heritage.

The University is committed to measuring results against self-defined and national standards. Through this ongoing assessment in which students, faculty, and staff participate, WSU will continuously improve and establish accountability for results. Thus, Winona State University reaffirms its social contract to provide educational benefits to the people of Minnesota, the nation, and the world.

ACADEMIC PROGRAMS

Five distinct colleges comprise the University: College of Business, College of Education, College of Liberal Arts, College of Nursing and Health Sciences, and the College of Science and Engineering. Through these colleges, Winona State University offers 64 undergraduate degree programs, 10 pre-professional programs, 18 Master’s (M.S.) degree programs, an Educational Specialist (Ed.S.) degree, a Doctor of Nursing Practice (D.N.P.) degree, and several undergraduate and graduate licensure programs.

All programs are offered by highly qualified faculty in an environment committed to a passion for learning and student service. Approximately 400 faculty members dedicate themselves to delivering rigorous academic programs while maintaining “small school closeness.” Classes average 25 to 30 students; the student-faculty ratio is 21:1.

ACCREDITATIONS AND MEMBERSHIPS

Winona State University is accredited by the following organizations:

- Accreditation Board for Engineering and Technology (ABET)
- American Chemical Society (ACS)
- Commission for Accreditation of Athletic Training Education (CAATE)
- Commission on Collegiate Nursing Education (CCNE)
- Council of Accreditation of Counseling and Related Educational Programs (CACREP)
- Council on Social Work Education (CSWE)
- Higher Learning Commission: North Central Association of Colleges and Schools (HLC)
- National Association of Schools of Music (NASM)
- National Association of Schools of Theatre (NAST)
- National Council for the Accreditation of Teacher Education (NCATE)

Winona State University is recognized by the following organizations:

- Association to Advance Collegiate Schools of Business (AACSB)
- Association for Childhood Education International (ACEI)
- Council for Exceptional Children (CEC)
- National Association for the Education of Young Children (NAEYC)
- National Council for the Social Studies (NCSS)
- National Council of Teachers of English (NCTE)
- National Council of Teachers of Mathematics (NCTM)

Winona State University programs are approved by:

- American Bar Association (Paralegal Program)
- Minnesota Board of Nursing (Entry Level Undergraduate Nursing)
- Minnesota Board of School Administrators
- Minnesota Board of Teaching

UNDERGRADUATE DEGREES AND PROGRAMS

Bachelor of Arts Majors

Art
Communication Studies
Economics
English
French
Geoscience
German
Global Studies
History
Law and Society
Mass Communication
Mathematics
Music
Political Science
Professional Studies
Psychology
Sociology
Spanish
Theatre Arts

Bachelor of Science Majors (Non-Teaching)

Accounting
Athletic Training
Biochemistry
Biology
Business Administration
Chemistry
Clinical Laboratory Science
Composite Materials Engineering
Computer Science
Cytotechnology
Exercise and Rehabilitative Science
Finance
Geoscience
Health Promotion
Human Resources Management
Management Information Systems
Marketing
Mathematics: Statistics
Music
Nursing
Paralegal
Physics
Public Administration
Recreation, Tourism, and Therapeutic Recreation
Sociology: Criminal Justice

Bachelor of Science Majors (Teaching)

Art
Biology Life Science
Business Education
Chemistry
Communication Arts and Literature
Earth Science
Elementary Education
French
German
Health Promotion
Mathematics: Secondary
Music
Physical Education
Physical Science
Physics
Social Science/History
Spanish
Special Education
Teaching English as a Second Language

Bachelor of Social Work

Social Work

Two-Year Undergraduate Associate in Arts

Special Licensure Programs

Developmental/Adapted Physical Education

Pre-Professional Sequences

Pre-Dentistry
Pre-Engineering
Pre-Law
Pre-Medicine
Pre-Optometry
Pre-Pharmacy
Pre-Physical Therapy
Pre-Physician Assistant
Pre-Podiatry
Pre-Veterinary Medicine



ADMISSIONS

Office of Admissions
Maxwell Hall (800 DIAL WSU or 507-457-5100)
www.winona.edu
Email: admissions@winona.edu

The Office of Admissions is responsible for recruiting prospective students to WSU, evaluating and approving applications for admissions, recommending newly admitted students for scholarships, facilitating student transfer to WSU from other post-secondary institutions, evaluating international transcripts for WSU equivalency, and verifying eligibility for veteran's assistance.

CAMPUS VISITS

Anyone interested in WSU is welcome to visit the campus at any time; tours begin in the Office of Admissions. When school is in session, student-conducted tours are available at 9 a.m. and 1 p.m. Monday through Friday. Tours are also offered at 10 a.m. on selected Saturdays from September through January (except holidays). Summer tours also are available. For more information or to request materials, contact the Office of Admissions at the telephone number or web address above or via the U.S. mail at:

Winona State University - Office of Admissions
P. O. Box 5838
Winona, MN 55987-5838

ADMISSION REQUIREMENTS AND PROCEDURES

Students can apply for admission for either semester during the academic year. WSU requires students applying for admission to meet certain entrance requirements. A student's ACT and SAT scores are factored into the admission decision for students who come directly from high school or who do not have a class rank. The ACT is required for registration to assist in placement and advising.

Even if they have not graduated from high school, students can be considered for admission if they have a High School Equivalency Certificate based on successful completion of the GED test and an acceptable score on one of the college entrance examinations.

NEW FIRST-YEAR STUDENT ADMISSION High School Preparation Requirements

To be considered for admissions to WSU, students must have completed the following high school curriculum in grades 9-12:

- 4 years of English (includes composition, literature, and speech).
- 3 years of mathematics including 2 years of algebra and 1 year of geometry.
- 3 years of science including 1 year of biology and 1 year of either chemistry or physics. All courses should include laboratory experiences.
- 3 years of social studies including 1 year of U.S. History and 1 year of geography or its equivalent is highly recommended.
- 2 years of a single world language (including non-English native languages and American Sign Language).
- 1 year of specified electives chosen from the following: World culture (including world cultures, area studies, and cultural or ethnic studies); the arts (including visual arts and the performing arts of theatre, music, dance, and media arts); and computers.

Application Process

Students coming directly from high school may apply as outlined below. Applicants are encouraged to submit all admissions material as early as possible during their senior year. For the past several years, WSU has closed new student admissions for the next fall semester by early March.

1. Complete a WSU Admission Application. Application forms are available online at www.winona.edu or at the Office of Admissions (Maxwell Hall).
2. Return the completed application to the WSU Office of Admissions with a \$20 non-refundable fee.
3. Request that your official high school transcript be forwarded to the Office of Admissions; the transcript should include high school rank.
4. Request that the ACT/SAT testing agency send your official score to the WSU Office of Admissions. The WSU ACT test code is 2162. The WSU SAT test code is 6680.

Types of Admission

Depending on their class rank, ACT/SAT scores, and high school curriculum, students are awarded either distinctive or university admission status at WSU.

- **Distinctive Admission:** Students are admitted with distinction if they rank in the upper 15 percent of their high school graduating class and have an ACT score of 26 or above or an SAT score of 1100 or above and have completed the 16 units of high school preparation requirements. Students admitted with distinction attend an orientation and registration program during the late spring preceding their first year at Winona State University.
- **University Admission:** Students are admitted with university admission status if they have an ACT score of 21 or above or an SAT score of 1000 or above and have completed the 16 units of high school preparation requirements. Students who score an 18, 19, or 20 composite on the ACT must also be ranked in the top 50% of their graduating class. Students admitted with university admission status attend an orientation and registration program during the mid-summer preceding their first year at Winona State University.

Proof of Immunization

Minnesota Law (M.S. 135A.14) requires that all students enrolled in public or private post-secondary school in Minnesota be immunized against diphtheria, tetanus, measles, mumps and rubella—allowing only for certain specified exemptions. See “Student Health Service” on page 32 for more information about the requirements related to immunizations and medical history.

Appeals Process

First-year applicants coming directly from high school who do not meet the admission requirements because of special and unique circumstances may be considered for admission by special appeal. If unusual circumstances exist, the student should first complete the regular application process. Then, if the student is denied admission to the University, he or she should write a letter of appeal to the Director of Admissions. This letter should outline the unique circumstance and should be supported by appropriate documentation and two letters of recommendation from high school faculty.

TRANSFER STUDENT ADMISSION Preparation for Transfer to WSU

Minnesota's technical colleges, community colleges, and universities are working to make transfer easier. Students can help by planning ahead, asking questions, and using pathways created by transfer agreements. Students who are enrolled in a college or university should first discuss their plans with a campus transfer specialist on their own campus. Whether currently enrolled in school or not, a student considering transfer to WSU should:

1. Contact the WSU Office of Admissions and consult the Minnesota Transfer website at www.mntransfer.org. The student should ask for the following materials and information:
 - Transfer brochure and application.
 - Information about admission criteria and materials required for admission (e.g., portfolio, transcripts, test scores). Note that some majors have limited enrollments or their own special requirements such as a higher grade point average.
 - Information about financial aid (how to apply and by what date).
2. After reviewing the materials, make an appointment to visit with a transfer counselor specialist at Winona State University. Be sure to ask about course transfer and admission criteria.

Note: Although WSU does not offer correspondence courses, the University will, transfer correspondence courses from accredited colleges and universities.

Admission Requirements for Transfer Students

The following information applies to students who are transferring from a community college or a four-year college with regional accreditation for college-parallel courses:

- Students are admitted if they have completed 24 transferable academic semester hours and have a cumulative 2.40 GPA for all colleges attended.
- Students may be considered for admission to WSU if they have completed 24 transferable academic semester hours and have a cumulative GPA of 2.20 to 2.39 for all colleges attended. Students who meet these criteria must visit the campus and interview with a transfer specialist.

- Students with fewer than 24 transferable credits must meet the admission criteria for first-year students, including high school preparation requirements, class rank, and admissions test scores.
- Students receive credit for courses taken at accredited institutions in which the grades A, B, C, D, P, or the equivalents were attained.
- Technical College Students: Students transferring from a technical college will receive a 16-credit general elective package of their technical courses. General education courses will be accepted on a course-by-course basis. To apply, students must send their official high school and technical college transcripts and request the ACT/SAT testing agency to send their official ACT/SAT scores to the WSU Office of Admissions.
- Students also may be considered for admission by special appeal if they are transfer students who do not meet the above requirements because of special and unique circumstances. The student should write a letter of appeal to the Director of Admissions, outlining the unique circumstance. The letter should be supported by appropriate documentation and two letters of recommendation from high school faculty.

Transfer students should be eligible to return to their former colleges or universities. An official transcript, including a statement of withdrawal if the student formally withdrew, is required from each college attended. Students should request that the registrar at each college attended send an official transcript directly to the WSU Office of Admissions. Students are subject to suspension if they fail to comply with the transcript requirement and are inadvertently admitted to WSU.

Most credits earned at a community or junior college may be accepted in transfer (remedial classes are not transferable); however, to earn a bachelor's degree, a student must earn 64 semester credits from a four-year institution. If students have a total of 64 semester credits earned at a community college, any credits exceeding those 64 semester credits are not counted toward the 128 credits required for a WSU baccalaureate degree. Transferred credits should have at least a "D" grade to transfer.

Transfer Application Process

1. Students should submit a transfer application and \$20 application fee as early as they can before the deadline, which is 45 days prior to the semester in which the student expects to begin.
2. Students should request an official transcript from every institution they have attended. Students also might be required to provide a high school transcript or GED test scores. WSU does not make an admission decision until all the required documents are on file.
3. An evaluation of credits that will transfer will be enclosed with the acceptance letter. The degree audit tells students which courses transferred and which courses did not transfer.
4. Students who have questions about the evaluation degree audit should contact the Office of Admissions and ask to speak with a transfer specialist. Students can appeal if they are not satisfied with the evaluation.

Transfer Student Rights and Appeal Process

Students have the right to:

- A clear, understandable statement of an institution's transfer policy.
- A credit review and an explanation of why credits were or were not accepted.
- A review of their eligibility for financial aid or scholarships.
- A copy of the formal appeals process. Usually the appeals procedure is as follows:
 - a. Students submit a completed appeals form. (Appeals forms are available at the Maxwell One Stop Center.) Students are encouraged to attach supplemental information such as a syllabus, a course description, or a reading list.
 - b. A department or committee reviews the appeals form.
 - c. Students receive notification, in writing, of the committee's decision.
 - d. Students then have the option of appealing the decision to the Vice President for Academic Affairs (Somsen Hall, Room 211).

Note: If a student is not satisfied with the college or university transfer appeal decision, the student may appeal to the Senior Vice Chancellor of Academic and Student Affairs at the Office of the MnSCU Chancellor.

University Studies and the Minnesota Transfer Curriculum

The Minnesota Transfer Curriculum is a cooperative transfer program in which all the public colleges and universities in Minnesota participate. If a new transfer student's former school certifies that he or she has completed all ten areas of emphasis of the Minnesota Transfer Curriculum, he or she is deemed to have satisfied the general education requirements of her or his new school. The ten areas of emphasis are written and oral communication; critical thinking; natural sciences; mathematics/symbolic

systems; history and the social/behavioral sciences; humanities—the arts, literature and philosophy; human diversity; global perspective; ethical and civic responsibility; and people and the environment. Information about the Minnesota Transfer Curriculum is available online at www.mntransfer.org.

If the former school of the student transferring into Winona State University certifies that she or he has completed some, though not necessarily all, of the ten areas of emphasis of the Minnesota Transfer Curriculum, the student will be deemed to have satisfied WSU University Studies.

WSU's physical development and wellness basic skill category has no corresponding Minnesota Transfer Curriculum area of emphasis. Students transferring to Winona State University will not be deemed to have completed this requirement unless the schools from which they transfer certify completion of the entire Minnesota Transfer Curriculum.

INTERNATIONAL STUDENTS ADMISSION

Office of International Services and Cultural Outreach
Kryzsko Commons, Room 128 (507-457-5303)
www.winona.edu/international
Email: intrec@winona.edu

Prospective international students who will hold F-1 visa status are welcome to apply for admission to Winona State University. Applicants should request the necessary application information from the Office of International Services and Cultural Outreach (see above). Prospective international students should follow these procedures:

1. Submit a completed WSU international admission application and \$20 application fee. The fee should be payable to Winona State University in U.S. dollars. The Office of Admissions encourages students who are non-U.S. citizens to complete the application process three months before the first day of class for the semester in which studies are to begin.
2. Include official, certified academic credentials, verifying the completion of previous educational studies; this document(s) must include official mark sheets from all schools attended, including language schools. Please note that syllabi (course descriptions) should be provided for all non-U.S. college or university subjects. This is essential for the correct awarding of transfer credit. English translations must accompany any foreign language documents.
3. Request that an original or a certified true copy of your TOEFL score be forwarded to the WSU Office of International Services. The WSU code is 6680. The TOEFL score must meet the minimum of 190 on the computerized version, 520 on the paper version, or 68 on the Internet version.
4. Include either an original or notarized financial support statement from each sponsor or an original or notarized official bank statement for personal savings. Such statements must provide proof of financial responsibility for the duration of study at WSU. The amount of available funds must be indicated in U.S. dollars and dated within six months of the application date. The international application includes specific forms to be used for this purpose.

International students should be aware of the following information regarding admission to the University:

- Failure to supply official mark sheets/certified true copies from all schools previously attended is considered fraud and grounds for canceling admission or enrollment to the University.
- The financial support statement submitted during the admission process is scrutinized carefully because very little financial aid is available to students who are not U.S. citizens. Upon enrollment at the University, all financial obligations, including tuition, fees, room and board, laptop program, and health insurance must be paid by the due date.
- In most cases, immigration regulations prohibit students from applying for or accepting employment outside the campus community.
- WSU cannot assume responsibility for emergency situations that may arise while international students are attending the University.
- WSU requires international students to have health insurance; in most instances, this insurance must be purchased through the University.
- The University also requires all F-1 visa holders to complete an on-campus English placement exam unless the student is transferring to WSU with English composition credits accepted by the University. The English test, administered during orientation week, determines the appropriate English placement.
- Cross-cultural scholarships are available to all students accepted for admission. Based on the TOEFL score, Presidential Honor Scholarships are available to students who come to the University as freshmen with no transfer credits. To request additional information, contact International Services at intrec@winona.edu.

International students must report to the Office of International Services upon arrival to campus. International students are also required to be enrolled for a minimum of one academic year prior to being given permission for transfer to another institution.

SPECIAL ADMISSIONS CATEGORIES

Adult Entry Students

Outreach and Continuing Education Department (OCED)
Somsen Hall, Room 109 (507-457-5080)

The Adult Entry Program serves the educational needs of adult students within the University's service area, on and off campus. The program is for adults who want to pursue an Associate in Arts or a baccalaureate degree. This innovative program features flexible admission requirements. The application process involves an assessment and review of prior learning, which the applicant has acquired through informal education or life/work experience. (A processing fee will apply.) WSU validates credits earned; the credits may apply toward a student's degree program. For more information, contact the OCED office.

Non-Matriculated Undergraduate Students

Outreach and Continuing Education Department (OCED)
Somsen Hall, Room 109 (507-457-5080)

The Non-Matriculated Undergraduate Student Program allows adults who are not seeking a degree to take undergraduate classes on campus without going through the formal admission procedure. To participate in the program, the applicant must be a high school graduate (and be out of high school for at least one year) and/or have five years work experience. A maximum of 6 credits can be taken per semester, and a maximum of 12 credits can be transferred to a degree program.

The program opens the University's doors to persons in the community desiring courses for general interest, professional enhancement, or personal enrichment. Contact the OCED office for more information.

Post-Secondary Enrollment Options Program

Students who have completed the 10th grade may be considered as applicants if they are currently enrolled in high school and have demonstrated an unusually high ability and/or achievement and are recommended by a high school counselor or principal. To be eligible, high school juniors must be in the top 15 percent of their class or have an ACT of 26 or higher; seniors must be in the top 25 percent of their class or have an ACT of 25 or higher.

Previous Undergraduate Degree Students

Students are classified as Previous Undergraduate Degree students if they have a baccalaureate degree and are taking additional undergraduate courses to satisfy a second major, minor, or certificate. Applicants must submit the following to the Office of Admissions:

- A Previous Bachelor's Degree Application
- A \$20 non-refundable application fee (unless they have attended WSU and paid the fee previously)
- Transcripts of previous college work and proof of baccalaureate degree

Returning Students

WSU students who have not attended the University for one or more semesters (summer excluded) are classified as returning students. Returning students must complete the Intent to Return form, which is available in the Registrar's Office (Maxwell Hall). The Registrar's Office then evaluates the student's record for possible re-admission.

Students who intend to take further coursework at WSU are considered to be returning transfer students if they have attended another college or university (summer excluded) since they last attended WSU. Official transcripts are required for all college/university attendance. Returning transfer students must complete the WSU Application for Transfer and Returning Transfer Admission form, which is available in the Office of Admissions. The Office of Admissions evaluates the transcripts for possible re-admission.

Returning students who have been academically suspended should refer to page 26 for guidelines concerning re-admission under the University's suspension policy. Under some circumstances, a returning student may petition to have a portion of his or her prior WSU transcript set aside and the GPA recalculated. See page 26 concerning the academic pardon policy.

Undergraduate Special Students

Students are classified as Undergraduate Special students if they are taking undergraduate courses for enrichment, general interest, credit to transfer to another school, or if they have no intention of earning a degree at WSU. Applicants must provide the following:

1. File an Undergraduate Special Enrollment form
2. Submit a \$20 non-refundable application fee (if they have not attended WSU and paid the fee previously)
3. Submit transcripts of previous college work or a Statement of Good Standing. This step is applicable for students who want to transfer credits to their "home" university or college.
Admissions decisions are based on the same standards established for students coming directly from high school and for transfer students.

PLACEMENT TESTING

Incoming students with no college credit in English and/or mathematics will be placed in their initial English or mathematics class based on their ACT sub-scores. Students who are not satisfied with their ACT placement or who do not present ACT scores may take the Accuplacer® exams for placement. Additional information about the Accuplacer® exams can be found at www.winona.edu/advising/placement. Information about specific dates, times, and locations of exams is available at the Advising and Retention Center (Maxwell Hall, Third Floor; 507-457-5600) and at www.winona.edu/advising.

VETERANS ASSISTANCE

Veterans Affairs Office
Maxwell Hall (507-457-5109)

WSU is approved by the State Approving Agency for Veterans Training. Students should present their eligibility certificates to the Veterans Affairs Office when they enroll.

Policies and Procedures

1. A student's application for veterans' benefits can be submitted through the county Veterans Service Office or through WSU. Along with the application, students must submit a certified copy of their DD-214 form or a Notice of Basic Eligibility.
2. Students should submit both copies of their Certificate of Eligibility for WSU when they apply for admission.
3. Enrollment is certified only after students present their DD-214 forms to the Veterans Affairs Office (after they have been admitted to the University). Enrollment for full-time students is usually for the academic year. Summer sessions and/or workshops are separate enrollment periods. The date of students' enrollment is based on the school calendar, workshop dates, or contract periods. **Note:** A mixture of graduate and undergraduate credits is allowed only under special arrangements.
4. Students must report each change in academic load to the Veterans Affairs Office.
5. Payments of benefits: Allowances are paid on a monthly basis, conditional on students' satisfactory progress in an approved course and their conduct. Payments are released upon certification furnished by the school. Students must notify the Registrar's Office and the Veterans Affairs Office when they complete a course, drop a course, or have an interruption in their course of training.
6. Veterans with Dependents: The Veterans Administration (VA) requires students to submit certified copies of marriage certificates, birth certificates, and/or adoption papers for their dependents before they can receive payments based on their marriage and dependents. They are paid a single rate until these documents are on file with the VA. The WSU Veterans Affairs Office and the county Veterans Services Officer can help expedite this procedure.
7. Re-enrollment: Students can re-enroll without a new Certificate of Eligibility. They must notify the WSU Veterans Affairs Office.
8. Academic Load: Full-time training requires 12 semester hours (S.H.) of undergraduate credit or 9 S.H. of graduate credit. Three-fourths time training requires 9 S.H. of undergraduate credit or 7-8 S.H. of graduate credit. Half-time training requires 6-8 S.H. undergraduate credit or 6 S.H. of graduate credit.
9. Tutorial assistance: This program provides tutors to help students overcome a deficiency in any subject required for the satisfactory pursuit of an educational objective. It is available to Vietnam-era veterans. Contact the WSU Veterans Affairs Office for detailed information.
10. Credit for military schools: Service schools and training are evaluated according to the recommendations of the American Council on Education's Guide to the Evaluation of Educational Experience in the Armed Services when students present an official AARTS or SMARTS transcript to the Office of Admissions.
11. Waiver of physical education activity requirements: This requirement is waived if students have been on active duty for more than one year.

COLLEGE-LEVEL EXAMINATION PROGRAM (CLEP)

Office of Admissions
Maxwell Hall (507-457-5100)

The College-Level Examination Program® (CLEP®) is a College Board program that allows students to earn college credit by demonstrating their mastery of college-level material in introductory subjects. CLEP provides students of any age with the opportunity to demonstrate college-level achievement through a program of exams in undergraduate college courses. CLEP exams do not relate to a specifically designed college-level course taught in high school. Rather, CLEP exams test mastery of college-level materials acquired in a variety of ways including general academic instruction, significant independent study, or extracurricular work.

CLEP exams cover material taught in courses that most students take as requirements in the first two years of college. A college usually grants the same amount of credit to students earning satisfactory scores (50 or higher) on the CLEP examination as it grants to students successfully completing the designated course.

CLEP Examination

Accounting
American Government
American Literature
Analyzing and Interpreting Literature
Biology
Calculus
Chemistry
College Algebra
College Mathematics
English Literature
French Language
Freshman College Composition
German Language
History of the United States I
History of the United States II
Human Growth and Development
Humanities
Information, Systems & Computer Applications
Introduction to Business Law
Intro. to Educational Psychology
Introductory Sociology
Introductory Psychology
Natural Sciences
Precalculus
Principles of Macroeconomics
Principles of Microeconomics
Principles of Management
Principles of Marketing
Social Science and History
Spanish Language
Western Civilization I
Western Civilization II
Western Civilization I AND
Western Civilization II

WSU Credit for

General elective
Political Science 120, Intro. to American Politics
English 120, Introduction to Literature

Math 115, College Algebra
Math 100, Survey of Mathematics
English 120, Introduction to Literature

History 150, U.S. History to 1865
History 151, U.S. History Since 1865
Psychology 250, Developmental Psychology
Electives, Humanities in University Studies

General Elective
Elective, Social Science in University Studies
Sociology 150, Introduction to Sociology
Psychology 210, Intro. to Psychological Science
Elective, Natural Science in University Studies
Math 120, Precalculus
Economics 202, Principles of Macroeconomics
Economics 201, Principles of Microeconomics
General Elective
Marketing 300, Principles of Marketing
Elective, Social Science in University Studies

History 120, Western Civilization to 1500
History 122, Western Civilization 1815 to Present
History 121, Western Civilization 1500–1815 AND
History 122, Western Civilization 1815 to Present

ADVANCED PLACEMENT

Office of Admissions
Maxwell Hall (507-457-5100)
Email: admissions@winona.edu

All departments offer advanced placement credit to qualified students who achieve satisfactory scores of “3” or above on Advanced Placement Tests. For specific details, contact the Office of Admissions.



TUITION AND FEES

Office of Student Accounts
Maxwell Hall (507-457-5076)

TUITION

For the fall and spring semesters, undergraduate tuition for full-time students (12-18 credits) on the Winona campus and the Outreach and Continuing Education department is billed at a flat rate. Tuition for full-time students who are Wisconsin residents is also billed at a flat rate. Tuition for classes on the Rochester campus is billed on a per-credit basis (except for Wisconsin residents). All summer session courses and graduate courses are charged on a per-credit basis. To view current tuition and fees, go to www.winona.edu/billing.

ESTIMATED FEES

Note: All fees are subject to change.

Application Fee: A non-refundable fee of \$20 is required with any application for admission. Students who have previously been admitted to WSU and paid the application fee are not subject to this fee when they return to WSU.

Athletics Fee: The athletics fee is assessed to all students attending classes through the Winona and Rochester campuses. A committee consisting of members of the student senate and university administration determines the rates and the distribution of funds.

Course Fees: Course fees are assessed to all students attending courses that have additional course fees indicated in the class schedule. Rates are determined by the department chairperson and approved by the dean and the Vice President for Academic Affairs. Departments use course fees to pay for costs not normally incurred in everyday instruction (e.g., greens fees for a golfing course or a transportation fee for courses with a field trip component).

Health Service Fee: The health service fee is assessed to all students attending classes through the Winona campuses. A committee consisting of members of the student senate and university administration determines the rates and the distribution of funds.

Incidental Fees: Several small fees arise from non-course related matters such as health service, credit by examination fees, ID card replacement fees, parking permits, and library fines.

Insurance: Health insurance is available to all full-time students. Further details are available in the Counseling Center (Wabasha Hall).

Laptop Program Fee: All full-time students attending the Winona campuses, including transfer students, are required to participate in the laptop program regardless of the number of completed credits. (Students are considered to be full-time if they are enrolled in 12 semester hours or more.) Students are required to continue in the program until they graduate or leave WSU. Part-time students are not required to participate in the laptop program; however, they can pay the laptop fee and receive a laptop computer. Please consult with the Office of Admissions or the Office of Student Accounts for current information. Complete information on the laptop program is available at www.winona.edu/tsc/programlaptop.htm.

Late Payment Fee: Payment in full for all tuition, fees, and residence hall charges must be paid by the payment due dates published in the current class schedule and on the WSU website at www.winona.edu/billing. Any payment accepted after the payment due dates will be assessed a late fee. Students are expected to pay all accounts to the University when they are due. The University is authorized to withhold the issuance of diplomas and official transcripts of credits and to deny students further registration until all money due the University has been paid.

MSUSA Fee: The MSUSA fee is assessed to all students attending classes for college credit. The rates are determined by the Minnesota State University Student Association (MSUSA) and the state board office. Funds are used by the Minnesota State University Student Association.

Residential College Fee: The Residential College fee is assessed to all students within the Residential College. The rates are determined by the university administration; funds are used to provide additional programs for those in residence at the Residential College.

Student Life Fee: The student life fee is assessed to all students attending classes through the Winona and Rochester campuses. A committee consisting of members of the student senate and university administration

determines the rates and the distribution of funds. Areas receiving funds include the student senate, university clubs, and the student newspaper, the *Winonan*.

Technology Fee: The technology fee is assessed to all students attending classes for credit. The rate is determined by the university administration; funds are used to support the student computer labs and academic computer services.

Union Facility Fee: The union facility fee is assessed to all students attending classes through the Winona campuses. The rate is determined by the university administration and the state board office. Funds are used to finance the construction, maintenance, and daily operation of the student union building.

REFUND POLICY

If a student's course schedule is reduced for the convenience of the University, the tuition shall be adjusted without penalty. Students who drop classes must inform the Registrar's Office using the official drop procedures (see page 27).

A student who withdraws from the University should obtain an Application for Refund form from the Registrar's Office (Maxwell Hall). See page 27 for other considerations and implications of withdrawing from the University. Students who withdraw from the University or who drop one or more credits will receive a tuition refund according to the refund schedule that follows; refunds on activity fees will be calculated on the same basis as tuition.

Refunds are not given for textbooks and materials. Used books may be sold at the University Bookstore during the last week of each term.

WSU TUITION REFUND SCHEDULES

TERMS AT LEAST 10 WEEKS IN LENGTH:

Withdrawal Day	Withdrawing	Credit Drops
Up to and including 5th class day of term or 1 day after 1st class session, whichever is later	100%	100%
7th through 10th class day of term	75%	None
11th through 15th class day of term	50%	None
16th through 20th class day of term	25%	None
After 20th class day of term	None	None

TERMS OF 3 TO 10 WEEKS IN LENGTH:

Withdrawal Day	Withdrawing	Credit drops
Up to and including 3rd class day of term or 1 day after 1st class session, whichever is later	100%	100%
4th and 5th class day of term	100%	None
6th through 10th class day of term	50%	None
After 10th class day of term	None	None

TERMS OF FEWER THAN 3 WEEKS IN LENGTH:

Withdrawal Day	Withdrawing	Credit drops
Up to and including 1 day after 1st class session	100%	100%
1 day after 1st class session	None	None

Enrollment for a Single 1-, 2-, or 3-Day Session or Less

Prior to beginning of session	100%	100%
After session has begun	None	None

ESTIMATED TEXTBOOKS

Textbooks costs range between \$300 and \$450 per term. Books can be purchased at the WSU Bookstore or other locations.

ESTIMATED ROOM AND BOARD

Payments for residence hall services and meal services are made each semester. Current information about the cost of room and board can be found at www.winona.edu/billing. For general information, see "Housing and Dining" on page 14.

RESIDENT STATUS

As a state-assisted institution, WSU's primary function is making higher education available to residents of Minnesota. A higher tuition rate, therefore, is charged to residents of other states or nations. Students can get information about regulations and criteria that determine their residence

status from the Office of Admissions (Maxwell Hall).

If a student is initially classified as a non-resident but believes that he/she has achieved residency, the student can request a change of status by filing a State of Residence form with the Office of Admissions.

Wisconsin, North Dakota, and South Dakota Tuition Reciprocity

Undergraduate or graduate students who live in Wisconsin, North Dakota, or South Dakota can submit the Student Application for Resident Fee Status form, which provides them with a tuition rate similar to what their home state

charges. All high schools in Wisconsin, North Dakota, and South Dakota have the necessary form; the form is also available in the WSU Office of Admissions. Approval is granted for one year and is effective as long as the student is enrolled each semester (summer sessions are excluded). Students must re-apply for reciprocity tuition if they leave WSU for more than one academic year.

Midwest Student Exchange Program: Kansas, Michigan, Missouri, and Nebraska

For students who are residents of Kansas, Michigan, Missouri, or Nebraska, the tuition rate is 150% of the resident rate. The rate represents a typical savings of over \$1,600 per year for undergraduate students.

UNDERGRADUATE STUDENTS: ESTIMATED TOTAL MINIMUM EXPENSES

All amounts shown are estimates and are subject to change at any time.

Actual rates are published on the WSU website at: www.winona.edu/billing/feeinformation.htm.

	2008-2009 Resident Per Semester	2008-2009 Non-Resident Per Semester	2009-2010 Resident Per Semester	2009-2010 Non-Resident Per Semester
Tuition (16 semester hours)	\$ 2,950.00	\$5,300.00	\$ 3,100.00	\$ 5,550.00
Laptop Program	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00
Fees	\$ 380.00	\$ 380.00	\$ 400.00	\$ 400.00
Residence Halls—Board & Room	\$ 3,100.00	\$ 3,100.00	\$ 3,210.00	\$ 3,210.00
Estimated Total	\$ 6,930.00	\$ 9,280.00	\$ 7,210.00	\$ 9,660.00

FINANCIAL AID

Student Financial Aid Office
Maxwell Hall (507-457-5090)
www.winona.edu/financialaid/

The Student Financial Aid Office can provide students advice and counsel about their long- and short-term plans for financing their education. Students who are entering WSU for the first time or who are transferring to WSU may contact the Director of Financial Aid for information about loans, scholarships, grants, and part-time employment. (See page 9 for general information about tuition, fees, and other financial information. To view current tuition and fees, go to www.winona.edu/billing/.)

In general, financial aid administered by the University is awarded after applicants meet eligibility criteria and establish need. A student must be enrolled or accepted for admission as a regular student in an eligible academic program for the purpose of earning a degree, be in good academic standing, and maintain satisfactory academic progress to be considered for financial aid. Awards are usually made for one academic year and are disbursed at the beginning of each semester.

STUDENTS' RIGHTS AND RESPONSIBILITIES

Students have the right to know:

- The cost of attendance.
- The refund policy for students who withdraw.
- What financial assistance is available from federal, state, and institutional sources.
- Procedures and deadlines for submitting applications for financial aid.
- How financial aid recipients are selected.
- How financial aid eligibility is determined, including all resources the Financial Aid Office considers available to the student.
- How and when funds will be disbursed.
- An explanation of each type of award received.
- For any student loan received: the interest rate, total amount to be repaid, when repayment begins, the length of the repayment period, and the cancellation or deferment provision of the loan.
- For any work study job: a description of the job, the hours to be worked, the rate of pay, and how and when they will be paid.

- The criteria used to determine satisfactory academic progress for financial aid purposes.

Students are responsible for:

- Reading directions thoroughly, completing all application forms accurately, and complying with any deadlines.
- Providing any supplemental information or documentation required by the Financial Aid Office or other agency, if applicable.
- Reading, understanding, and keeping copies of any forms they are required to sign.
- Repaying any student loans they receive.
- Attending entrance and exit interviews as required if they receive student loans.
- Notifying the Financial Aid Office of any changes in enrollment or financial status (including any scholarships or grants received from outside sources). Students who have loans must report changes of address and enrollment status to the lender.
- Satisfactorily performing the work agreed upon in a work study job.
- Knowing and complying with all requirements for continuation of financial aid, including satisfactory academic progress requirements.

APPLICATION PROCEDURE

To initiate the process, students should complete a Free Application for Federal Student Aid (FAFSA) on the web at www.fafsa.ed.gov. Paper FAFSA forms are available upon request from the U.S. Department of Education at the above website. The WSU FAFSA code is 002394.

Awards to new students are made as soon as possible after the student is admitted to the University; awards to continuing students are made at the end of each academic year (in May). Certain programs have limited funding; others are entitlement programs and have funds available throughout the year.

WSU-Rochester

WSU students attending WSU-Rochester should submit the FAFSA on the web (www.fafsa.ed.gov), or they should complete a paper form, listing Winona State University (FAFSA code 002394) as the receiving school. A financial aid advisor is available weekly to meet with students on the Rochester campus.

SATISFACTORY PROGRESS FOR FINANCIAL AID RECIPIENTS

Federal and state regulations require that all financial aid recipients maintain satisfactory progress. The intent of this requirement is to encourage all aid recipients to advance steadily toward the completion of their degree. The minimum standards required to receive financial aid apply to all academic work at Winona State University, whether financial aid was received at the time or not. Satisfactory progress is evaluated following each semester, including the summer term.

MINIMUM STANDARDS OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID RECIPIENTS

Note: This standard became effective fall semester 2007.

I. QUALITATIVE MEASURE

Students are required to maintain a minimum financial aid Satisfactory Academic Progress Grade Point Average (SAP GPA). WSU and consortium agreement credits are used to compute the SAP GPA. Please refer to Section VIII, which follows for a description of consortium agreement credits.

A student with the following number of WSU attempted credits at the end of a semester must have at least the minimum listed SAP GPA:

1 - 15 WSU attempted credits:	1.75 minimum SAP GPA
16 or more WSU attempted credits:	2.00 minimum SAP GPA
1+ graduate credit:	3.00 minimum SAP GPA

II. QUANTITATIVE MEASURE

A. Required Completion Percentage

A student must have at least 67% minimum listed Required Completion Percentage. To measure a student's completion percentage:

1. Combine WSU earned credits and consortium credits to obtain cumulative earned credits.
2. Combine WSU attempted credits and consortium attempted credits to obtain cumulative attempted credits.
3. Divide the cumulative earned credits by the cumulative attempted credits to obtain the completion percentage.

B. Maximum Time Frame

Students may not exceed the maximum number of attempted credits listed below and continue to receive financial aid:

- Undergraduate Student: May not exceed 192 attempted credits.
- Previous Undergraduate Degree (second degree) Student: May not exceed 64 attempted credits.
- Graduate Student: May not exceed 45 attempted credits. Contact the Financial Aid Office for programs with degree requirements exceeding 30 credits.

II. EVALUATION PERIOD

Financial aid Satisfactory Academic Progress is evaluated at the end of each semester, including the summer term.

III. FAILURE TO MEET STANDARDS

At the end of each semester, including summer term, all students are reviewed for financial aid Satisfactory Academic Progress (SAP). Financial aid SAP suspension holds are placed on academic records for all students not meeting the standards.

Note: Students with special circumstances, which have caused the record to read as it does, may appeal the suspension. See the "Appeals" section for details.

V. NOTIFICATION

- **Fall Semester Review:** At the end of fall semester, a notice of suspension is sent to students who have filed the FAFSA for the current academic year and have a financial aid SAP hold.
- **Spring Semester Review:** At the end of spring semester, a notice of suspension is sent to students who have filed the FAFSA for either the current or next academic year and have a financial aid SAP hold.
- **Summer Term Review:** At the end of summer term, a notice of suspension is sent to students who have filed the FAFSA for the next academic year and have a financial aid SAP hold.

If the FAFSA has not yet been received for a student with a financial aid SAP hold, no notice of suspension is sent. When the FAFSA is received for a student with a financial aid SAP hold, the suspension notice will be sent.

In all cases, the suspension is effective immediately. No further processing of the student's aid application takes place. Any costs already incurred are the responsibility of the student, and arrangements must be made with Student Accounts.

VI. APPEALS

Students who have experienced a special circumstance may submit written reviews to the Financial Aid Satisfactory Progress Review Committee to have their situation reviewed for possible reinstatement of aid. To submit a review, the student must submit the following documentation to the Financial Aid Office:

1. Satisfactory Progress Review Form (received with the notice of suspension).
2. Letter from the student explaining why he or she has fallen below standards and why aid should be reinstated.
3. Third-party letter documenting the student's special circumstances.

If the appeal is approved, the student retains financial aid eligibility under an appeal status for one semester. Minimum academic standards for the semester are specified and communicated as part of the appeal resolution. When the cumulative standards are met, the student returns to a status of good standing at the end of the appeal semester.

If the cumulative standards are not met, the qualitative and quantitative performances for the appeal semester are reviewed. If the minimum standards are met as specified in the appeal for the semester, the appeal status is continued for another semester. If the minimum standards specified in the appeal are not met, the appeal status is removed and financial aid eligibility is suspended.

VII. REINSTATEMENT

Students may request reinstatement of aid for future semesters/terms once deficiencies have been made up and the record once again meets the minimum standards of financial aid Satisfactory Academic Progress. In addition, students may appeal after an absence if there is a valid reason to appeal. Contact the Financial Aid Office for the procedure to follow. Aid cannot be reinstated for a semester in which the student is academically ineligible.

VIII. ADDITIONAL ELEMENTS

- **Treatment of Grades:** WSU courses for which a student receives grades of A, B, C, D, F, W (withdrawal), P (pass), NC (no-credit), I (incomplete), IP (in-progress), and Z (no grade reported) are considered to be credits attempted for purposes of monitoring the Financial Aid Satisfactory Academic Progress standard. WSU courses for which a student receives grades of A, B, C, D, and P are counted as satisfactorily completed for the purposes of monitoring the Financial Aid Satisfactory Academic Progress standard.
- **Academic Pardon:** For monitoring the financial aid Satisfactory Academic Progress standard, credits for which students have been granted academic pardon are included in the calculation of the cumulative GPA, completion percentage, and maximum time frame. See page 26 for an explanation of the University's academic pardon policy.
- **Audited Courses:** Audited courses do not count as credits attempted or credits earned and are not funded.
- **Consortium Credits:** Credits for which financial aid is received under a consortium agreement are recorded in the student data system to be included in cumulative GPA, completion percentage, and maximum time-frame calculations as transfer credits.
- **Remedial Credits:** For monitoring the financial aid Satisfactory Academic Progress standard, classes in this category are considered attempted. Up to 30 remedial credits are excluded from the Maximum Time Frame calculation.
- **Repeated Courses:** When a student repeats a course, only the last grade received and credits earned are counted in the GPA and as earned credits for this standard. However, the credits are considered to be attempted each time the course is taken. For financial aid Satisfactory Academic Progress, there is not a limit on the number of times a single course may be repeated. See page 25 for academic policies regarding repeated courses.
- **Transfer Credits:** Transfer credits accepted by WSU are not counted as credits attempted for calculation of cumulative completion percentage; grades associated with these credits are not used in calculating cumulative GPA. Transfer credits accepted by WSU apply toward the maximum time frame calculation.

- **Withdrawal:** If a student withdraws from the University before financial aid disbursement, the student does not receive any aid since no progress has been made toward a degree. The student must pay expenses from his or her own funds. Standard University refund policies and procedures are followed when a student withdraws from the University for any reason during the term after student aid has been disbursed. Withdrawal credits are considered credits attempted for purposes of monitoring the financial aid Satisfactory Academic Progress standard.

GRANTS

Federal Pell Grant: A federal grant program available to undergraduate students on the basis of financial need. The Pell Grant processor notifies students of their eligibility by sending them the Student Aid Report (SAR).

Minnesota State Grant Program: Available to qualified Minnesota residents on the basis of financial need. Students must apply within 30 days of the beginning of a term in order to be considered for that term. Students can get information about eligibility criteria and application procedures from any high school counselor or from the Financial Aid Office.

Federal Supplemental Educational Opportunity Grant: A federal grant available to undergraduate students who are eligible for a Pell Grant and who demonstrate exceptional need.

Post-Secondary Child Care Program: The state of Minnesota provides funding for child care to students who meet certain income guidelines, who are Minnesota residents, and who are not receiving MFIP (Minnesota Family Investment Program) assistance. Contact the Financial Aid Office for more information.

Bureau of Indian Affairs Grant: Grants are available to students with one-quarter or more Indian blood. Students who qualify can get more information and application forms by contacting the agency or area office serving their tribal group.

Rehabilitation Services: Students who have a disability may qualify for rehabilitation benefits that help defray college costs. Students who qualify should contact their high school counselor or local Division of Rehabilitation Services for detailed information.

LOANS

The loans listed below require repayment of the principal after a student leaves the University. In contrast to most commercial loans, some of the loans below are interest-free while the student is enrolled; others have interest accrual.

Subsidized Federal Stafford Loan: This need-based loan provides up to \$3,500 for first-year students, \$4,500 for sophomores, \$5,500 for juniors and seniors, and \$8,500 for graduate and professional students. The federal government pays the interest while the student is enrolled on at least a half-time basis and during a six-month grace period. The interest rate is fixed at 6.8%.

Unsubsidized Federal Stafford Loan: The terms and conditions are the same as those for Federal Stafford Loan, except that the borrower is responsible for interest that accrues while attending school. This loan program is available for students who do not qualify for a fully subsidized Stafford loan. Independent students may be eligible for higher loan limits.

Federal Perkins Loan: A need-based loan at 5% interest. Repayment and interest do not begin until after the student leaves school, and the loan may be partially canceled if the graduate obtains employment in certain areas according to the terms in the promissory note.

Student Educational Loan Fund (SELF): The Minnesota Higher Education Services Office provides loans for undergraduates and graduate students. Currently, undergraduate students can borrow up to \$7,500 per grade level, and graduate students can borrow up to \$9,000 per grade level. Students are eligible for SELF loans regardless of family income; however, the student must have a creditworthy co-signer. The interest rate is variable with a cap on increases and decreases at 2% for any 12-month period.

Federal PLUS Program: A loan program allowing parents of dependent students to borrow. Parents can borrow up to the cost of attendance less other financial aid the student receives. The interest rate is fixed at 8.5%.

Short-Term Loans: These loans are available to students for emergency expenses. For applications and more information, students should contact the Financial Aid Office.

SCHOLARSHIPS

See page 14 for information about scholarships awarded by the Financial Aid Office.

EMPLOYMENT

Students can work up to 20 hours each week and earn a portion of their college expenses under the Federal Work Study Program, a program in which students can participate if they demonstrate financial need. The program pays minimum wage or more; students are paid twice a month. Most of the Federal Work Study Program jobs are located on campus; however, students can work for approved off-campus, nonprofit organizations or agencies. Eligibility for work study does not guarantee employment. Although WSU tries to maximize the number of work study opportunities each year, there are typically more eligible students than available jobs.

Students who are Minnesota residents can participate in the State Work Study Program. Students must demonstrate financial need to be eligible for the program. Students are paid minimum wage or more and, like the federal program, they can work on- or off-campus. Work Study Program earnings are taxable. However, the earnings are not included in the total income when filing the FAFSA for future years.

Students who do not qualify for work study may still be able to find employment on campus in student help positions. These positions are not based upon the results of the financial aid application and are not considered student financial aid. A listing of available work study and student help jobs is available at www.winona.edu/career.



SCHOLARSHIPS

Scholarship Administration Office – University Advancement
Somsen Hall, Room 210G (507-457-5198)
www.winona.edu/

In an effort to help students make progress toward their goals, Winona State University offers hundreds of scholarships. Students in almost all academic disciplines benefit from scholarship funds that come from a variety of sources, both on and off campus.

Some scholarships are open to all students. Many have eligibility criteria based on major field of study, academic standing, financial need, affiliation with a particular organization, or other criteria established by the individual scholarship fund donors. Early in the spring semester, many scholarship applications are posted on the WSU Foundation webpage. To access this information, go to www.winona.edu, click on the Sitemap, and scroll down to find the “Scholarships” link.

The following sections describe general categories of scholarships that are available through the University.

WSU ACADEMIC SCHOLARSHIPS

The Office of Admissions (Maxwell Hall) can provide students with information about first-year and transfer academic scholarships. Funds for these scholarships come from the University and the WSU Foundation.

Outstanding Academic Honors Awards: This \$3,500 award recognizes outstanding academic achievement in high school and is available to any first-year student coming to WSU directly from high school. It is renewable the first eight consecutive semesters for a total of \$14,000 if the student maintains a cumulative GPA of 3.50 while attending WSU continuously as a full-time student and completing at least 12 credits per semester. A student is eligible if he or she is in the top 5% of his or her graduating class and has an ACT composite of 32 or greater. Awards are based on the date the student is accepted for admission to the University. Students are encouraged to apply for admission early. Recipients are required to live on-campus during their first two years unless they live with a parent or guardian. First-priority awards are made in early November.

WSU Foundation Board Scholarships: The WSU Foundation annually awards scholarships of \$4,000 to six students coming to WSU directly from high school who rank in the top 5% of their high school graduating class and have an ACT composite of 28 or greater. An on-campus interview is required. Candidates are determined from a review of essays submitted to the WSU Foundation Board. The scholarship is renewable the first eight consecutive semesters for a total of \$16,000 if the student maintains a cumulative GPA of 3.50 while attending WSU continuously as a full-time student and completing at least 12 credits per semester. Awards are based on the date the student is accepted at WSU; therefore, students are encouraged to apply for admission early. Recipients are required to live on-campus during their first two years unless they live with a parent or guardian.

Note: Students who are selected as recipients of the WSU Foundation Board Scholarship are not eligible for the President’s Honor Scholarship awarded by the WSU Office of Admissions.

President’s Honor Scholarships: The President’s Honor Scholarships are awarded to first-year students coming to WSU directly from high school in the following categories:

\$2,500	Top 5% of graduating class and ACT 28 or SAT 1240
\$1,500	Top 10% of graduating class and ACT 27 or SAT 1210
\$1,000	Top 15% of graduating class and ACT 26 or SAT 1170

The scholarships are available for the first eight consecutive semesters if the student continuously attends WSU as a full-time student, maintains a 3.50 cumulative GPA, and completes at least 12 credits per semester. President’s Honor Scholarship recipients are required to live on-campus during their first two years unless they live with a parent or guardian. Early application for admission is encouraged.

Academic Awards: \$300-\$500 awards are made to students graduating from high schools in Minnesota and Wisconsin. Students are eligible if they are in the top 20% of their graduating class with a minimum ACT of 21 or if they have an ACT composite of 24 and are in the top half of class. The awards are based upon the date the student is accepted at WSU. Students are encouraged to apply to WSU early.

TRANSFER SCHOLARSHIPS

Transfer Honor Scholarships: Students can apply for this scholarship if they are transferring to WSU and have a minimum GPA of 3.35 on a 4.00 scale. Application forms are available in the WSU Office of Admissions.

Phi Theta Kappa Scholarships: \$1,000 renewable Presidential transfer scholarship. The scholarship is awarded to transfer students who have completed study at a community college with a 3.5 GPA or higher, membership in Phi Theta Kappa, and an earned Associate of Arts degree.

RESIDENT TUITION SCHOLARSHIPS

The Resident Tuition Scholarship (RTS) awards resident tuition rates to new, non-resident, non-reciprocity first-year students. Based on the difference in the cost of resident and non-resident tuition, this scholarship is valued at \$4,500 annually. The Resident Tuition Scholarship is renewable the first eight consecutive semesters if the student maintains a cumulative GPA of 3.00 while attending WSU continuously as a full-time student and completing at least 12 credits per semester.

An RTS is automatically awarded to new students who meet the criteria above and who rank in the top 15% of their graduating class or have an ACT of 25 or an SAT total of 1100. Students are encouraged to apply to WSU early.

TALENT SCHOLARSHIPS (FINE ARTS AND ATHLETICS)

Students may apply for fine arts scholarships if they are talented in art, music, speech, or theater by contacting the chairperson of the appropriate WSU department. Students are encouraged to apply to WSU early. Students who are interested in intercollegiate sports should contact the appropriate head coach to be considered for athletic scholarships.

SCHOLARSHIPS AWARDED BY WSU DEPARTMENTS

Most WSU academic departments select recipients of WSU Foundation scholarships in their major fields with awards of \$100 to \$2,000. Students in good academic standing and majoring in the specific departments may apply for these scholarships. The application process begins early in spring semester. Students should contact the designated departments for information about application procedures and deadlines.

For more information regarding WSU Foundation scholarships, including application dates and specific requirements, contact the Scholarship Administration Office, Somsen Hall, Room 210 (507-457-5198).

ALUMNI SOCIETY SCHOLARSHIPS

WSU Alumni Affairs Office
Somsen Hall, Room 206 (507-457-5027)

The WSU Alumni Society awards six \$1,000 scholarships to new, not previously registered students who are relatives of alumni. The applicant must be a child, a grandchild, a sibling, or a ward of a WSU graduate, and the applicant must be endorsed by a high school counselor or a community leader. Applications are available in the WSU Alumni Office. Applications must be submitted by March 1.

INCLUSION AND DIVERSITY SCHOLARSHIPS

Inclusion and Diversity Office
Kryzsko Commons, Room 121 (507-457-5595)

The WSU Inclusion and Diversity Office coordinates scholarships, incentive grants, internships, and summer opportunity employment programs for historically under-represented students.

Inclusion and Diversity Academic Honors Scholarship: This \$2,000 award is available to incoming first-year students with a composite score of 24 or above on the ACT or a 3.00 high school GPA and ranking in the 50th percentile of their graduating class. The scholarship is renewable for three years if the student maintains a 3.00 GPA each semester. Applicants must submit one letter of recommendation from a high school teacher or counselor along with a typed autobiographical essay. Students who receive the Inclusion and Diversity Academic Scholarship are required to participate in the mentor program. (See note below for changes effective fall 2007.)

Inclusion and Diversity (Alliss) Scholarship/Grant: Scholarships/grants of \$350-\$1,100 are awarded to students admitted to WSU based on financial need and academic potential. Students must maintain a 2.75 GPA to remain eligible for the scholarship/grant as well as Federal Financial Aid. Applicants must complete a Free Application for Federal Student Aid (FAFSA) form. (See note below for changes effective fall 2007.)

Note: Effective fall 2007, scholarship requirements were modified to align with innovations at WSU as well as MnSCU's definition of "underrepresented populations." MnSCU defines underrepresented populations as "those who have been under-prepared for or traditionally under-represented or under-served in higher education, including students of color, first generation college students, students for whom English is a second language, and low income students."

SCHOLARSHIPS AWARDED BY THE FINANCIAL AID OFFICE

The Financial Aid Office selects recipients for the scholarships listed below. Awards are based upon financial need and other criteria as determined by the scholarship donor. To apply for these scholarships, students must complete the FAFSA (Free Application for Federal Student Aid) form, which is available through the Financial Aid Office (page 10). Scholarship amounts vary.

Charles and Ellora Alliss Foundation Scholarship
Etta Hudson Howell Scholarship
Arthur and Liola (Zeller) Mattson Scholarship
Winona County Bicentennial Scholarship

OTHER SOURCES OF SCHOLARSHIPS

In addition to scholarships from WSU and the WSU Foundation, a number of organizations offer scholarships to their members, employees, and relatives. Each year, WSU students receive thousands of dollars in scholarships from businesses, government agencies, civic groups, professional organizations, fraternities and sororities, foundations, religious groups, education associations, and military/veterans organizations. Directories of these scholarship sources are available from a public library, high school guidance counselor, or financial aid office.



HOUSING AND DINING

Department of Housing and Residence Life
Kryzsko Commons, Room 130 (507-457-5305)
www.winona.edu/housing
Email: reslife@winona.edu

HOUSING

The Department of Housing and Residence Life provides a comprehensive variety of residential opportunities to WSU students with an equal focus on the following areas: student learning, outstanding service, leadership development, and facilitation of a positive sense of community and connection to WSU. The University does not offer a residential experience at the WSU-Rochester campus. See page 35 for information about housing as it relates to the Rochester campus.

ON-CAMPUS HOUSING

WSU offers more than a place to sleep and study. WSU offers a total living and learning environment that supports our academic mission and promotes leadership and community development. Students enjoy a quality residential experience filled with activities and programs that extend learning beyond the classroom to include (1) recreational and social pastimes with friends from across the country and around the world and (2) abundant opportunities to expand their intellectual horizons and hone their leadership skills.

At WSU, we believe that living on campus should be a special and rewarding part of the student's education. The Housing and Residence Life staff members devote their time to providing resources, services, and programs that ensure a stimulating and supportive atmosphere for every resident.

Throughout the school year, every residence hall sponsors high-quality programs that complement classroom learning and encourage leadership and citizenship. The programs—many of which are organized by hall residents—touch on different areas such as diversity, career development, intellectual and creative enrichment, social and recreational activities, community service, and other issues important to students.

A full-time hall director resides in each residence hall; the majority of our hall directors hold master's degrees in fields related to College Student Development. Hall directors provide supervision and leadership, working with a team of upper-division resident assistants (RAs) to create a comfortable, secure, and supportive environment for all students.

Residence Hall Council and Resident Assistants

In each hall, a Residence Hall Council offers opportunities for students to develop a variety of leadership and management skills. Comprised of students elected to various posts by their fellow residents, the council is responsible for organizing the hall's educational and social activities and for encouraging students to take ownership of their hall. Council members

attend regional and national conferences devoted to student leadership and host leadership conferences on campus. First-year students are strongly encouraged to get involved with their hall council; new students may also find their leadership niche by running for one of the six Freshman Senator posts in the WSU Student Senate.

A well-trained and responsive team of RAs plays a key leadership role in the daily life of each hall. Selected through a rigorous application process, these upper-division students serve as peer advisors and counselors for residents, organize educational activities, and encourage participation in hall and campus activities.

Residence Halls

Nine residence halls allow WSU to house approximately 2,100 students. See the campus maps for names and locations of residence halls. For a description of each hall and the different options, students should request a copy of the Residence Life Viewbook or visit the Residence Life website.

While the specific housing options vary within each facility, students can expect to find the following in every WSU residence hall:

- A room fully furnished and wired for laptop computers, local telephone service, and hook-up for cable TV.
- A laser printer at the hall reception desk for students' use.
- Areas conducive to group study.
- Fitness facilities—aerobic equipment and weights—are available in some halls. All halls have TV lounges with big screens and lots of comfortable furniture, kitchen facilities for preparing a snack or light meal, vending machines for those times when hunger strikes at odd hours, laundry rooms, and sports equipment and games to borrow.
- A secure environment. Campus security monitors the halls throughout the day and conducts "check-ins" for everyone after 11 p.m. Residence hall staff and campus security work diligently to make the halls safe.

University Apartments at East Lake

University Apartments at East Lake is located at the corner of Franklin and Sarnia Streets. The complex consists of 100 apartment units, housing a total of 360 students. Most of the apartments are 4-bedroom/2-bath units that accommodate 4 students; some are 2-bedroom/2-bath units that accommodate 4 students, and a few are 1-bedroom/1-bath units that accommodate 2 students. All the apartments are fully furnished (including washer and dryer); the housing fee includes all utilities except long distance telephone service.

Applying for Housing

Students must first apply for admission to Winona State University. WSU is an early application school, and on-campus space is allocated based on the date of the student's application. Therefore, it is important for applicants to return the housing application as early as possible.

The application process is as easy as 1-2-3:

1. Apply for admission to WSU early in the senior year of high school. The housing packet will be sent to you following your letter of acceptance from WSU.
2. Promptly complete the housing application/contract. It is recommended that you complete the application as early as possible, but not later than March 1 to guarantee a space in the residence halls.
Note: Residence hall space is allocated by the date WSU receives your completed housing application/contract.
3. Submit a \$250.00 payment (which includes a \$50 application fee) on or before March 1 to confirm your space on campus.
Note: \$200.00 of your advance payment is refundable if the Housing Office receives your written refund request on or before May 1. The \$50.00 application fee is not refundable.

Payment for Housing and Dining Services

Payment for residence hall and meal services is made on a semester basis. See page 10 for an estimated total of the minimum expenses for undergraduate students. View current room and board rates at www.winona.edu/billing.

OFF-CAMPUS HOUSING REFERRAL SERVICE

The Office of Housing and Residence Life provides an Off-Campus Referral Service (Kryzsko Commons, Room 130), which consists of listings provided by the landlords of apartments and other rental options. Information is available at the office during business hours. The listing is available on the Student Answer Center website (www.winona.edu/sac).

WSU makes no representation as to the kind, quality, or quantity of facilities listed by the landlords. The University also does not control any changes to the information; cost and availability are subject to change by the landlords. WSU assumes no liability arising from relationships between students and landlords as a result of these listings. All questions should be addressed to the landlords.

The University does not own nor does it operate housing facilities specifically for married students. To apply for subsidized housing, students should contact the Housing and Redevelopment Authority of Winona, 165 E. 4th St., Winona, MN 55987.

CAMPUS DINING

Campus dining at WSU is an exciting and nutritious experience. WSU has two dining halls on campus, the Jack Kane Dining Center, located in Kryzsko Commons, and the Lourdes Dining Hall, located on the West Campus. Built in 1994, the Jack Kane Dining Center follows a riverboat theme, providing an atmosphere that complements fine dining. The area hosts an upper-level mezzanine as well as a lower-level with a private dining area. The newly renovated Lourdes Dining Hall, located on the main floor of Lourdes Hall, provides additional convenience for the students living on the West Campus. (See page 35 for information about dining options for the Rochester campus.)

Students on the meal plan can use their meal cards in either dining location. In addition to the two dining halls, students have the option of eating in the Kryzsko Commons Food Court (known as the Smaug) or the Lourdes Hall Snack Shop.

Meal Plan advantages include:

- All you care to eat: Unlimited portions available on all items except premium entrees.
- Grab & Go Lunches and Dinners: Available for students with work or class schedules that conflict with meal times.
- Under-the-Weather Trays: If students are ill and need to have a meal brought to them, they can arrange this service through the Residence Life Staff.

WSU offers a choice of three meal plans: 14, 10, or 7 meals per week. In addition, each meal plan includes cash credit (Kryzsko Kash) to make purchases in the “Smaug” or at convenience stores on the main and west campuses. Changes to decrease the number of meals in your meal plan can only be made during the week of final examinations or during the first week of classes each semester. You may increase the number of meals in your meal plan at any time.

The Food Service Committee, comprised of students, provides input and suggestions to enhance WSU’s campus dining experience.

EMPLOYMENT OPPORTUNITIES

Campus dining also provides employment opportunities; it is one of the largest student employers on campus. Students who are interested in on-campus employment should contact the Campus Dining Office (Kryzsko Commons, Room 229).

REGISTRATION AND ACADEMIC RECORDS

Registrar’s Office
Maxwell Hall, Third Floor (507-457-5030; fax: 507-457-5578)
www.winona.edu/registrar

The Registrar’s Office is responsible for maintaining and safeguarding records of student academic performance; monitoring compliance with academic requirements; facilitating the scheduling of classes; managing the process of enrolling in University courses and programs; providing official transcripts and other documents to verify student achievement; maintaining an accurate catalog of all academic offerings; facilitating the transfer of student records between WSU and other institutions; and verifying compliance with federal and state regulations and with the expectations of agencies with which WSU or its students have obligations.

REGISTRATION

WSU offers classes in two 15-week semesters and a 10-week summer term, which consists of two 5-week sessions. Continuing students register for fall and summer classes during April of the previous academic year, and for spring classes during November. New students typically register for classes during June of the summer before their first fall semester. All course registration is performed electronically on the WSU website. Prior to registering for on-campus (Winona) classes, new and returning students must satisfy admissions requirements. All Winona campus undergraduate students must also contact their advisor each term to receive

their registration access code. See pages 5 and 7 for an explanation of the admissions policies and procedures for new and returning students. When new students’ applications have been approved and processed, WSU sends each student a Warrior ID number and a PIN number.

ADVISING

Each semester, WSU schedules an Advising Period (see the Academic Calendar at www.winona.edu/registrar). During this period, students who are enrolling in on-campus (Winona) classes must meet with their advisors (see page 28). In addition to providing academic advising, the advisor gives the student an access code that the student must use, together with the Warrior ID number and the PIN number, to initiate the WSU Web Registration procedure for the fall and spring semesters. Summer term registration does not require an access code. Most students on the Rochester campus and those registering for extension classes do not need an access code.

Students may go to www.winona.edu/registration.html for up-to-date reports that assist in their academic planning. From this web address, students can access the Minnesota State Colleges and Universities (MnSCU) Student Portal where they may view and print their current academic transcript. Students can also get a copy of their Degree Audit Report from the Degree Auditing Reporting System (DARS). The DARS report is designed to help students select courses and build their academic

schedule by displaying their progress at any point in their career. It shows how courses taken at WSU or transferred from other schools apply to the student's degree and what courses are still needed to meet all requirements. Students use this information to work with their advisors to better plan their academic careers.

WEB REGISTRATION

The order of registration for continuing students is determined by the number of academic credits they have completed. Students with the greatest number of credits register first. The schedule of registration "windows" during which students may register is available on the MnSCU portal at www.winona.edu/registration.html. The Registrar strongly advises students to print a copy of their updated schedule any time they use the Web Registration system to add or delete courses and to maintain a personal folder of all records of academic progress.

Students should keep the paper copy of their schedule until grades are reported at the end of the semester. If there is any problem with a student's registration or bill, the student will be asked for the printed schedule.

EXTENSION CLASSES

Students can enroll in Extension classes without being formally admitted to the University or filing an Intent to Return form. To register in an extension class, the student may go to the WSU website and follow the Web Registration instructions. Web Registration requires the student to enter his/her Warrior ID number and PIN number. Students who have not received these numbers can contact the Outreach and Continuing Education Department (OCED) in Somsen Hall, Room 109 (507-457-5080) for assistance. Students who are unable to register on the website may register by submitting an Extension Class Registration form to the OCED office.

ATTENDANCE POLICY

Students are required to attend the first meeting of all classes in which they are registered. See page 24 for more details on the class attendance policy.

CHANGES IN CLASS SCHEDULE

Change the Grade Method for a Class

At the time of registration, students must indicate whether they are taking a course for letter grade, audit, or pass/no credit if the course permits these grading options. If students wish to modify their choice of grade type, they must request the change by the published drop/add deadline. Audited courses cannot be used to satisfy graduation, enrollment status, certification, or licensure requirements. To request a grade method change, students should go to the WSU website and follow the directions under Web Registration.

Add a Class

For the first five instructional days of the semester, students may add a class using the Web Registration process. After the fifth instructional day of the semester (or after the first class meeting for evening classes), students must obtain the permission of the instructor for each class to be added.

To register for a full class or for a course that requires the instructor's permission, students must either submit a signed Class Permit form (also called a "blue card") to the Registrar's Office or have their instructor submit an override online.

Arranged Classes

An "arranged class" is a course listed in the WSU catalog but not scheduled to be offered during a particular semester. Such a course may be made available at the discretion of the faculty member, department chairperson, and academic dean. To apply for an arranged class, students must be fully matriculated with an established WSU GPA of 2.00 or higher. Students should request an application from the Registrar's Office and obtain approvals from the academic dean and academic department. When the arranged class has been added to the University's course schedule, the student must then register for the class in the usual fashion.

Independent Study or Internships

To apply for an independent study course or an internship, a student must be fully matriculated with an established WSU GPA of 2.00 or higher. The student should consult the academic department for information about any additional GPA requirements for internships. A special application form, available from the Registrar's Office, must be submitted to the appropriate academic dean according to announced deadlines (see the Academic Calendar at www.winona.edu/registrar). Because an independent study or an internship is an academic course, the student must register for

it after the special application form has been approved—either by using the Web Registration procedure or by submitting an application to the appropriate office (Registrar's Office, Maxwell Hall, Third Floor or the University Center Rochester). See page 24 for further information about independent study and internships.

ACADEMIC RECORDS

Student Privacy Policies

WSU complies with the Federal Family Educational Rights and Privacy Act (FERPA) and the Minnesota Government Data Practices Act. Based on these two acts, students are afforded certain rights with regard to their education records. Specifically, students have the right to:

1. Inspect and review their education records within 45 days of the date that the University receives the student's request for access.
2. Request correction of records the student believes to be inaccurate, misleading, or in violation of his/her privacy rights.
3. Withdraw consent to disclosure of "directory information" as defined in the following policy statement:

Pursuant to the Minnesota Government Data Practices Act, Minnesota Statute Section 13.32, Subdivision 3; and the Family Educational Rights and Privacy Act, 20 USC 1232g et seq. 1974, Winona State University gives notice that the following directory information will be released upon request:

- Name
- Classification (FR, SO, JR, SR, etc)
- Permanent Address and Telephone Number
- Enrollment Status (Full-Time or Part-Time)
- Local Address and Telephone Number (includes email address)
- Date of WSU Graduation
- Date and Place of Birth
- Major and Minor Fields of Study and Licensure Programs
- Participation in Officially Recognized Activities and Sports
- Weight and Height (of Athletic Team Members)
- Dates of Attendance
- Degrees and Awards Received
- Most Recent Previous Educational Institution Attended

The University may disclose any of these items without prior written consent, unless notified in writing to the contrary. Any student who objects to the release of all or any part of the directory information on file in his or her name must notify the Registrar's Office, in writing, that he or she does not wish to have such information released. This request will be honored and all, or any specified portion of the information, which the student requests not to be released, will be held confidential.

Name or Address Change

Official name changes are made at the Maxwell One-Stop Center and require supporting documentation such as a marriage license, court order, or divorce decree. Students should use the MnSCU Student Portal to record address changes as soon as possible. In addition, students who are candidates for graduation should make the same name or address changes on the Application for Graduation.

Final Grades

At the end of the semester, final grades are available to students on the WSU website. To view grades, students access the MnSCU Student Portal and click on "Check Term Grades."

Transcripts of Credit and Copies of Student Records

Upon the student's signed, written request, the Registrar's Office will issue either an unofficial transcript or an official transcript (i.e., embossed with the University seal and a copy of the Registrar's signature). In general, students and advisors use unofficial transcripts on campus. Official transcripts are sent to other educational institutions, businesses, and other organizations. Release of official transcripts may be withheld if there is an outstanding debt to the University.

Transcripts may be requested in person at the Registrar's Office, by United States Postal Service mail, or by fax. Official transcripts are processed within three to five business days. When a transcript is given directly to the student, it is stamped "Issued to Student"; students must show a current WSU ID to pick up transcripts.

WSU reserves the right to refuse students access to inspect the following kinds of records:

- Financial statements of the student's parents
- Letters and statements of recommendation for which the student has waived his or her right of access, or which have been maintained by WSU prior to January 1, 1975

- Records connected with an application to attend WSU or a component unit of WSU if that application is denied
- Records that are excluded from the FERPA definition of education records
- Records that are determined by the University to include confidential data, in accordance with the Minnesota Government Data Practices Act.

If the student has an unpaid financial obligation to the University or if there is an unresolved disciplinary action pending against the student, Winona State University reserves the right to deny transcripts or copies of records not required to be made available by the Family Educational Rights and Privacy Act of 1974, as amended.

Credit Transfers from WSU

Universities and other colleges accept academic courses, undergraduate and graduate, completed at WSU when those courses are applicable to a curriculum the student chooses and when the courses meet prescribed scholastic standards. See pages 5 and 7 for further information about credit transfer as a new or returning WSU student.

Application for Graduation

The requirements for graduation with Associate in Arts and baccalaureate degrees are listed on page 23. Candidates for graduation should review the requirements specified for their major/minor, and submit an Application

for Graduation to the Registrar's Office at least two semesters before they expect to graduate.

Applications are processed in the order in which they are received at the Maxwell One-Stop Center; students should allow four to six weeks minimum for application processing and notification. Three weeks before graduation, a list of candidates is posted online and on the Maxwell One-Stop Center bulletin board. Candidates should review the list to confirm that they have been approved for graduation. If a candidate's name does not appear on the list, he or she should contact the Maxwell One-Stop Center.

Graduation for any particular semester becomes final 30 working days after the end of the semester. Degrees are posted on student transcripts at the end of the fall semester, spring semester, and the second summer session.

Student Right to Know Act

Institutional Research
Maxwell Hall, Room 209 (507-457-5004)

In compliance with the federal Student Right to Know Act, WSU tracks the rates at which full-time students complete bachelor's degrees from the University, within a specified period of time. This information is available on request from the Office of Institutional Research.

ACADEMIC POLICIES & UNIVERSITY REQUIREMENTS

Sally Johnstone, Vice President for Academic Affairs
Somsen Hall, Room 211 (507-457-5010)
www.winona.edu/academics

The Office of the Vice President for Academic Affairs oversees all academic matters for the University, which include maintaining the curriculum and making it available to students, assuring the quality of instruction, administering the academic policies and requirements of the University, managing enrollment, and maintaining a stimulating learning environment.

Policy Changes: Administrative and committee actions may change policies that affect students at any time. Students are responsible for complying with changes as they are reported either in the student newspaper (the Winonan) or in announcements posted in the Registrar's Office (Maxwell Hall) or on the University's website (www.winona.edu).

UNIVERSITY REQUIREMENTS

Students progress toward an associate (two-year) or a baccalaureate (four-year) degree by completing courses that satisfy University Studies requirements. Students in baccalaureate programs must also satisfy the requirements of an academic major and may take required courses in a minor or related field. Students also commonly take elective courses for personal interest or enrichment that do not satisfy requirements in any of these three areas, but that can be applied toward the total number of course credits required for graduation.

However, excessive accumulation of elective courses can delay graduation. Some academic choices lead unavoidably to that end. For example, a student who changes academic goals by transferring from another school or by changing majors may accumulate courses that can only be counted as electives. If a student changes from one curriculum to another within the University, the student must meet requirements of the newly chosen curriculum even though the total number of credits earned exceeds the total minimum for graduation.

Some courses may apply to both teacher licensure and a university requirement, or they may satisfy more than one university requirement simultaneously. Careful academic planning, with the help of an advisor

(page 28), can take advantage of such overlaps to satisfy multiple goals within the time span required for an undergraduate degree.

Non-Degree Credit

A small number of courses cannot be used to satisfy university requirements or applied toward graduation. These include:

- Developmental courses (course numbers below the 100-level). Developmental courses such as English 099 and Math 050 meet a student's educational needs, but carry only non-degree credit that counts toward financial aid and athletic eligibility but does not count toward graduation requirements. The grade received in a developmental course is not used in computing the term or cumulative GPA.
- Audited courses (page 24).
- Vocational courses in excess of 16 credits (not available at WSU but sometimes taken at another school).
- Courses taken for continuing education credit (CEU) (page 29).
- Courses in which the student has received a failing grade. (Some departments require a grade of "B" or better in courses applied toward the major.)

Required for A.A.	Required for B.A. or B.S.	
		Developmental Courses
46 Credits	46 Credits	University Studies, Including: Basic Skills — 12 credits Arts and Sciences Core — 22 credits Unity and Diversity — 12 credits
	12 Credits	Flag Requirements — 12 credits
	47 Credits Minimum	Major Minor
18 Credits	Variable	Electives
64 Credits	128 Credits	TOTAL CREDITS

UNIVERSITY STUDIES PROGRAM (USP)

The University Studies Program (46 semester hours) provides a broad base of skills and knowledge to equip students for informed, responsible citizenship in a changing world. It thereby distinguishes a college degree from a technical or occupational training program certificate. The program provides opportunities for students to evaluate their cultural and social inheritance critically, to think scientifically in both the natural and social spheres, to think beyond the boundaries of their own culture, and to understand the expressive arts. It also enhances reasoning, analytic, and communication skills that students will need to perform well in a wide range of occupations and postgraduate programs. Finally, the program provides the opportunity for students to explore how an understanding of the connections among these diverse bodies of skill and knowledge enhances their ability to live well and ethically in the contemporary world. Page 19 provides an overview of the University Studies subject areas and semester-hour requirements. Page 19 lists the courses approved for University Studies credit at the time this catalog was published.

All students, including transfer students, must complete the University Studies requirements in order to graduate from WSU:

- Transfer students who have satisfied specific goals of the Minnesota Transfer Curriculum, as identified in the Admissions section of this catalog will be considered to have satisfied the equivalent components of the University Studies Program.
- Transfer students who have received an Associate in Arts (A.A.) degree from a community or technical college have automatically satisfied the Basic Skills, Arts and Sciences Core, and Unity and Diversity components of University Studies but must, nevertheless, complete the University Studies Program Flag requirements at WSU.
- Transfer students who have received an Associate of Science (A.S.) or Associate of Applied Science (A.A.S.) degree from a community or technical college must complete the WSU University Studies requirements; however, the unity and diversity components will be waived unless there are specific requirements in the student's major.

Note: The list of approved University Studies courses is continually updated as additional or new courses are approved for various levels of the University Studies Program. The most up-to-date list of courses is available at www.winona.edu/registrar. Students are expected to check all course descriptions carefully to determine prerequisites.

Credit Transfers from WSU

The Minnesota Transfer Curriculum is a cooperative transfer program in which all public colleges and universities in Minnesota participate. If Winona State University certifies that a student transferring to another participating college or university has satisfied all ten areas of emphasis of the Minnesota Transfer Curriculum, then the other school will give the student credit for fully satisfying their general education requirements. The ten areas of emphasis are written and oral communication; critical thinking; natural sciences; mathematics/symbolic systems; history and the social/behavioral sciences; the humanities—arts, literature, and philosophy; human diversity; global perspective; ethical and civic responsibility; and people and the environment. Additional information about the Minnesota Transfer Curriculum is available at www.mntransfer.org.

WSU's general education requirements comprise three areas within the University Studies requirements described on page 19 of this catalog:

- **Four Basic Skills:** College Reading and Writing, Oral Communication, Mathematics, and Physical Development & Wellness
- **Four Arts and Sciences Core Requirements:** Humanities, Natural Science, Social Science, and Fine and Performing Arts
- **Four Unity and Diversity Requirements:** Critical Analysis, Science and Social Policy, Global or Multicultural Perspectives, and Contemporary Citizenship or Democratic Institutions.

A current list of courses that meet these requirements can be viewed online at www.winona.edu/registrar.

If a student transferring from WSU to another school that participates in the Minnesota Transfer Curriculum (MNTC) has completed some but not all the University Studies Program requirements, then he or she will be certified as having completed those areas of emphasis indicated by the table below.

Note: For students whose initial enrollment was fall 2006 or later, introductory or beginning world language courses do not count toward any of the MNTC goals although such courses typically fulfill Humanities requirements in the University Studies Program.

Successful completion of University Studies Program flagged requirements will not result in certification of completion of MNTC areas of emphasis. Students transferring to a college or university outside Minnesota or to a Minnesota institution that does not participate in the Minnesota Transfer Curriculum may have their transcripts evaluated on a course-by-course basis.

Using University Studies Courses to Meet Graduation Requirements

1. Students may use University Studies courses toward meeting the requirements in any minor requiring the course.
2. Students may use Basic Skills courses to satisfy both University Studies and major requirements.
3. Students may use courses in the Arts and Sciences Core to meet both University Studies and major/option requirements only if they are Additional Requirements courses.

An **Additional Requirements course** is an Arts and Sciences Core course that is required in the major/option but offered outside the major/option department. In this catalog, additional requirements are noted in the major/option program descriptions with an asterisk (*). Grades and credit hours earned in additional requirement courses are not calculated into the student's major GPA.

4. Students may use Unity and Diversity courses to satisfy both University Studies and major requirements.
5. Students may use Flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. All Flag courses require the relevant Basic Skills course(s) as prerequisites (e.g., the "College Reading and Writing" Basic Skill course is a prerequisite for Writing Flag courses). However, departments and programs may require additional prerequisites for Flag courses.

Satisfied Winona State's Requirements in University Studies Areas:

College Reading and Writing and Oral Communications (Basic Skills)
Mathematics (Basic Skills)
Physical Development and Wellness (Basic Skills)
Humanities and Fine and Performing Art (Arts and Sciences Core)
Natural Science (Arts and Sciences Core)
Social Science (Arts and Sciences Core)
Critical Analysis (Unity and Diversity)
Science and Social Policy (Unity and Diversity)
Multicultural Perspectives or Global Perspectives (Unity and Diversity)
Contemporary Citizenship or Democratic Institutions (Unity and Diversity)

Certified as Having Completed Minnesota Transfer Curriculum (MNTC) Areas:

Written and Oral Communication (MNTC Goal 1)
Mathematics/Symbolic Systems (MNTC Goal 4)
Does not satisfy any MNTC area
The Humanities—the Arts, Literature, and Philosophy (MNTC Goal 6)
Natural Sciences (MNTC Goal 3)
History and the Social and Behavioral Sciences (MNTC Goal 5)
Critical Thinking (MNTC Goal 2)
People and the Environment (MNTC Goal 10)
Human Diversity (MNTC Goal 7) & Global Perspective (MNTC Goal 8)
Ethical and Civic Responsibility (MNTC Goal 9)

Overview of University Studies Components

BASIC SKILLS (12 S.H.)

College Reading and Writing (ENG 111; 4 S.H.): Increase students' critical reading, thinking, and writing skills. Help students develop a mature writing style; establish foundation for the reading/writing done in later college courses. Students should take ENG 111 during the first year of college.

Oral Communication (CMST 191; 3 S.H.): Develop skill in expressing ideas effectively in individual and group formal presentations; establish the foundation for the communications required in later college courses. Students should take CMST 191 during their first two years of college.

Mathematics (3 S.H.): Develop an appreciation of the uses and usefulness of mathematical models of our world as applied in a variety of specific contexts. Should be taken during the first year, but no later than the student's third semester.

Physical Development and Wellness (2 S.H.): Provide knowledge and practical skills in lifetime physical activity, health awareness, and wellness. Courses complement and enhance students' educational foundation by demonstrating how to live a healthy lifestyle.

ARTS AND SCIENCES CORE (22 S.H.)

Humanities (6 S.H.): Provide a framework for understanding the nature and scope of human experience. Courses explore the search for meaning and value in human life by examining its expression in cultural forms and texts, literature, and the arts.

Natural Science (7 S.H.): Provide students the tools to understand and apply the methods by which scientific inquiry increases our understanding of the natural world. One laboratory course is required.

Social Science (6 S.H.): Help students to understand and explain economic, political, psychological, and sociological perspectives regarding human behavior.

Fine and Performing Arts (3 S.H.): Offer students opportunities for creative expression. Courses develop basic skills and aesthetic awareness in tandem with a fundamental understanding of artistic traditions and contemporary expressions.

UNITY AND DIVERSITY (12 S.H.)

Critical Analysis (3 S.H.): Develop critical thinking or analytic problem-solving skills, including the ability to identify sound arguments and distinguish them from fallacious ones.

Science and Social Policy (3 S.H.): Promote students' understanding of the interrelated concerns of society and the sciences. Courses integrate issues related to one of the sciences with the social and government policy decisions that stem from these issues.

GLOBAL OR MULTICULTURAL PERSPECTIVES (3 S.H.):

Global Perspectives: Improve students' understanding of the growing inter-relatedness of nations, people, and the environment. -OR-

Multicultural Perspectives: Develop students' understanding of diversity within and among societies.

CONTEMPORARY CITIZENSHIP OR DEMOCRATIC INSTITUTIONS (3 S.H.):

Contemporary Citizenship: Provide students with the ability to participate as effective citizens in a democratic, multicultural, and global society. -OR-

Democratic Institutions: Help students understand basic concepts of social justice, the common good, and the legitimate scope of government in a democratic and pluralistic society.

FLAG REQUIREMENTS (12 S.H.)

- I **Oral Flag (3 S.H.):** Complete the process of providing WSU graduates with the knowledge and experience required to become highly competent communicators by the time they graduate.
- P **Writing Flag (6 S.H.):** Reinforce the outcomes specified for the basic skills area of writing. Courses emphasize writing as essential to academic learning and intellectual development.
- O **Mathematics/Statistics or Critical Analysis Flag (3 S.H.):**
 - Mathematics/Statistics: Provide students with significant practice in applying prerequisite mathematics or statistical knowledge. -OR-
 - Critical Analysis: Provide students with significant practice in rigorous argument comparable to what a student is expected to receive in a mathematics/statistics flag course.

APPROVED USP COURSES

Note: The list of approved University Studies courses is continually updated as additional or new courses are approved for various levels of the University Studies Program. The most up-to-date list of courses is available at www.winona.edu/registrar. Students are expected to check all course descriptions carefully to determine prerequisites.

BASIC SKILLS (12 S. H.)

COLLEGE READING & WRITING (4) -MNTC Goal 1-

ENG 111 College Reading and Writing (4)

ENG 112 Research Writing (1) (must be combined with transfer credit)

ORAL COMMUNICATION (3)

CMST 191 Introduction to Public Speaking (3)

MATHEMATICS AND STATISTICS (3) -MNTC Goal 4-

100 Survey of Math (3)

110 Finite Mathematics (MATH) (3)

115 College Algebra (3)

120 Precalculus (3)

130 Matrix Algebra (3)

140 Applied Calculus (3)

150 Modeling Using Precalculus and Statistics (3)

155 Calculus Based Modeling (3)

160 Calculus I (4)

165 Calculus II (4)

110 Fundamentals of Statistics (STAT) (3)

210 Statistics (STAT) (3)

PHYSICAL DEVELOPMENT AND WELLNESS (2)

Health, Exercise and Rehabilitative Sciences (HERS)

204 Personal and Community Health (3)

205 Nutrition for Lifetime Wellness (3)

Physical Education and Sport Science (PESS)

Activities (1 S.H. each): 100, 101, 102, 103, 104,

112, 120, 122, 123, 134, 135, 137, 139, 140, 141, 142

144 Contemporary Activities (1)

199 Lifetime Fitness (2)

214 Standard First Aid and CPR (2)

Recreation, Tourism and Therapeutic Recreation (RTTR)

144 Contemporary Activities (1)

239 Outdoor Pursuits (3)

ARTS & SCIENCES CORE (22 S.H.)

HUMANITIES (6 S.H.)

Note: For students whose initial enrollment was fall 2006 or later, introductory or beginning world language courses do not count toward any of the Minnesota Transfer Curriculum goals. Introductory language courses include: ARAB 101, 102; CHIN 101, 102; ENG 106; FREN 101, 102; GERM 101, 102; JPN 101,102; and SPAN 101, 102.

Arabic (ARAB)

101 Arabic for Beginners (4)

102 Introduction to Arabic Grammar and Literature (4)

Art -MNTC Goal 6-

109 Introduction to Art (3)

221 Art History I (3)

222 Art History II (3)

224 American Art (3)

Chinese (CHIN)

101 Beginning Chinese I (4)

102 Beginning Chinese II (4)

Communication Studies (CMST) -MNTC Goal 5-

283 Introduction to Rhetorical Studies (3)

289 Gender and Communication (3)

English (ENG) -MNTC Goal 6-

106 ESL: Academic Reading and Writing I (3) (Exception:

ENG 106 does not count toward MNTC goals. See Note above.)

120 Introduction to Literature (3)

240 Young Adult Literature (3)

Foreign Languages (FREN, GERM, SPAN)

101 Elementary French I (4)

102 Elementary French II (4)

101 Elementary German I (4)

102 Elementary German II (4)

101 Elementary Spanish I (4)

102 Elementary Spanish II (4)

History (HIST) -MNTC Goal 5-

- 120 Western Civilization to 1500 (3)
- 121 Western Civilization 1500-1815 (3)
- 122 Western Civilization 1815-Present (3)
- 150 United States History to 1865 (3)
- 151 United States History Since 1865 (3)
- 214 The Mississippi River in U. S. History (3)

Humanities (HUM) -MNTC Goal 6-

- 140 Approaches to Film (3)

Japanese (JPN)

- 101 Beginning Japanese I (4)
- 102 Beginning Japanese II (4)

Music (MUS) -MNTC Goal 6-

- 109 Introduction to Music (3)
- 112 Musical Culture Along the Mississippi River (3)
- 113 Women in Music (3)
- 122 History of Rock Music (3)

Philosophy (PHIL) -MNTC Goal 6-

- 120 Introductory Philosophy (3)
- 201 Classical Philosophy (3)
- 230 Moral Theory (3)
- 240 Philosophy of Science (3)
- 260 Problems in Philosophy (3)
- 270 Philosophy of Religion (3)
- 280 Philosophy of Art (3)
- 301 Early Modern Philosophy (3)
- 302 Contemporary Philosophy (3)

Residential College (RESC) - MNTC Goal 6-

- 140 Topics in Humanities (3)

NATURAL SCIENCES (7 S.H.)**Biology (BIOL) -MNTC Goal 3-**

- 117 Human Biology (3)
- 118 General Biology (4)
- 201 Human Anatomy (4)
- 203 Natural History (4)
- 211 Anatomy and Physiology I (4)
- 212 Anatomy and Physiology II (4)
- 241 Basics of Life (4)
- 242 Organismal Diversity (4)

Chemistry (CHEM) -MNTC Goal 3-

- 100 Chemistry Appreciation (3)
- 106 Chemistry in Our World (3)
- 107 Chemistry in Our World with Lab (4)
- 108 Introductory General Chemistry (4)
- 210 Chemistry for Health Sciences (5)
- 212 Principles of Chemistry I (4)
- 213 Principles of Chemistry II (4)

Geoscience (GEOS) -MNTC Goal 3-

- 100 Minnesota's Rocks and Waters (3)
- 104 Catastrophes and Extinctions (3)
- 105 Astronomy with Laboratory (4)
- 106 Astronomy (3)
- 110 Oceanography with Laboratory (4)
- 111 Oceanography (3)
- 115 Meteorology with Lab (4)
- 116 Meteorology (3)
- 120 Dynamic Earth with Lab (4)
- 121 Dynamic Earth (3)
- 130 Earth and Life Through Time (4)

Physics (PHYS) -MNTC Goal 3-

- 115 Conceptual Physics (4)
- 200 Fundamentals of Aviation (3)
- 201 General Physics I (4)
- 202 General Physics II (4)
- 221 University Physics I (4)
- 222 University Physics II (4)

Science Education (SCIE) -MNTC Goal 3-

- 201 Investigative Science I: Earth the Water Planet (4)
- 401 Investigative Science II (4)

SOCIAL SCIENCE (6 S.H.)**Communication Studies (CMST) -MNTC Goal 5-**

- 282 Introduction to Communication Studies (3)
- 287 Conflict and Communication (3)

Economics (ECON) -MNTC Goal 5-

- 201 Principles of Microeconomics (3)
- 202 Principles of Macroeconomics (3)

Education (EDUC) -MNTC Goal 5-

- 303 Human Development and Learning: Elementary Education with Early Childhood Emphasis (4)
- 304 Human Development and Learning: Middle Level and K-12 (4)
- 305 Human Development and Learning: Secondary (4)

Geography (GEOG) -MNTC Goal 5-

- 110 World Regional Geography (3)
- 212 Physical Geography (3)
- 213 Cultural Geography (3)

Political Science (POLS) -MNTC Goal 5-

- 120 Introduction to American Politics (3)
- 130 Introduction to International Relations (3)
- 150 Introduction to Political Theory (3)
- 201 Politics and Violence (3)
- 221 State and Local Government (3)

Psychology (PSY) -MNTC Goal 5-

- 210 Introduction to Psychological Science (3)
- 250 Developmental Psychology (3)
- 325 Social Psychology (3)

Sociology (SOC) -MNTC Goal 5-

- 150 Introduction to Sociology (3)
- 205 Social Interaction (3)
- 212 The Family (3)
- 216 Social Problems (3)

Special Education (SPED) -MNTC Goal 5-

- 400 Education of Exceptional Children/Youth (3)

Women's and Gender Studies (WAGS) -MNTC Goal 5-

- 148 Introduction to Women's & Gender Studies (3)

FINE AND PERFORMING ARTS (3 S.H.)**Art (ART) -MNTC Goal 6-**

- 110 Experiencing Art (3)
- 114 2-D Design (3)
- 115 3-D Design (3)
- 117 Drawing for the Sciences (3)
- 118 Drawing I (3)
- 120 Introduction to Ceramics (3)
- 128 Introduction to Sculpture (3)
- 130 Introduction to Printmaking (3)

English (ENG) -MNTC Goal 6-

- 222 Introduction to Creative Writing (3)

Mass Communication (MCOM) -MNTC Goal 6-

- 115 Photography Appreciation (3)

Music (MUS) -MNTC Goal 6-

- 110 History of American Jazz (3)
- 111 Film Music: Art behind the Scenes (3)
- 120 Introduction to Music Theory (3)
- 141 World Music Ensemble (1)
- 143 Women's Chorus (1)
- 233 Piano Ensemble (1)
- 239 Jazz Combo (1)
- 240 Percussion Ensemble (1)
- 241 Symphonic Wind Ensemble (1)
- 242 Orchestra (1)
- 243 Concert Choir (1)
- 244 Jazz Ensemble (1)
- 247 Woodwind Ensemble (1)
- 320 Music for Elementary Teachers (3)
- 324 Recreational Music (2)

Residential College (RESC) - MNTC Goal 6-

- 143 Experience and Expressions (3)

Theatre and Dance (THAD) -MNTC Goal 6-

- 111 Theatre Appreciation (3)
- 115 Dance Appreciation (3)
- 131 Performance I for Everyone (3)
- 141 Oral Interpretation (3)
- 151 Tap Dance I (1)
- 153 Jazz Dance I (1)
- 155 Modern Dance I (1)
- 157 Ballet I (1)
- 205 Make Up for the Performer (1)
- 253 Jazz Dance II (2)
- 255 Modern Dance II (2)
- 257 Ballet II (2)
- 295 Making Interdisciplinary Connections (3)

UNITY AND DIVERSITY (12 S. H.)**CRITICAL ANALYSIS (3 S.H.)****Child Advocacy Studies (CAST) -MNTC Goal 2-**

- 301 Perspectives on Child Maltreatment & Child Advocacy (3)

Chemistry (CHEM) -MNTC Goal 2-

- 190 Forensic Chemistry (4)
- 425 Analytical Chemistry I (4)

Communication Studies (CMST) -MNTC Goal 2-

- 375 Argumentation and Advocacy (3)

Computer Science (CS) -MNTC Goal 2-

- 130 Introduction to BASIC Programming (3)
- 150 Overview of Computer Science (3)
- 234 Algorithms and Problem Solving I (4)

Economics (ECON) -MNTC Goal 2-

- 302 Intermediate Microeconomics (3)

English (ENG) -MNTC Goal 2-

- 210 Advanced Expository Writing (3)

Finance (FIN) -MNTC Goal 2-

- 360 Corporate Finance (3)

Geoscience (GEOS) -MNTC Goal 2-

- 240 Watershed Science (4)

Health, Exercise and Rehabilitative Sciences (HERS) -MNTC Goal 2-

- 326 Educational Topics/Issues (2)
- 433 Senior Health Seminar (1)
- 491 Therapeutic Treatment and Rehabilitation of Athletic Injuries (3)

History (HIST) -MNTC Goal 2-

- 298 Historical Research Methods and Historiography (3)

Mathematics (MATH) -MNTC Goal 2-

- 210 Foundations of Mathematics (4)
- 315 Chaos Theory (3)

Mathematics Education (MTED) -MNTC Goal 2-

- 201 Technology-Based Geometry and Probability for Elementary Teachers (4)

Music (MUS) -MNTC Goal 2-

- 203 Theory III (4)

Nursing (NURS) -MNTC Goal 2-

- 392 Cardiovascular Risk Prevention (3)

Philosophy (PHIL) -MNTC Goal 2-

- 110 Critical Thinking (3)
- 210 Inductive Reasoning (3)
- 250 Symbolic Logic (3)

Physics (PHYS) -MNTC Goal 2-

- 223 University Physics III (4)

Psychology (PSY) -MNTC Goal 2-

- 308 Experimental Psychology (3)

Statistics (STAT) -MNTC Goal 2-

- 303 Introduction to Engineering Statistics (3)
- 305 Biometry (3)
- 310 Intermediate Statistics (3)
- 321 Industrial Design of Experiments I (3)

Theatre and Dance (THAD) -MNTC Goal 2-

- 119 Play Reading (3)
- 215 Introduction to Laban Movement Analysis (3)

Women's and Gender Studies (WAGS) -MNTC Goal 2-

- 373 Feminist Theory/Process (3)

SCIENCE AND SOCIAL POLICY (3 S.H.)**Biology (BIOL) -MNTC Goal 10-**

- 104 Environment, Society, and Conservation (3)
- 109 Microbes and Society (3)
- 269 Human Reproduction (3)
- 330 Biomedical Ethics (3)
- 490 Issues in Biology (3)

Chemistry (CHEM) -MNTC Goal 10-

- 320 Environmental Chemistry (4)

Computer Science (CS) -MNTC Goal 10-

- 110 Computers in a Global Society (3)

Economics (ECON) -MNTC Goal 10-

- 315 Environmental and Natural Resource Economics (3)
- 450 Health Economics (3)

Engineering (ENGR) -MNTC Goal 10-

A sequence of the following three courses:

- 102 Introduction to Engineering (2)

- 390 Composites Manufacturing (3)

- 480 Design Project II (3)

Geoscience (GEOS) -MNTC Goal 10-

- 102 Resources of the Earth (3)
- 103 Natural Disasters (3)
- 108 Geology of the Mississippi River (3)
- 325 Environmental Geoscience (3)

Philosophy (PHIL) -MNTC Goal 10-

- 330 Biomedical Ethics (3)

Physics (PHYS) -MNTC Goal 10-

- 140 Energy (3)

Political Science (POLS) -MNTC Goal 10-

- 340 Environmental Policy (3)

Psychology (PSY) -MNTC Goal 10-

- 298 Health Psychology (3)
- 330 Psychology and the Law (3)
- 360 Personnel Psychology (3)

GLOBAL PERSPECTIVES OR MULTICULTURAL PERSPECTIVES (3 S.H.)**GLOBAL PERSPECTIVES****Child Advocacy Studies (CAST) -MNTC Goals 7 and 8-**

- 302 Global Child Advocacy Issues (3)

Economics (ECON) -MNTC Goals 7 and 8-

- 404 International Economics (3)
- 415 International Economic Development (3)
- 430 Asian Economies in Transition (3)

Finance (FIN) -MNTC Goals 7 and 8-

- 440 International Finance (3)

Geoscience (GEOS) -MNTC Goals 7 and 8-

- 425 Global Climate Change (3)
- 450 Travel Study in Costa Rica (2)

Global Studies (GS) -MNTC Goals 7 and 8-

- 200 Introduction to Global Studies (3)
- 205 Cultural Encounters (3)
- 210 Introduction to North America (3)
- 232 Introduction to Latin America (3)
- 233 Latin American & Caribbean Immigrants in the U.S. (3)
- 250 Introduction to Asia (3)
- 255 Peoples and Culture of South and Southeast Asia (3)
- 300 Contemporary China (3)

Health, Exercise & Rehabilitative Sciences (HERS)**-MNTC Goals 7 and 8-**

- 305 Health, Exercise and Medicine: An International Perspective (3)

History (HIST) -MNTC Goals 7 and 8-

- 123 East Asian Civilization (3)
- 165 Latin American History (3)
- 170 African Civilization (3)

Marketing (MKTG) -MNTC Goals 7 and 8-

- 450 Travel Study in Costa Rica (2)

Recreation, Tourism and Therapeutic Recreation (RTTR)**-MNTC Goals 7 and 8-**

- 450 Travel Study in Costa Rica (2)

Political Science (POLS) -MNTC Goals 7 and 8-

- 205 The United Nations in World Affairs (3)

Social Work (SOCW) -MNTC Goals 7 and 8-

- 445 Globalization of Social Welfare (3)

Women's & Gender Studies (WAGS) -MNTC Goals 7 and 8-

- 234 Interdisciplinary Approach to Gender and Latin American Society through 20th Century Literature (3)
- 235 Interdisciplinary Approach to Women and Social Justice Issues in Latin America (3)

MULTICULTURAL PERSPECTIVES**Biology (BIOL) -MNTC Goals 7 and 8-**

- 365 The Cultures & Ecology of East Africa - Tanzania (4)

Business Education (BUED) -MNTC Goals 7 and 8-

- 350 Quality of Work Life (3)

Chinese (CHIN)

- 201 Advanced Beginning Chinese I (4)
- 202 Advanced Beginning Chinese II (4)

Communication Studies (CMST) -MNTC Goals 7 and 8-

- 281 Intercultural Communication (3)
- 290 Disability Communication and Culture (3)

- 291 Topics in Multicultural Communication (3)
Economics (ECON) -MNTC Goals 7 and 8-
 435 North American Economics (3)
Education (EDUC) -MNTC Goals 7 and 8-
 308 Human Relations and Student Diversity (3)
English (ENG) -MNTC Goals 7 and 8-
 107 ESL: Academic Reading & Writing II (3)
 220 Multicultural American Literatures (3)
 221 Topics in World Literature (3)
Foreign Languages (FREN, GERM, SPAN) -MNTC Goals 7 and 8-
 201 Intermediate French I (4)
 202 Intermediate French II (4)
 201 Intermediate German I (4)
 202 Intermediate German II (4)
 201 Intermediate Spanish I (4)
 202 Intermediate Spanish II (4)
Geography (GEOG) -MNTC Goals 7 and 8-
 223 Geography of the Orient (3)
 225 Geography of Latin America (3)
Global Studies (GS) -MNTC Goals 7 and 8-
 215 Modern Japanese Culture
History (HIST) -MNTC Goals 7 and 8-
 220 Introduction to African-American History (3)
 235 History of the American Indian (3)
Japanese (JPN) -MNTC Goals 7 and 8-
 201 Advanced Beginning Japanese I (3)
 202 Advanced Beginning Japanese II (3)
Music (MUS) -MNTC Goals 7 and 8-
 114 World Music (3)
 115 Music of East and Southeast Asia (3)
 116 Music of the Americas (3)
Nursing (NURS) -MNTC Goals 7 and 8-
 325 Transcultural Issues in Health Care (3)
Recreation, Tourism and Therapeutic Recreation (RTTR) -MNTC Goals 7 and 8-
 265 Leisure in Different Cultures (3)
Political Science (POLS) -MNTC Goals 7 and 8-
 225 Ethnic Conflict and Nationalism (3)
 226 Politics and Society in Africa (3)
 270 Politics and Society in the Middle East (3)
 335 Latin American Political Systems (3)
 390 Comparative Politics - Third World (3)
Theatre and Dance (THAD) -MNTC Goals 7 and 8-
 312 Japanese Classical Theatre
Women's and Gender Studies (WAGS) -MNTC Goals 7 and 8-
 220 Power, Privilege, and Gender (3)

CONTEMPORARY CITIZENSHIP OR DEMOCRATIC INSTITUTIONS (3 S.H.)

CONTEMPORARY CITIZENSHIP

- Accounting (ACCT) -MNTC Goal 9-**
 211 Financial Accounting Principles (3)
Business Administration (BUSA) -MNTC Goal 9-
 106 Introduction to Business (3)
Business Education (BUED) -MNTC Goal 9-
 215 Personal Finance (3)
 360 Interpersonal Business Relations (3)
Computer Science (CS) -MNTC Goal 9-
 116 Web Technology
Counselor Education (CE) -MNTC Goal 9-
 200 Career/Life Decision Making (3)
 220 Emotions and Behavior (3)
Economics (ECON) -MNTC Goal 9-
 320 Business-Government Relations (3)
 420 Labor Economics (3)
Education (EDUC) -MNTC Goal 9-
 120 Parenting (3)
 299 Latino and Latin American Perspectives (3)
English (ENG) -MNTC Goal 9-
 211 Writing in Communities (3)
Finance (FIN) -MNTC Goal 9-
 201 Introduction to Finance (3)
Health, Exercise and Rehabilitative Sciences (HERS) -MNTC Goal 9-
 235 Professional Issues in Exercise Science (3)

- Marketing (MKTG) -MNTC Goal 9-**
 100 Marketing and Society
 101 Experiential Entrepreneurship
Music (MUS) -MNTC Goal 9-
 298 Foundations and Principles of Music Education (2)
Nursing (NURS) -MNTC Goal 9-
 120 Introduction to the Health Professions (3)
 260 Women's Health Issues (3)
Philosophy (PHIL) -MNTC Goal 9-
 130 Moral Problems (3)
 332 Philosophy of Law (3)
Recreation, Tourism and Therapeutic Recreation (RTTR) -MNTC Goal 9-
 421 Outdoor Education and Interpretive Services (3)
Political Science (POLS) -MNTC Goal 9-
 218 Community Service (3)
 228 Public Service (3)
Residential College (RESC) -MNTC Goal 9-
 150 Insights and Implications
Statistics (STAT) -MNTC Goal 9-
 350 Design of Samples and Surveys (3)

DEMOCRATIC INSTITUTIONS

- History (HIST) -MNTC Goal 9-**
 125 Classical History (3)
Mass Communication (MCOM) -MNTC Goal 9-
 100 Mass Media and Society (3)
Philosophy (PHIL) -MNTC Goal 9-
 220 Philosophy of Democracy (3)
 335 Constitutional Philosophy (3)
Political Science (POLS) -MNTC Goal 9-
 135 Comparative Political Systems (3)
 220 Civil Rights and Civil Liberties (3)
 332 European Political Systems (3)
 343 Human Rights in Theory and Practice (3)

FLAG REQUIREMENTS (12 S.H.)

Students may use University Studies Flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. In this catalog, flag course offerings are listed in each academic department's program description. The list of Flag courses is continually updated as additional or new courses are approved. For the most recent list of approved flag courses in the University Studies Program, see www.winona.edu/register.

MAJOR/MINOR REQUIREMENTS

In addition to University Studies requirements, all students in baccalaureate degree programs must complete requirements for an academic major or specialization. The major provides the student with in-depth practical and theoretical knowledge in a particular area of study. Many majors or areas of specialization offer students alternative paths of study or options. Students are also encouraged to pursue their interests by taking elective courses related to their major. Some degree programs require the student to complete a minor.

To declare a major, minor, or licensure program, complete the following steps:

1. Determine what major/minor program you wish to pursue. Check the program descriptions in this catalog to determine the major/minor program requirements. Because requirements may have changed since this catalog was printed, you are advised to consult with the Registrar's Office and the department offering the major or minor before making academic decisions.
2. If the major/minor program you wish to pursue is not listed in the current catalog, consult with the appropriate academic department to determine program requirements.
3. Complete the Declaration/Change to Major/Minor/Licensure Program form, and submit it to your major department, your academic advisor, or the Registrar's Office. When you declare (or change) your major/minor/licensure program, you must conform to the requirements effective on the date indicated on the Declaration/Change to Major/Minor/Licensure Program form.

Program requirements must be completed within seven years after declaring or changing a major/minor/certification. If the seven-year limit expires before the student completes the program requirements, the student must then complete the program requirements currently in effect.

GRADUATION REQUIREMENTS

Four-Year Graduation Guarantee

The offer of a Four-year Graduation Guarantee is extended to “first-time-in-college” students who declare certain majors at the time of matriculation. If the student signs a guarantee and complies with its terms and conditions, the student is assured graduation after completing four years of full-time study. If a student signs a guarantee and complies with the conditions but does not receive a diploma, WSU promises that the student can complete any remaining required courses tuition-free. For more information, contact the appropriate department or college dean.

To determine whether the major you intend to declare participates in the Four-year Graduation Guarantee Program, contact the Office of Admissions (Maxwell Hall).

Associate in Arts Degree - AA (Two-Year)

To be eligible for graduation, the student must satisfy the following requirements:

1. Complete a minimum of 64 credit hours.
2. Complete at least 16 of the 64 credit hours at WSU.
3. Complete the University Studies requirements except for the Flag Requirements.
4. Accumulate an overall “C” average (2.00 GPA or higher).
5. Be enrolled at WSU during the semester of graduation.
6. Submit a completed Graduation Application to the Registrar’s Office at least two semesters before the expected graduation date. See page 17 for the detailed application, approval, and notification procedures.

Baccalaureate Degree (Four-Year)

To be eligible for graduation, a student must satisfy the following requirements:

1. Complete a minimum of 128 credit hours.
2. Complete at least 30 of the 128 credit hours in residence during the junior and senior years combined. Residence credit is credit for classes taught by WSU faculty as well as credit earned under the Minnesota State University Common Market Program; it does not include credit by examination.
3. Complete the University Studies Program requirements.
4. Accumulate an overall “C” average (2.00 GPA or higher).
5. Be enrolled at WSU during the semester of graduation.
6. Bachelor of Science—Teaching (BT) candidates must complete the Professional Education Sequence, including student teaching. See page 91, “Admission to the WSU Teacher Education Program.”

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

7. Complete, with a “C” average, either a broad major of 47 credit hours or more or a major of fewer than 47 credit hours combined with a minor or a second major. (With a broad major, a minor is not required.) Students should be aware of the following considerations related to the major requirements:
 - a. A student cannot have a minor, option, or concentration that consists wholly of courses that are required in the major or option in which he/she is earning a degree.
 - b. Students can use a course to meet requirements in any major, minor, option or concentration requiring the course. However, they may not use a course in their major to meet arts and sciences core requirements unless it is an additional requirement (see page 18). Credit earned in a course counts only once toward the minimum 128 semester credits required for graduation.
 - c. If the major has more than one option or concentration, the minor requirement may not be fulfilled with a second option or concentration in that major. However, a student may take a major and a minor in the same department, unless the department prohibits that practice.
 - d. Certain departments require students to earn a “C” or better in each course within their major/minor or to earn a “C” or better in specific courses in their major/minor. Students should consult with the department offering the major or minor for any additional GPA requirements.
 - e. The major GPA does not include grades earned in additional requirements courses. (For more information, see page 18.)
8. Submit an Application for Graduation to the Registrar’s Office. See page 17 for more details about how to apply for graduation.

Notes:

- No degree is awarded until all grades are finalized; “I” or “IP” grades cannot remain on the permanent record.
- The student has the final responsibility for selecting and registering in courses that meet curriculum requirements.

Dual Majors

If a student completes two or more majors, a single degree is awarded based upon the primary major. A student’s default primary major is the major with the greatest number of credits. Any additional majors are listed on the student’s transcript under the degree to be awarded. If any of the majors fall under different degrees (for example, one major leads to a Bachelor of Arts and another leads to a Bachelor of Science), the student may choose either degree. (Students seeking additional or dual degrees should see the information below.) Students completing dual majors may use the second major as a minor if they are only receiving one degree. Students are encouraged to choose the Bachelor of Science—Teaching (BT) degree if they are seeking a teaching license.

Additional Majors/Minors

WSU graduates may return for an additional major/minor by completing all of the requirements for that major and/or minor. If a student completes another major/minor, the additional major/minor is recorded on the permanent record. Students without a WSU degree cannot earn an additional major and/or minor unless they complete the degree requirements. (See “Dual Degrees” below.)

Dual Degrees

If a student wishes to complete two concurrent degrees, (for example, Bachelor of Arts and Bachelor of Science), the student must complete a minimum of an additional 30 semester hours above the required 128 semester hours. Students must complete all major requirements under both degrees, including separate minors if required.

Additional Degree

If a student returns after graduation from WSU to earn an additional (different) bachelor degree at WSU, the student must complete a minimum of 30 additional credits for the second degree. Students must complete all major requirements under the degree, including a minor if required. If a student completes another major but does not complete the additional 30 credits, the major is recorded on the permanent record, but the additional degree is not recorded nor is another diploma awarded. The student receives only one diploma for each degree earned.

Teaching Degree Requirements for Post-Baccalaureate Students

A Bachelor of Arts graduate who holds a degree from WSU or another accredited institution may qualify for teacher licensure by complying with certain requirements, which are detailed in the Department of Education section on page 93.

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

ALTERNATIVES FOR EARNING ACADEMIC CREDIT

In addition to taking courses described in this catalog, students may make progress toward academic and career goals by:

1. Participating in special learning activities described in the catalog section entitled, “Other Academic Resources” (e.g., Cooperative Program with St. Mary’s University; Minnesota State University Common Market program; Outreach and Continuing Education Department, Study Abroad Program). (See page 28.)
2. Exercising alternatives such as credit by examination, independent study, internships, which are described in this section of the catalog.

Credit by Examination

If students can satisfy the requirements of a particular course by a written or oral examination, they may be able to get credit by departmental examination without formally enrolling in the course. This policy allows students to receive credit if they have completed equivalent study at a non-accredited school or if they can present evidence of independent study and related work experience. Students cannot use this process to repeat a course to improve a grade.

To be eligible, the student must be fully matriculated with a minimum 2.00 GPA at WSU and enrolled at the University during the semester in

which a credit by examination is requested. To apply, the student should request a Credit by Examination form from the Registrar's Office (Maxwell Hall) and obtain the necessary approvals from the academic dean and department offering the course to be credited.

Credit for Life-Work Experience

Students may obtain credit for prior learning acquired outside the traditional institutional setting. Students may request evaluation of prior learning by submitting a portfolio. If a student can demonstrate to the WSU faculty evaluators that what he/she has learned is substantially equivalent in level and depth of knowledge to what the student would acquire in the classroom, the faculty member may recommend the awarding of equivalency credits. All equivalency credits are awarded on a pass/no credit basis. For more information or to begin the application process, students should contact an Adult Entry Advisor in the Outreach and Continuing Education Department (Somsen Hall, Room 109, 457-5080).

Substitution of a Course

A student may request that a particular course be substituted for a course required in the student's major or minor. The course to be substituted may be one that the student has completed at WSU or at another college/university; it should carry the same credit and level as the course it is to replace. To request a course substitution, students should request an application from the Registrar's Office (Maxwell Hall) and obtain approvals from the academic department offering the course. Course substitutions are not reflected on the academic transcript.

Audited Courses

The auditing procedure permits a student to attend a course without performing graded work. An audited course appears on the student's transcript, but carries no academic credit. Audited courses cannot be used to satisfy graduation, certification, or licensure requirements. Courses pursued on an audit basis must be declared and processed during the registration period. A decision to change from a graded basis to an audit basis must be finalized by the published add/drop deadline for the semester. Regular tuition charges apply. See page 15 for registration information.

Independent Study

Projects beyond the scope or range of any courses offered at WSU can be pursued as independent study at the discretion of the appropriate faculty member, department chairperson, and dean. To be eligible, the student must be fully matriculated with an established cumulative GPA at WSU of 2.00 or higher. Students must apply for independent study according to announced deadlines (see Academic Calendar) and register for the course during the designated registration period. See page 15 for registration information.

Internships

Internships provide students academic credit for a supervised on-the-job work experience. Students apply the knowledge and skills learned in an academic setting to a professional work environment. A number of departments offer specific courses granting internship credits. Students must be fully matriculated to enroll in an internship. WSU policy indicates that students must have a minimum GPA of 2.00 to enroll in an internship; however, some departments require a higher minimum GPA.

University policy limits the number of credits that may apply toward a degree as follows: 12 internship credits per semester and 16 internship credits in total. In cases where combined internship credits in a major and/or minor will exceed 16 credits, a maximum of 21 semester credits may be applied toward graduation. However, individual departments may set a maximum number of credits awarded for internships.

Students should refer to the appropriate department listing for specific internship details, including minimum GPA, prerequisites, and credit limitations. Internships are offered on a pass/no credit basis, except three semester credits may be taken for a grade with approval of the department and academic dean. See page 15 for registration information.

GRADING AND CREDIT POLICIES

Credit Load

One hour of credit is granted for one lecture or class period of 50 minutes per week for 15 weeks. Most courses are credited with three or four semester hours. Laboratory classes, internships, practica, and other special courses typically offer fewer credits per hour of instructional time. To be considered full-time, a student must take a minimum of 12 credit hours per semester. Students who wish to enroll in more than 19 semester credits must obtain prior approval from the academic dean of the College of their major prior to registration.

The University may restrict the number of credits in which a student can enroll if it determines that previous low scholarship, out-of-school obligations, or similar factors might interfere with satisfactory performance of the student's obligations. The University may restrict a student from registering if the student fails to follow proper registration procedures.

To complete degree requirements in four years (eight semesters), students must earn an average of 16 semester credit hours each semester. For more information about the four-year graduation guarantee, see page 23.

Class Attendance

In order to improve students' access to classes they need and want, the faculty has adopted a policy that requires student attendance at the first meeting of all classes. The purpose of this policy is to identify students who have decided to drop a particular class as early as possible so that students who want to enroll in that class will be able to do so.

If a student wishes to continue in a class but is unable to attend the first class meeting due to circumstances beyond his/her control, the student should notify the instructor or academic department before the first class meeting. If a student wishes to withdraw from a class, the student is responsible for dropping the class (page 27).

An instructor may choose to cancel a student's registration if the student fails to attend the first class meeting of a closed (i. e., full) class; however, the instructor is not required to do so. The student must not assume that the instructor will cancel his/her registration for a class, even if the class is closed. If the instructor cancels the student's registration, a notice will be sent to the student's permanent address.

Other than this policy regarding attendance at the first meeting of a class, the University has no overall policy governing class attendance. Each instructor establishes and announces an attendance policy and has the responsibility and authority for enforcing it.

Grading System

Work in any course is evaluated in accordance with the following system of letter grades:

A - Excellent	F - Failing	W - Withdrawal
B - Very Good	NC - No Credit	AU - Audit
C - Average	I - Incomplete	IP - In-Progress
D - Below Average	P - Pass	

The notation of "Z" on an unofficial transcript indicates that no final grade has been reported yet. At the close of a semester, a "Z" grade is replaced with one of the other grades.

Grade Point Average (GPA)

Each semester hour of credit attempted receives honor points according to the following:

- Each "A" credit = 4 GPA points
- Each "B" credit = 3 GPA points
- Each "C" credit = 2 GPA points
- Each "D" credit = 1 GPA point
- Each "F" credit = 0 GPA points

The GPA is computed by dividing the total number of GPA points by the total number of GPA credits attempted. The frequently referred to "C" average is a 2.00 grade point average. The major and minor GPAs do not include Additional Requirements (i.e. Arts and Sciences courses outside the major department that are required courses in certain majors; see page 18). Although courses taken on a pass/no credit basis grant credit toward graduation, the credit does not affect the GPA.

Note: For probation and suspension decisions, only courses and credits taken at WSU count in the computation of GPAs.

Incomplete Grades

An “Incomplete” is reserved for special cases in which the student, for reasons beyond his/her control, is unable to finish an important assignment or other required coursework by the end of the semester, though the student is passing in all other aspects. An incomplete grade cannot be used to gain time to perform extra credit work to improve a potentially low course grade.

Students must complete the prescribed requirements of the course before mid-term of the next semester. Once the requirements are satisfied, the instructor will submit a completed Change of Grade/Incomplete form to the Registrar’s Office. The Registrar must receive a grade to replace the “I” by mid-term day of the next semester. If an “I” is not replaced with a grade within the specified time, the incomplete grade automatically becomes a failing grade.

In-Progress Grades

An instructor may assign a grade of IP (“In Progress”) to a student who is in a course that is not expected to end at the close of a semester. Certain internships and arranged classes, for example, are designed to continue beyond the close of a semester. If an “IP” is not replaced with a grade within one year of the close of the semester in which the course was offered, it becomes a failing grade.

Repeated Courses

When a student repeats a course, he/she must take the course on a regular graded basis (i.e., letter grade). When a student repeats a course, only the last grade received and credits earned are included in the GPA computation. If the student withdraws (W) while repeating a course, the original grade is included in the GPA computation.

At registration, the student must submit the appropriate forms to the Registrar’s Office, indicating that a particular course is being repeated. Without this notification, the student’s academic records may be adversely affected. Students should be aware that repeating courses will slow their academic progress and may delay graduation, because they will only receive credit for the most recent offering of the course. Once a baccalaureate degree has been awarded, the student cannot repeat any course to improve his/her GPA.

Pass/No Credit (P/NC) Courses

The University’s P/NC grading classification enables students to enroll in unfamiliar or difficult academic subjects without fear of jeopardizing their GPA. It is intended to introduce students to lifelong learning—learning that does not include the traditional reward or penalty of a grade.

Although courses taken on a P/NC basis grant credit toward graduation, the credit does not affect the cumulative GPA. When the course is completed, either P (pass) or NC (no credit) is entered in the student’s permanent record. P is interpreted as equivalent to an A, B, C or D letter grade. If the student receives a “grade” of NC, the course can be repeated; however, it must be repeated for a letter grade, and the grade will be included in the student’s GPA (see “Repeated Courses” above).

Departments designate which courses are required or permitted to be taken on a P/NC basis. Major, minor, or professional courses generally are not included; however, a department chairperson, in consultation with the instructor and the dean, may approve an exception. The department may permit the course to count toward the major/minor requirements if a student selects a major or minor after taking a course in the department on a P/NC basis.

Students cannot take more than six P/NC credits per semester except for student teaching and internships. The six credits include both optional P/NC classes and classes in which P/NC grading is mandatory.

Additionally, the total number of credits for graduation may not include more than 32 “Pass” credits. Optional P/NC courses, mandatory P/NC courses, student teaching and/or internships all are counted in the 32-credit limitation. For optional P/NC courses, the student must decide, by the last day of the drop/add period, whether the course is being taken on a P/NC basis. See page 16 for more information about declaring/changing the grade method for a course.

Final Examinations

A final examination is required for every course taught at WSU. The course instructor determines the content of the final examination. Students can find out when an exam is to be given by going to www.winona.edu/class_schedule and clicking on the link to the appropriate semester’s exam schedule. Exams are scheduled according to the following guidelines:

- Because the semester extends through the final exam week, classes are expected to meet as designated in the final exam schedule.
- An instructor who wishes to reschedule an exam during final exam week must receive prior approval from the college dean.
- Courses of more than two credits will have final exam times determined

by the day the class first meets for lecture each week. Final exams for classes beginning on Monday, Wednesday, or Friday will meet at MWF times. Final exams for classes beginning on Tuesday or Thursday will meet at TH times.

- Examinations in classes offered for one or two credits will be given during the last regularly scheduled class period prior to the first day of the final examination schedule.
- The responsibility for allowing exceptions for individual students rests with the student and the instructor.
- The content of the final examination is determined by the course instructor, who is encouraged to consult with the students prior to giving the final.
- Evening class final exams adhere to the published schedule for evening classes. All other classes follow the day class schedule.
- Some classes may begin at times other than the regularly scheduled start times. Final exams for these classes will be held at the examination time schedule for the class period in which the start time of the class falls (example: a class beginning at 9:00 a.m. Tuesday and Thursday will have its final exam at the time scheduled for 8:00 - 9:20 a.m. TH classes).

GRADE APPEAL POLICY

The evaluation of student performance in courses and the reporting of appropriate grades are faculty responsibilities. However, students sometimes feel that their academic work has been evaluated unfairly. The process for student appeals of grades is as follows:

1. Any student who wants to appeal a grade must confer with the instructor within the first 10 academic calendar days of the next term (excluding summer terms) in an attempt to resolve the dispute.
2. If the student and the faculty member come to agreement, the process ends.
3. If the student and the faculty member do not come to agreement, then the student may file a written grade appeal, using the Grade Appeal form, which is available in the Registrar’s Office and at the University Center Rochester student services desk. The written appeal must be sent to the Grade Appeals Committee chairperson within 30 academic calendar days of the next term (excluding summer terms); a copy of the appeal must be sent to the Vice President for Academic Affairs.

A Hearing Committee, which is a subcommittee of the Grade Appeals Committee, will review the case as presented by the student and the faculty member. Both parties are entitled to assistance and advice from members of the academic community in presenting their case to the subcommittee. The Hearing Committee may recommend that the instructor do one of the following:

- a. Make no change in the grade
- b. Re-evaluate the student’s academic work
- c. Change the grade

The finding of the Hearing Committee is final. It will be conveyed to the student, the instructor, the Vice President for Academic Affairs, and the chairperson of the Grade Appeals Committee. Within seven (7) calendar days, the course instructor will inform the student, Grade Appeals Committee chairperson, and the Vice President for Academic Affairs of the action taken regarding the Hearing Committee’s recommendation. The instructor is not obligated to comply with the recommendation of the Hearing Committee.

ACADEMIC PROGRESS Classification of Students

Based on credit hours completed, students are classified as follows:

	Credit Hours
Freshman	0 - 29
Sophomore	30 - 59
Junior	60 - 89
Senior	90+

Freshmen are not eligible to enroll in courses numbered in the 400-level. In order to make continuous progress toward a four-year degree, a student must take an average of 16 credits per semester. A “freshman,” therefore, is usually a first-year student; a sophomore is usually a second-year student, and so forth. Because a student’s credit load in any semester may vary from the average, classification by credit hours is a more informative indicator of progress toward a degree than time spent in school.

Satisfactory Progress

To maintain good academic standing, a student must have a minimum WSU cumulative GPA of 1.75 for the first 15 degree credits attempted and 2.00 thereafter. The cumulative GPA used to determine satisfactory

progress is based solely on courses attempted and grades earned at WSU. In addition, a student must complete at least 67% of credits attempted to maintain good academic standing.

The satisfactory progress requirements that are used to determine eligibility for financial aid (page 11) are more stringent than the requirement listed in this section.

Academic Honors

WSU offers many opportunities for students to achieve academic honors including the Dean's List and Graduation with Honors. Students are encouraged to take advantage of the various department-level and university-level opportunities to earn recognition for their academic excellence and achievements.

WSU belongs to several national fraternities that recognize scholarship and a commitment to service, including Alpha Lambda Delta (first-year students with 3.50 GPA), Golden Key International Honor Society, the National Society of Collegiate Scholars (NSCS), and the National Residence Hall Honorary Society.

Honor Societies

Some academic departments have joined national honors societies, and other departments are in the process of doing so. If your major is not included in the following list, contact the chairperson of your department to learn what activities are underway regarding honor societies.

Biology	Beta Beta Beta
Communication Studies	Lambda Pi Eta
Education	Alpha Upsilon Alpha
	Kappa Delta Pi
History	Phi Alpha Theta
Mathematics	Pi Mu Epsilon
Nursing	Sigma Theta Tau
Political Science	Pi Sigma Alpha
Psychology	Psi Chi
Statistics	Mu Sigma Rho

Department Honors Programs

Some departments have honors programs with specific requirements for admission and an honors thesis project. For information, see the department's program description in this catalog or the department's website.

Dean's List

Undergraduate students are included on the Dean's List if they complete 12 semester hours or more for letter grades at WSU (not including pass/no credit) during any one semester and achieve a GPA of 3.50 or higher.

Graduation with Honors

Honors are awarded to WSU graduates whose academic record as reflected by their grade point average (GPA) illustrates significant academic achievement. To qualify for "Graduation with Honors," a student must meet the following requirements:

- Students receiving a baccalaureate degree must complete 30 credits in residence during their junior and senior years (i.e., a minimum of 30 credits of WSU courses).
- Students receiving an A.A. degree must complete 16 credits in residence.
- Achieve a minimum GPA of 3.60 for all WSU coursework.
- Achieve an overall GPA of 3.60, including any college-level transfer work.

Students who do not meet all of the above requirements are not eligible for Honors. (**Note:** All GPAs are truncated and not rounded; for example, 3.2499 is truncated to 3.24.)

Examples

- Student has a 3.59 WSU GPA and a 4.00 Transfer GPA: WSU GPA is too low to qualify for honors.
- Student has a 3.60 WSU GPA and a 3.59 Transfer GPA: Combined GPA is too low to qualify for honors.
- Student has a 4.00 WSU GPA and a 3.00 Transfer GPA: Student may qualify if overall GPA is above 3.60.
- Student has a 3.60 WSU GPA and a 3.60 Transfer GPA: Student qualifies for honors.

Honors Standards through Fall 2008

Cum Laude: Overall GPA between 3.250 and 3.499

Magna Cum Laude: Overall GPA between 3.500 and 3.749

Summa Cum Laude: Overall GPA between 3.750 and 4.000

Honors Standards Effective Spring 2009

Cum Laude: Overall GPA between 3.600 and 3.749

Magna Cum Laude: Overall GPA between 3.750 and 3.899

Summa Cum Laude: Overall GPA between 3.900 and 4.000

Provisional (Commencement) Honors

Honors recognition for the commencement ceremony is based on the provisional determination of honors. This determination is made based on coursework completed prior to the term for which the student has applied to graduate. Provisional honors include any faculty grade changes for prior coursework on record at the midterm deadline of the graduation term (see academic calendar). Provisional honors also include administrative conversions (i.e., grades of "I" and "IP" to "F") from prior terms on record following the midterm conversion deadline. Any faculty grade changes from prior terms recorded after the midterm deadline are not used to determine provisional honors.

Students who have not filed a Graduation Application prior to the published midterm date of their graduation term are not eligible for provisional honors. However, all graduating students will be reviewed for final honors.

Final Honors

Final honors are determined for all graduates after commencement and include all undergraduate coursework based on the standards and requirements above. A student's honors status may change after the determination of final honors. Final honors are posted on the student's transcript.

Academic Warning and Suspension

To remain enrolled in the University, students must be in good academic standing at the end of each academic year. A Notice of Academic Warning is sent to any student who is not in good academic standing at the end of the fall semester of each academic year. If, at the end of the spring semester, the student's cumulative GPA or credit completion rate is below the minimum required for good academic standing, the Vice President for Academic Affairs will suspend the student. See page 25 for information about the policy for satisfactory progress.

Once a student is suspended, he/she can submit a written appeal for readmission. If the written appeal is denied, the student can appeal in person to the Academic Review Committee. If the appeal is granted, the student is eligible to return during the next academic year. Instructions for submitting an appeal are included in the Notice of Suspension.

Re-Admission after Suspension

If the student does not appeal a suspension or if the appeal is denied, the student must comply with the following suspension policy regarding University enrollment. The student cannot enroll:

- For one semester after receiving the first Notice of Suspension.
- For a full academic year after receiving a second Notice of Suspension.
- For two full academic years after receiving a third Notice of Suspension.

A student may enroll in courses at WSU during the summer sessions even though he/she has been suspended. Students who have returned to the University after complying with the suspension policy, but who do not return to good academic standing within the academic year in which they re-enroll, are subject to suspension again at the end of the academic year. For answers to specific questions regarding the suspension policy or procedures, contact the Advising and Retention Center.

Academic Pardon

The purpose of the academic pardon policy is to grant students a one-time pardon for past failures and to allow them to resume their college careers with a realistic possibility of completing a degree. Academic pardon may be attractive for a student who has left WSU with a very low GPA, gained life experience, and returned after an extended absence to resume degree work. If the student has not yet applied for graduation, he or she may request that grades earned during a specified period of the previous undergraduate career be held aside during calculation of an adjusted GPA, as described below.

Approval of academic pardon has the following consequences:

1. The cumulative GPA will be recalculated. The new GPA will be based on courses completed after the student was re-admitted. Grades and credits attempted during the period for which academic pardon has been approved will not be used in calculating the cumulative GPA that is printed on transcripts and in determining whether graduation requirements have been met.
2. Courses in which the student received a grade of "C" or better prior to being re-admitted will be used for academic credit but not used in calculating the GPA.
3. The following statement will appear on transcripts of the student's academic record: "This student was granted Academic Pardon under the WSU Academic Pardon Policy. All WSU courses with a grade of "C" or better taken prior to re-admission and granting of academic pardon were

- given academic credit, but were not used in the calculation of the WSU GPA.”
- Grades the student received during the period of academic pardon will remain unchanged as a permanent part of the student’s academic record and will be printed on all transcripts of that record.
 - The student must meet all major/program requirements in effect at the time he/she was re-admitted.
 - The student is not eligible for academic honors at graduation (i.e. Cum Laude, Magna Cum Laude, Summa Cum Laude).

DROPPING CLASSES

Registration in a course obligates each student to pay tuition and other fees unless the course is dropped before the drop-without-tuition-obligation deadline. The refund deadline is the fifth class day of full-term courses. The deadline for short courses (three days or less) is the first class meeting. For short courses greater than three days, students have one day to drop with a refund.

Courses dropped before the deadline are not recorded on the student’s transcript. Courses dropped between the drop deadline and the final withdrawal deadline receive an administrative indicator of “W” (“withdrew”). Credits in courses with the “W” symbol are not included in the computation of GPAs.

Note: MnSCU requires WSU to charge tuition and fees based on course registration, not on attendance. Tuition and fee charges are based on all courses in which the student is enrolled after the drop deadline even if the student has never attended those classes.

In order to increase the number of students served, WSU allows instructors to drop students who do not attend the first class meeting. However, instructors may drop students from closed classes only, but they are not required to do so. Therefore, students are responsible for dropping any class that they have decided not to take. Students must not assume that someone else will take care of it for them. Students may drop classes using either the WSU website or staff assistance:

- If you use the website, always print a copy of your schedule after you have finished dropping classes. The printed copy confirms that the Internet transaction was completed. Also, your computer screen should display a message indicating that the transaction was successfully completed. If the message is not displayed, the transaction was not successful.
- If you use staff assistance, ask the staff person for a copy of your schedule.

WITHDRAWAL

Deciding Whether to Withdraw

If you are thinking about withdrawing during the semester, you owe it to yourself to be well informed and to consider all the consequences. Use the following checklist as you ponder this decision:

- Talk with your academic advisor. She/he will review your academic and career objectives and listen to your concerns. Your advisor can help you plan for completing your college education at a later time.
- Make an appointment to see one of the staff members in the Advising and Retention office (Maxwell Hall).
- If you are having academic difficulty in one or more of your classes, check out Tutoring Services or Student Support Services (Darrell W. Krueger Library). See page 28 for more information about specific services available and eligibility for these services.
- If you are not sure that you have chosen a major or career path that is right for you, visit the Career Services office (Maxwell Hall).
- If you are experiencing personal problems, help is available in the Counseling Center (Wabasha Hall).
- If you are experiencing illness, contact Student Health Services (Wabasha Hall).
- If you are having trouble paying tuition and fees, you may be able to work out a payment plan with the Office of Student Accounts (Maxwell Hall).
- If you are living on campus and are having problems with your roommate or accommodations, contact your Resident Assistant, Residence Hall Director, or the Housing and Residence Life office to find out what changes can be made (Kryzsko Commons, Room 130; 457-5305).

If you receive financial aid through the University and then withdraw during the term and, you may be expected to return part of the financial aid, corresponding to the portion of the semester in which you are not enrolled. If you plan to return to WSU or transfer to another school, leaving during the term may make you ineligible to receive government-sponsored financial aid in the future.

Withdrawing from the University

If, after exploring your options, you decide to leave the University, here is a checklist of things you should do.

- Be sure to drop your classes, either on the WSU website or with the assistance of staff members as follows:

Winona classes: Maxwell One-Stop Center (Maxwell Hall, Second Floor; 507-457-5030)

Rochester classes: UCR Service Desk (507-285-7100)

Extension classes: Outreach and Continuing Education (Somsen Hall, Room 109; 507-457-5080)

- Return your laptop computer to the Technical Support Center in Somsen Hall, Room 207. You are responsible for paying the laptop fee for any semester in which you are enrolled at WSU. If you are not enrolled and do not return the laptop by the start of the next semester, you will be charged a late fee.
- If you are leaving the University for only a semester or two, pick up an Intent to Return/Application for Readmission form at one of the registration offices above. Complete it and submit it at least one month before you plan to register for classes for your first term back.
- Check with the Office of Student Accounts (Maxwell Hall) to make sure your account is paid in full or to inform yourself of the balance on your account and the University’s collections policies.
- If you are leaving during the semester and have received financial aid through the University, contact the Office of Student Accounts (Maxwell Hall) to learn whether you will be expected to return any of the aid you have received.
- If you are living in a campus residence, formally check out of your room with your Resident Assistant or the Residence Hall Director.

You may withdraw from the University (drop all of your classes) anytime during the semester until the final withdrawal deadline. If you withdraw from the University within a few weeks after the “drop-without-tuition-obligation” deadline, you will receive a partial refund of tuition and fees, based on the date of your withdrawal, and in accordance with a pro-rated refund schedule (page 9). Each term’s pro-rated refund schedule is published on the WSU website.

ACADEMIC INTEGRITY POLICY

At WSU, academic integrity is based on honesty. The University community requires that work produced by students in the course of their studies represents their personal efforts and requires that students properly acknowledge the intellectual contributions of others.

WSU students are required to adhere to the University’s standards of academic integrity. The following are examples, not intended to be all-inclusive, of types of behavior that are unacceptable and will be viewed as violations of the academic integrity policy.

- Cheating:** Using or attempting to use unauthorized materials in any academic exercise or having someone else do work for you. Examples of cheating include looking at another student’s paper during a test, bringing a “crib sheet” to a test, obtaining a copy of a test prior to the test date, or submitting homework borrowed from another student.
- Deception and Misrepresentation:** Lying about or misrepresenting your work, academic records, or credentials. Examples of deception and misrepresentation include forging signatures, falsifying application credentials, and misrepresenting group participation.
- Enabling Academic Dishonesty:** Helping someone else to commit an act of academic dishonesty. This would include giving someone else an academic assignment with the intent of allowing that person to copy it or allowing someone else to cheat from your test paper.
- Fabrication:** Refers to inventing or falsifying information. Examples of fabrication include “drylabbing” (inventing data for an experiment you did not do or did not do correctly) or making references to sources you did not use in academic assignments.
- Multiple Submissions:** Submitting work you have done in previous classes as if it were new and original work. Although faculty may be willing to let you use previous work as the basis of new work, they expect you to do new work for the class. Students seeking to submit a piece of work to more than one class should seek the permission of both instructors.
- Plagiarism:** Using the words or ideas of another writer without proper acknowledgment, so that they seem as if they are your own. Plagiarism includes behavior such as copying someone else’s work word for word, rewriting someone else’s work with only minor word changes, and/or summarizing someone else’s work without acknowledging the source.

Due Process

“Due process” refers to the concept of fair treatment. Students accused of violating the academic integrity policy have the following due process rights:

1. Oral or written notice of the charges from the faculty member
2. An explanation of the evidence against the student
3. An opportunity for the student to present his/her side of the story
4. Notice of sanction(s) imposed (such as lowering a grade, failing the course, dismissal from a program, etc.)
5. An opportunity to appeal the sanction(s)

Students accused of academic dishonesty have the right to appeal a faculty member's sanction to the Grade Appeals Committee. In cases involving accusation of academic dishonesty, the committee will make a recommendation to the appropriate academic dean rather than to the instructor, as is usually the case with standard grade appeals (page 25). The decision of the academic dean (or designee) is final.

Academic sanction appeals must be received in writing within five class days or, in the case of break periods, within five class days after returning from a break. A time extension may be granted upon request to the Grade Appeals Committee. Failure to submit a timely appeal or request for extension constitutes a waiver of any right to request an appeal.

The written appeal must be based on one or more of the following reasons:

1. The evidence from the meeting between the faculty member and the student does not support the outcome.
2. There are new or newly discovered facts not brought out in the original meeting, which may substantially affect the outcome.
3. There was a procedural error, which could have substantially affected the outcome of the meeting.
4. The sanction was excessively severe.

Under some circumstances, a sanction(s) more severe than academic sanction may be appropriate. The dean of the college(s) or designee where the alleged violation(s) occurred, in collaboration with the WSU Conduct Officer (or designee), will make the decision as to whether or not the case will be heard as a behavior discipline. If so, the case will be referred to the Office of Student Life and Development to be processed under the guidelines of the WSU Student Conduct Policy. Students found responsible for a violation(s) processed under the WSU Student Conduct Policy face disciplinary sanctions (such as probation, suspension, etc.).

Information pertaining to the WSU Student Conduct Policy is available in the Office of Student Life and Development (Kryzsko Commons, Room 129) or at www.winona.edu/sld.

ACADEMIC RESOURCES

ACADEMIC ADVISING

Advising and Retention

Maxwell Hall, Third Floor (507-457-5600)

www.winona.edu/advising

WSU's academic advising system is designed to help students make well-informed decisions. Students are ultimately responsible for being aware of the policies and requirements that affect their academic progress and for making appropriate decisions about choosing courses and a major, as well as other academic matters. Because this is a vital responsibility, the University offers the guidance of experienced professionals, through whom students learn about University objectives, requirements, support services, activities, and policies. As a result of advising, students should understand themselves better and learn to use resources to meet their specific educational needs.

Each student is assigned an advisor. Students who have declared a major are assigned an advisor in the department of their declared major. New students who have not declared a major are assigned to their orientation instructor for advising. Prior to each registration, the student must meet with the advisor to discuss course selection and obtain an access code for web registration. Students are encouraged to meet with their advisors at other times as well to discuss academic and career goals.

To get the greatest benefit from advising, each student should maintain a file of documents related to his or her academic progress and should bring the file to advising appointments. At a minimum, the file should include a copy of the student's current schedule, electronic degree audit report (DARS), and unofficial academic record. These documents are available to the student through the web registration system. Students will find the name of their advisor printed on their course schedule and on the DARS report. If no advisor is listed, the student should contact the department offering his/her major to request an advisor. Students who have not declared a major should report to the Advising and Retention Center for assistance.

NEW STUDENT ORIENTATION

Advising and Retention

Maxwell Hall, Third Floor (507-457-5600)

www.winona.edu/advising/

To assist new students in their transition into the University, WSU offers an orientation course (OR 100, Introduction to Higher Education) for incoming first-year students. OR 100 begins with academic and social activities the week prior to the start of fall semester. This course introduces students to services, activities, expectations, and opportunities at WSU, and it provides them with the means to network with other students, faculty, and staff. Incoming students register for OR 100 (1 S.H.) during New Student Registration.

TUTORING SERVICES

Darrell W. Krueger Library, Room 220 (507-457-2486)

www.winona.edu/tutoring

Tutoring Services offers free peer tutoring and Supplemental Instruction (SI). Peer tutoring is available in a wide variety of subjects during drop-in hours or by appointment. SI sessions are regularly scheduled, informal review sessions in which students compare notes, discuss readings, and develop organizational and study tools under the guidance of a student who has already excelled in the course. Students can view information about Tutoring Services and other helpful WSU resources by accessing the web address above.

STUDENT SUPPORT SERVICES

Howell Hall, Room 133 (507-457-5465)

www.winona.edu/studentssupportservices

The Student Support Services is dedicated to providing individualized academic and personal support to facilitate lifelong learning and development. Student Support Services is designed to help students achieve their goal of graduating from college. The program provides a community of support for students who are first-generation college students, who have low income, or who have disabilities. Services include tutoring, academic advising, counseling, student leadership opportunities, and help in choosing a major. This is a federally funded TRIO program.

OTHER ACADEMIC RESOURCES

Cooperative Program: WSU-St Mary's University of Minnesota

Registrar's Office

Maxwell Hall (507-457-5030)

The cooperative program between WSU and St. Mary's University of Minnesota (SMU) allows full-time, undergraduate WSU students to take classes at SMU and pay tuition for the credits at WSU. Participating students are required to take a minimum of nine credits at WSU during the semester in which they enroll in this program unless the department chairperson or the appropriate college dean approves an exception. To obtain information about participating in the program, students should contact the Registrar's Office.

If the student decides to take a course at SMU, he/she must get a permit, which requires the approval of the student's advisor and the WSU Registrar's Office. Then the student must present the permit to the SMU Registrar's Office for processing and return the approved permit to the WSU Registrar's Office.

Minnesota State University Common Market Program

Registrar's Office
Maxwell Hall (507-457-5030)

Under the Student Exchange Program, a WSU student may attend another Minnesota state university for one semester per institution up to a total of three semesters at three different institutions. By doing so, students may take advantage of curriculum and program specialties as well as different intellectual and social climates. The home university considers credits earned under the program as "resident credit."

When students apply, they list the courses they want to take and usually include several alternate choices. The Common Market Director at the receiving institution notifies the student whether or not his/her request can be met. The student indicates his/her choice of housing on the application form, and the request is referred to the housing office at the receiving university. The student also receives assistance with transferring financial aid if necessary.

To participate in the Common Market Program, students must be fully matriculated, must have attended WSU for at least two consecutive semesters, and must have at least a 2.00 GPA. Catalogs and application forms are available in the Registrar's Office.

Outreach and Continuing Education Department (OCED)

Somsen Hall, Room 109 (507-457-5080)

OCED serves as a major hub for a broad network of community partners, learners, and businesses. OCED offers a variety of learning opportunities for students at different stages of their lives, and the office coordinates programs that strengthen the University's links with its service region. Programs include Adult Entry, Continuing Education, Customized Training, Extension Program, Senior Citizen Program, Professional Cooperative Education, Travel Study and others. OCED also actively seeks and creates opportunities for WSU to be a significant contributor to the business and economic development of our service region.

Adult Entry Program

The Adult Entry Program serves the educational needs of adult students within the University's service area, on and off campus. The program is for adults who want to pursue an Associate in Arts or a baccalaureate degree. This unique and innovative program features flexible admission requirements. It also provides the opportunity for an assessment and review of prior learning acquired through informal education or life/work experience. (A processing fee will apply.) WSU validates credits earned; the credits may apply toward a student's degree program. For more information, contact the OCED office.

Continuing Education

Continuing Education provides non-credit courses as well as courses offering continuing education units (CEUs). CEU courses and activities are taught by WSU faculty, community resource persons, or visiting experts. The courses frequently fulfill specialized learning needs identified by businesses and organizations. The CEU provides a standard measure for non-credit learning (1 CEU = 10 contact class hours) and is used for record keeping but does not fulfill the requirements for an academic degree. The CEU is recorded on the student's transcript and can serve as verification for continuing education activities.

Contact the OCED office to get detailed information about CEU offerings or to discuss how WSU may be able to provide learning resources for your organization.

Customized Training

WSU works closely with the business community including schools, industries, and nonprofit agencies to provide continuing education for their employees. Specialized programs and individual courses are designed to meet the needs of the company and can be delivered on-site at the business or on campus. Courses may be offered for credit or non-credit. For more information regarding customized training and education programs, contact the OCED office.

Extension Program

In addition to its regular programs, WSU offers a variety of on-campus and off-campus learning experiences for residents in the area. These courses may be undergraduate or graduate classes, and may be suitable for those seeking a degree or personal enrichment. Instruction for extension courses includes regularly scheduled evening, weekend, and daytime classes taught by WSU faculty; specially scheduled workshops and seminars; educational travel opportunities; and credit options for workshops and/or conferences scheduled by outside agencies.

Students are permitted to enroll in an undergraduate extension class without having been admitted to the University. However, graduate students must complete a WSU application form. Extension courses can apply toward appropriate degree programs. For more information, contact the OCED office.

Senior Citizen Program

All senior citizens who are legal residents of Minnesota (reciprocity is not available) can take WSU courses by special arrangement and within legislative limitations. A one-time fee of \$20 is required for admission to this program.

A person is considered a senior citizen if he/she reached the age of 62 before the beginning of any semester in which he/she will be enrolling in a course. Students can register for courses on a no-credit basis at no cost, or they can register for credit on a fee basis, which requires a service charge of \$20.00 per credit hour (amount subject to change). Enrollment is on a space-available basis. For registration details, contact the OCED office.

Professional Cooperative Education Program

The Professional Cooperative Education Program is a partnership between WSU and area businesses to help students earn money for college while gaining real-world experience at an established business. The experience is customized for each participant; therefore, the work experience they receive will enhance their educational goals. For more information, contact the OCED office.

STUDY ABROAD PROGRAM

Study Abroad Office
Minné Hall, Room 120 (507-457-5500)
www.winona.edu/studyabroad

A variety of Study Abroad Program options are available for students of at least sophomore standing who are interested in broadening their university experience and enhancing their resumes by including a living and learning experience in a foreign country. In addition to programs sponsored by WSU, students may select programs through other universities. Programs vary in location, length, cost, admission requirements, application deadlines, and focus; therefore, it is important to request the most recent and detailed information.

WSU Study Abroad options include academic programs in the following international locations:

- **China:** WSU has a study abroad agreement with Hebei University of Technology in Tianjin, China. Students with good academic standing can take courses in Chinese language. They can also take a range of courses offered in English in the social sciences and business areas of study. Students have the option of attending for a semester, summer session, or a full academic year.
- **Japan:** WSU has a study abroad agreement with Akita International University in northern Japan. Students with good academic standing can take courses in Japanese language. They can also take a wide range of courses offered in English in the social sciences, humanities, and business; many of these courses are applicable to the Global Studies major at WSU. Students have the option of attending for a semester, summer session, or a full academic year.
- **South Korea:** WSU has an exchange agreement with Soonchunhyang University in Asan, South Korea and a study abroad agreement with Chung Ang University in Seoul. Students with good academic standing can take courses in Korean language. They can also take a range of courses offered in English that correspond to WSU Global Studies courses, which may lead to dual degrees. A paid internship as an English ambassador is also available. Students have the option of attending for a semester or a full academic year.
- **Spain:** WSU has a study abroad agreement with the University of Granada's Modern Language Center located in Granada, Andalusia, Spain. Students with good academic standing can take courses at beginning, intermediate, and advanced levels of Spanish; they can also coordinate courses through the Global Studies program. Students have the option of attending for a semester, summer session, or a full academic year.

Early and careful planning for studying abroad is important to ensure that students can maximize the academic and cultural benefit of the experience. All WSU-sanctioned programs that are one semester or more carry 12-15 credits per semester. (Short-term study and tours carry fewer credits.) To obtain preliminary information about Study Abroad Program, students may contact the Student Answer Center in Kryzsko Commons (457-2456). For detailed information and application, go to the Study Abroad website.

TRAVEL STUDY PROGRAM

Outreach and Continuing Education Department (OCED)
Somsen Hall, Room 109 (507-457-5080)
www.winona.edu/oced/travel

The WSU Travel Study Program is designed to enrich students' educational experience while broadening their intellectual, cultural, and social horizons. The program consists of credit-based coursework offered through various academic departments and taught by WSU faculty. The number of credits earned varies depending on the nature and extent of the learning experience provided. Courses typically last two to eight weeks and

are taught in various countries around the world as well as in the United States. Travel study courses provide students the opportunity to engage in field research, service learning, and immersion into different communities and cultures. Courses are usually interdisciplinary and, therefore, provide students with an opportunity to integrate learning across several fields of knowledge.

Students and faculty interested in participating in or organizing a travel study course should contact the OCED office, which oversees the program and arranges the logistics for travel study offerings. The OCED office can provide additional enrollment information, a list of specific travel study opportunities, and answers to frequently asked questions.

STUDENT SERVICES

Connie Gores, Vice President for
Student Life and Development
Kryzsko Commons, Room 129 (507-457-5300)
www.winona.edu/sld

The Division of Student Life and Development advances student learning and supports and enhances the educational mission of Winona State University. With an emphasis on holistic student development, faculty and staff within Student Life and Development (SLD) strive to assist students in achieving their potential and in becoming self-directed in all activities.

Student Life and Development promotes and contributes to a University community centered on student learning and success. SLD is responsible for planning and administering an array of programs, services, and activities designed to accomplish the following:

- Encourage the optimal growth and personal development of students
- Contribute to student success and well-being
- Foster a sense of community
- Support an environment which is personal in nature, intellectually and culturally diverse, and which encourages the integration of in and out-of-classroom student experiences

SLD creates supportive environments and innovative opportunities for student learning. We promote individual student excellence; we invite collaboration and discovery; and we challenge students to take responsibility as members of a diverse, global community.

Dean of Students
Karen Johnson, Dean
Kryzsko Commons, Room 131 (507-457-5300)

The Dean of Students serves as a strong student advocate and provides leadership to the University community in maintaining a safe, inclusive, and affirming environment. The Dean manages and oversees the University's conduct processes and provides leadership to the University in promoting and maintaining student rights and responsibilities.

SERVICES

Career Services

Maxwell Hall (507-457-5340)
www.winona.edu/career
Email: career@winona.edu

Career Services assists students seeking career direction, major selection, part-time employment on and off campus, work-study positions, summer opportunities, internships, and full-time employment. Individual advising appointments may be scheduled. Students are encouraged to register early to take full advantage of the broad range of services offered through Career Services. Alumni are also eligible to register for assistance in their search for full-time employment.

Career Services provides opportunities for students to interact with employers through career fairs, job fairs, and on-campus interviews. For students registered with Career Services, employers have access to their resumes directly through our website. Additionally, students can access job openings or update their resumes via the Internet 24 hours a day, seven days a week. Employment information and graduate follow-up results are available in the office as well as on our website. The Discover Career Guidance and Information System is also available through Career Services.

Career Services is open from 8:00 a.m. to 4:30 p.m. during the academic year and 7:30 a.m. to 4:00 p.m. during the summer.

Counseling Center

Wabasha Hall (507-457-5330)

The Counseling Center provides short-term counseling to currently enrolled students who are experiencing difficulty in their personal lives. Common concerns students may bring to the Counseling Center are anxiety, depression, adjustment issues, family problems, relationship concerns, academic concerns, self-esteem, grief, alcohol use/abuse, and so on. Counselors will also assist with off-campus referrals/resources if appropriate for the student's care. In addition to personal counseling, the Counseling Center also offers career counseling, including the use of testing instruments such as the STRONG and DISCOVER programs. Outreach educational presentations are offered to both the WSU community and the community at large.

Four licensed, full-time counselors, one licensed social worker, a full-time office manager, and graduate student trainees staff the Counseling Center. During the academic year, students should stop by the Counseling Center between 8:00 a.m. and 4:30 p.m. to request an appointment.

Services are provided at no cost to the student. The information exchanged during the counseling process is confidential; students are advised of their client rights and the exceptions to confidentiality. Information will be released with the student's written consent when appropriate.

Disability Resource Center

Maxwell Hall, Third Floor (507-457-2391; fax: 507-457-2957)
www.winona.edu/disabilityservices
Email: drc@winona.edu

In accordance with Section 504 of the federal Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Winona State University shall make reasonable adjustments in its policies, practices, services, and facilities to ensure equal opportunity for qualified persons with disabilities to participate in all educational programs and activities. A person with a disability is defined as:

- A person with a physical or mental impairment that substantially limits one or more major life activities. This includes care for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.
- A person who has a disability, has a record of the disability, or is regarded as having the disability.

A student requiring special accommodation or auxiliary aids must apply for such assistance through the Disability Resource Center. Proof of disability from a competent authority will be required, as well as information regarding specific limitations for which accommodation is requested. Reasonable accommodations are the services that are necessary to provide equal access in an academic setting. Examples of possible accommodations may include testing accommodations, note taking assistance, interpreter services, recorded lectures, assistive technology, writing/typing assistance, lab assistance, adaptive equipment, priority registration, or alternative textbooks.

An eligible student is one who has a disability and who meets the essential academic eligibility requirements for the WSU program or activity in which the student seeks to participate. In order to receive academic accommodations, the student must identify/self-disclose his/her educational needs.

- Approval of accommodations is based on adequate supporting documentation of a disability.

- Qualified disabled students must meet the same academic requirements as all students on campus.
- An accommodation is not reasonable if it compromises the essential elements of a course or lowers academic standards.
- A request may be denied if it fundamentally alters a course or program or is an undue hardship for WSU.
- Some of the auxiliary aids may be provided by another agency such as Recordings for the Blind and Dyslexic and the National Library Service.
- Certain accommodations, such as course modifications or substitutions, may take up to one semester to be provided.
- The ADA Coordinator will respond to concerns about the inequality of access or opportunity.

More information is available in the Student or Faculty Disability Handbook, which is available in the Disability Resource Center or online at www.winona.edu/disabilityservices/handbooks/student/shandbook.html.

Health Insurance

All full-time students may purchase health insurance through the MnSCU Injury and Sickness Insurance Plan. For detailed information, contact one of the following offices: International Services (Kryzsko Commons, Room 130) or Student Health Service (Wabasha Hall). Information is also available at www.student-resources.net.

Inclusion and Diversity

Kryzsko Commons, Room 121 (507-457-5595)

It is the goal of Winona State University to create a learning community where its members feel safe and respected regardless of cultural background and where opportunities are provided to explore, understand, and appreciate one another's cultural experiences and heritage. Going beyond this, it is the goal of this institution to develop a learning community where diversity in its broadest terms—including race, ethnicity, national origin, gender, ability/disability, age, religion, economic, language, gender identity, and sexual identity—is valued, affirmed, and celebrated as an important first step toward embracing world differences in order to make the world a better place in which to live and work.

Winona State University is committed to cultural diversity and supports the following initiatives as part of its mission to:

- Promote understanding of the cultural and ethnic heritages of African Americans, Asian Americans, Latino/Hispanic Americans, and Native Americans as well as other diverse cultures at WSU.
- Increase enrollment, retention, and success of historically underrepresented and under-served students (i.e., racially diverse students, first-generation college students, students for whom English is a second language, and low-income students).
- Increase recruitment and retention of culturally diverse faculty and staff.
- Enhance curriculum development through the inclusion of multicultural perspectives.
- Provide resources for multicultural campus and community initiatives.
- Promote the understanding and appreciation of issues related to race, ethnicity, national origin, gender, age, beliefs, ability levels, economic status, sexual identity, gender identity, and religion.
- Create a safe, welcoming, and nurturing environment that encourages all campus members—student and employee alike—to grow and achieve their goals.

In the spirit of broadening horizons and enabling campus and community members to appreciate different cultures and ethnicities, the ultimate aim of Winona State University's commitment to cultural diversity is to empower people of all backgrounds for successful living in a global society.

Integrated Media Services (Information Technology Services)

Howell Hall, Room B3 (507-457-5110)

www.winona.edu/its/mediaservices

Integrated Media Services provides real-time technology support required in the classroom to enhance the learning environment. Classroom support provides the “real-time” services needed to ensure that technology does not become a burden to the educational process. Additional services include equipment checkout, event support, audio/video duplication, video editing stations, and technical support and training.

International Services and Cultural Outreach

Kryzsko Commons, Room 128 (507-457-5303; fax 507-457-2474)

www.winona.edu/internationaloffice

Email: intrec@winona.edu

The Office of International Services and Cultural Outreach welcomes international students and provides assistance to all international students attending Winona State University. Information and advice is available

regarding admission to the University, scholarships, immigration concerns and employment regulations regarding F-1 visa holders, friendship family program, orientation, insurance requirements, and other information related to the well-being of international students.

A limited number of English language courses are available for non-native speakers who are admitted to the University. Students are assigned to these courses on the basis of their scores on the WSU English Test for Non-Native Speakers. This test must be taken during orientation and prior to registration for the initial term of attendance at WSU.

See page 6 for admissions requirements and considerations. Students who initiate their attendance for fall semester will be billed during the fall for the entire year.

The University requires that international students meet with a staff member of the Office of International Services immediately after arrival to the University. At that time, students will receive detailed information on the required orientation (OASIS) held the week prior to the beginning of classes.

Maxwell Children's Center

On-Campus Site: Wabasha Hall, 101 E Wabasha St.

Off-Campus Site: Madison Elementary School, 515 W. Wabasha St. (507- 457-2300)

www.winona.edu/catalog/childcare.htm

The Maxwell Children's Center, which is part of the College of Education, provides:

- Full-service, affordable, educational, and inclusive child care for all children.
- An interactive classroom setting for University students seeking a variety of Minnesota teaching licensures. Students participate in practicum/field placements, student teaching, and employment opportunities.
- A model program for regional early childhood professionals.

The Children's Center serves children aged six weeks to 12 years and is open-year round Monday through Friday from 7:00 a.m. to 5:30 p.m., excluding University holidays and part of each semester break. Children may be enrolled as either part-time or full-time participants. Additionally, children aged 3-5 may be enrolled as morning preschool participants. Children aged 6-11 may participate in after-school or full-day summer enrichment programs.

WSU students who have children are strongly urged to contact the Children's Center as soon as they are admitted to WSU due to high demand for the center's services.

Maxwell One-Stop Center

The Maxwell One-Stop Center, located on the west side of the newly remodeled Maxwell Hall, is a new student service center. By incorporating the functions of seven departments—Admissions, Advising and Retention, Career Services, Financial Aid, Parking, Registrar, and Student Accounts, the center provides students with more integrated and efficient services.

The heart of the Maxwell One-Stop Center is the second floor “hub” where staff who are trained as generalists assist students with many, and often all, of their enrollment service needs. When necessary, these generalists link students with specialists from the various areas who work one-on-one with students to address specific needs. Many of these specialists are located directly behind the hub. The Office of Admissions is on the first floor; resources such as advising, career services, and services for students with disabilities are located on the third floor.

The Maxwell One-Stop Center provides personalized, student-centered services that provide efficiencies by using existing technologies and allowing for quality face-to-face interactions between students and staff dedicated to student learning.

Parking Services

Maxwell Hall, (507-457-5062)

www.winona.edu/parking

Email: parking@winona.edu

Parking permits are required in all University parking lots on the Winona campuses. The requirement for permits includes all students who have state-issued handicapped permits. The only exceptions are the metered spaces on the main campus.

The application process for parking permits starts April 1 to be effective the next school year. If applications exceed the number of available parking spaces, a drawing is held. Once space becomes available after the drawing, permits are sold on a first-come, first-served basis. If no permits are available, applicants' names are put on a waiting list. For more details and information about the cost of parking permits on the Winona campuses, contact Parking Services.

Security Services

Sheehan Residence Hall, Main Floor (507-457-5555)
www.winona.edu/security

WSU Security is responsible for the physical security of all residence halls and academic buildings throughout the University. Campus security employs three full-time security personnel with over 75 years of combined law enforcement experience. In addition, the security force is supplemented with approximately 50 students who perform security-related duties on campus. The Winona Police Department also patrols and responds to calls on campus 24 hours a day throughout the year.

Security works to ensure the safety of students, staff, faculty, and University property. Crime prevention, proactive safety programs, and training are integral parts of Winona State University Security; our goal is to maintain a safe environment for everyone. See page 34 for information about crime awareness and the Campus Security Report.

Student Answer Center (SAC)

Kryzsko Commons, Lower Level (507-457-2456)
www.winona.edu/sac
Email: SAC@winona.edu

The Student Answer Center (SAC) is a one-stop resource for students, prospective students, families, and community members seeking information about WSU and the Winona area. The SAC is also the satellite site for the Maxwell One-Stop Center, which supports students with information on admissions, financial aid, registration, advising, career and employment, housing, parking, library services, and more. "ASK WSU" is coordinated through the staff at the SAC.

If students have questions prior to, during, or after their time at WSU, the SAC is here for them. Frequently asked questions can be accessed through the "ASK WSU" icon on the website. Routine inquiries can be handled by the SAC, making it a convenient WSU resource. The SAC's hours of operation have been expanded; check the website for current hours.

Student Health Service

Wabasha Hall, 201 E. Wabasha Street (507-457-5160)
www.winona.edu/healthservices

The Health Service facility is staffed by physicians, nurse practitioners, registered and practical nurses, a medical technologist, a health educator, and a medical records clerk. Services include:

- Medical examinations and consultations for illness, injury, and other medical concerns
- Laboratory services
- Mantoux tests and other immunizations
- Physical exams for sports, employment, or travel
- Allergy injections (students must supply their own serum)
- Contraceptive counseling, exams, and prescriptions
- Health education materials including pamphlets, videos and consultation, which enable students to develop a lifestyle that will reduce their risk of disease and injury.
- Smoking cessation program
- Alcohol education class
- Campus-wide and community health promotion, prevention, and awareness programs
- A Peer Health Educator program

The student health fee pays for most of the services provided during regular office hours. However, there is a \$5.00 office visit fee to see the physician or nurse practitioner. In addition, there are charges for

medications, laboratory tests, and some medical procedures and supplies. Information about costs and charges is available on the health service website. Emergency care is available evenings and weekends at Community Memorial Hospital (855 Mankato Avenue, Winona).

Pre-Enrollment Medical Examination

Each student must complete a Report of Medical History form and submit it to the Student Health Service. All new students get the form at registration, or the health service mails it upon request. The form can be completed without a physical exam or a physician's signature. However, the University recommends that a physical exam be done.

Notes:

1. For students who are planning to participate in athletics, a physical exam is mandatory and must be completed after July 1. A special form is available from the Department of Athletics.
2. Health records for transfer students are not sent automatically with transcripts from other colleges; transfer students must specifically request the records. Students must complete the Report of Medical History for the WSU Student Health Service.

Proof of Immunization

Minnesota Law (M.S. 135A.14) requires that all students enrolled in a public or private post-secondary school in Minnesota be immunized against diphtheria, tetanus, measles, mumps and rubella—allowing only for certain specified exemptions. Records must be on file with the Student Health Service. The law also requires that all students, in order to remain enrolled, must submit their immunization information to the Student Health Service within 45 days of the beginning of the semester. The immunization form is on the back of the Report of Medical History form. Forms are available in the Student Health Service office.

STUDENT UNION/ACTIVITIES

The hub of student activities is the Student Center in Kryzsko Commons. This facility encompasses places to eat, study, meet, or just hang out. The Jack Kane Dining Center is located on the upper level. Conference rooms and/or private dining areas are available to students for meetings and informal gatherings. The Student Activity Center is located on the main level and includes student lounges, conference rooms, a club activity room, Student Senate offices, Greek organization offices, a stage, dance floor, and numerous PC hook-ups. The Smaug dining center is also on the main level. This center includes dining choices such as Tuscan Oven, Sub Generation, and The Grille; these venues serve everything from burgers and wraps to Mexican cuisine to a variety of other cuisines. The Wharf (located adjacent to The Smaug) is a convenience store where students can get a made-to-order smoothie, ice cream, coffee, soft drinks, and many other items. The WSU Bookstore, located in the lower level, stocks WSU apparel, class books, and school supplies.

The Student Union/Activities Director and Assistant Activities Director advise and work with student committees to coordinate social, cultural, and recreational programs. Activities include movies, dances, guest speakers, concerts, river excursions, banquets, art exhibits, and other special events.

More than 190 student clubs and organizations are represented; they encompass a wide variety of interests. These clubs showcase academic, athletic, cultural, political, religious, and social interests. Each organization provides service activities to benefit its members, the campus, and the community. The Alliance of Student Organizations Committee (ASO) is the central organization to which all University clubs belong.



Student Clubs and Organizations

Note: The list of student organizations may be updated after this catalog is printed; the most up-to-date list will be available at www.winona.edu/studentunion/.

Academic Clubs

Accounting Association
 American Advertising Federation
 American Chemical Society
 American Marketing Association
 American Sign Language
 Art Club
 Association of Student Paralegals
 Athletic Training Club
 Biology Club
 Chemistry Club
 Communication Club (majors/minors in Communication Studies)
 Computer Science Club
 Criminal Justice Club
 Education Minnesota Student Program
 Environmental Club
 Exercise Science Club
 Financial Management Association
 Geology Club
 Grub Street (English club)
 Health Organization for Promotion & Education
 Health and Wellness Association
 History Association
 International Association of Business Communicators
 Journalism/Photojournalism Club
 Learning Disabilities Association (Council for Exceptional Children)
 Management Information Systems Association
 Macintosh Users Group
 Mass Communication Club
 Mathematics/Statistics Club
 Minnesota Student Nurses Association
 Music Business Club
 Music Educators National Conference
 Nursing Club
 Peace Office Student Training Association
 Performance Engineering Club
 Physics Club
 Political Science Association
 Pre-Pharmacy Club
 Professional Educators of Physical Activity
 Psi Chi Honor Society (psychology club)
 Science Education Club
 SHAPE (Spreading Health Awareness/Peer Education)
 Society for the Advancement of Material Process Engineering
 Society for Collegiate Journalists
 Society for Human Resources Management
 Society of Plastic Engineers
 Student Association of Social Workers
 Student International Reading Club
 Student MN Education Association
 Sociology Club
 Synergy (Professional Business Association)
 Therapeutic Recreation (recreation club)

Athletic Clubs

Bowling Team
 Bocce Ball Club
 Cheer Team
 Dance Team
 Fencing Club
 Karate Club
 Outdoor Club
 Rugby Team (men)
 Rugby Team (women)
 Running Club
 Rowing Club
 Snowboard Club
 Soccer/Futbol Club
 Tri-Club (Triathlons)
 Ultimate Frisbee—The Experience (men)
 Ultimate Frisbee—Bad Monaz (women)
 Veterans Club
 Volleyball Club (men)
 Water Ski & Wakeboard Team

Athletic NCAA Intercollegiate Teams

Men	Women
Baseball	Cross Country
Basketball	Golf
Cross Country	Gymnastics
Football	Soccer
Golf	Softball
Tennis	Tennis
	Track & Field
	Volleyball

Campus Organizations

Alliance of Student Organizations (ASO)
 Ambassadors
 Grievance Board
 Homecoming Committee
 Judicial Board
 National Residence Hall Honorary
 Residence Housing Association (RHA)
 Student Senate
 Student Support Organization for MSUSA
 University Programming Activities Committee (UPAC)

Communications

KQAL FM Radio (college radio station)
Satori (literary publication)
Bravura (lab newspaper)
Winonan (student newspaper)
 National Broadcast Society

Cultural Clubs

African Club
 Asian American Club
 Association for Disability Awareness
 Black Cultural Awareness Association
 GLBTA (Gay, Lesbian, Bi, Trans, Allies Partnership)
 Hispanic Association of Students
 Hmong American Student Association
 Intercambios
 International Club
 Japan Club
 Malaysian-American Chapter
 Native American Heritage and Awareness
 Soka Gaikki International
 SOUL
 United Nations Club

Fine Arts Clubs

Brass Ensemble
 Chamber Choir
 Choral Union
 Concert Band
 Concert Choir
 Dance Society
 Forensics
 Jazz Club
 Opera Workshop
 Percussion Ensemble
 Symphonic Wing Ensemble
 Symphony Orchestra
 University String Quartet
 Wenonah Players (theatre)
 Woodwind Ensemble
 Woodwind Quintet

Greek Life

Delta Phi Epsilon Sorority
 Phi Theta Chi Sorority
 Pi Lambda Phi Fraternity
 Sigma Sigma Sigma Sorority
 Tau Kappa Epsilon Fraternity
 Inter-Greek Council
 Panhellenic Association

Honorary Societies

Alpha Delta Mu (social work)
 Alpha Epsilon Rho (broadcasting)
 Alpha Lambda Delta (freshman/sophomore honors)
 Alpha Omega Honore
 Beta Beta Beta (Tri Beta Biological Society)
 Delta Sigma Pi (business)
 Golden Key International (junior/senior honors)
 Kappa Delta Pi

Lambda Pi Eta
National Society of Collegiate Scholars
Sigma Theta Tau (nursing)

Intramurals

Aerobics	Badminton
Basketball	Flag Football
Floor Hockey	Racquetball
Soccer	Softball
Tennis	Volleyball
Water Aerobics	Weight Training

Religious Clubs

Christians in Action - Chi Alpha
Catholic Newman Center
Fellowship of Christian Athletes
Intervarsity Christian Fellowship
Latter Day Saints Student Association
Lutheran Campus Center
Lutheran Student Fellowship
Muslim Student Association
True North WELS Campus Ministry
United Campus Ministries

Special Interest Clubs

Amnesty International
Anime Club
Card Club
Circle K (College Kiwanis)
Colleges against Cancer
FORGE (Fighting for Our Rights & Gender Equality)
Game Development Club
Habitat for Humanity
Rod and Gun Club
RPSIG (Role Playing Special Interest Group)
Strategy Gaming Club
Up 'Til Dawn
Warriors for Life
WSU College Democrats
WSU College Libertarians
WSU College Republicans
WSU Greens
WSU NORML
Video Game Club

POLICIES AND REGULATIONS

Affirmative Action Office

Somsen Hall, Room 204
(507-457-5013)

The Affirmative Action Officer provides information and investigates complaints of discrimination or harassment based upon race, sex, color, creed, religion, age, national origin, marital status, disability, status with regard to public assistance, sexual orientation, or membership or activity in a local commission as defined by law. The Affirmative Action Officer also investigates concerns regarding sexual harassment at WSU. These confidential services are available by appointment or on a walk-in basis. Call the Affirmative Action office for more information or to make an appointment.

Crime Awareness and Campus Security Act

WSU Security Services
Sheehan Hall, (507-457-5555)

www.winona.edu/security/crime_report_wsu.html

Winona State University recognizes that providing the safest environment possible is an integral element of the University's educational mission, and the University publishes an annual Campus Security Report that is available to everyone. This report provides statements of policy for a broad range of safety, community relations, environmental safety, enforcement authority, and response issues. It also includes a three-year statistical review of designated crimes on campus. A printed copy of this report may be obtained, at no charge, from the Director of Security, Winona State University (Sheehan Hall), Winona, MN 55987 or by calling 507-457-5555.

In addition, the *Campus Security Report* can be accessed at the following websites:

- Winona Campus:
http://www.winona.edu/security/files/clery_report_final.pdf
- Rochester Campus:
http://www.winona.edu/security/files/clery_report_rctc.pdf

Winona State University encourages all members of the University community to be fully aware of the campus safety issues and to take action to prevent and report illegal and inappropriate activities. Personal awareness and applying personal safety practices are the foundation of a safe community. The *Campus Security Report* is designed to inform and educate you on the measures that can be taken and the services available to you to assist in maintaining a safe and secure learning environment. All members of the University community are encouraged to contact the Director of Security at dwalski@winona.edu or by phone (507-457-5555) with any concerns and questions regarding campus security and related issues.

Student Conduct

Office of Student Life and Development
Kryzsko Commons, Room 130 (507-457-5300)

The WSU Student Conduct Policy and related policies, which express expectations concerning behavior and state the rights of students, are available online at www.winona.edu/sld or www.winona.edu/handbook (online Student Handbook) or in the Office of Student Life and Development. Students are responsible for being aware of and complying with all WSU student policies and regulations.

The purpose of the judicial system at WSU is (1) to provide an educational experience through which students learn to understand, accept, and promote attitudes and behavior conducive to responsible citizenship; (2) to provide a system by which students are held accountable for actions that violate University proscribed behaviors listed in the Student Conduct Policy; and (3) to protect the due process rights of students charged with violating these behaviors.

At the discretion of the University, students may be held accountable for behavior—both on and off campus—that constitutes a violation of local, state, and federal laws. Note that the WSU Student Conduct Policy does not replace or reduce the requirements of civil or criminal laws. If assistance with a complaint or additional information is needed, contact the Office of Student Life and Development.



WSU-ROCHESTER

Office of the Director

U.S. Highway 14 and 30th Avenue SE
Rochester, MN
SS131 UCR (507-285-7100)
www.winona.edu/rochester

PROGRAM OVERVIEW

Since 1917, Winona State University has served students in Rochester, Minnesota and the surrounding area. In 1993, Winona State University, along with the University of Minnesota and Rochester Community and Technical College (RCTC), collaborated to create the University Center at Rochester (UCR). The Greater Rochester area served by the UCR has a population of over 100,000 people; area residents have a high level of education attainment, and they are highly receptive to the lifelong learning opportunities offered by WSU-Rochester and the other institutions.

Its location in the growing city of Rochester provides WSU-Rochester with unique opportunities to offer specialized classes and programs aimed at key industries in the area, including computer science, the health care professions, business, and education. WSU-Rochester's strong "commitment to community" is evident as students, faculty, and staff from a variety of programs engage in experiential community-based learning in area organizations, businesses, and schools.

WSU-Rochester has served the region with distinction, and the numbers tell the story. Over 2,000 students are served each year through day, evening, and weekend classes. Over 5,000 bachelor's and master's degree candidates have graduated from programs offered at the WSU-Rochester campus. Approximately 40 resident faculty serve WSU-Rochester; in addition, 20 faculty from the Winona campus are dedicated to the Rochester campus. A number of adjunct faculty professionals from area industries also serve students.

DEGREES AND PROGRAMS

WSU-Rochester provides upper-division courses for the completion of a number of WSU baccalaureate degrees. Entering students can transfer credits from other institutions through individual transcript evaluation or official 2+2 program agreements with RCTC. Through the 2+2 Program, students can complete 12 baccalaureate degree programs by transferring lower-division credits from RCTC and completing upper-level courses at WSU-Rochester. Students at WSU-Rochester can also complete numerous undergraduate minors and five graduate degrees within 16 different graduate programs at the Master's Specialist, and Doctoral levels.

See page 37 for detailed descriptions of the undergraduate programs; for more information about the graduate programs, see the *WSU Graduate Catalog*.

Non-Credit Programs

WSU-Rochester cooperates with community and professional groups and WSU's Outreach and Continuing Education Department to provide non-credit continuing education programs for educators, business and industry, agencies, and government.

Adult Entry Program

This program is designed for mature students who have never attended college or who are returning to college. Counselors are available in Rochester on a regular basis to assist adult students seeking a college education. Under this program, college credit may be awarded for life/work experience. (See "Outreach and Continuing Education Department" on page 29 for more information.)

ADMISSION AND REGISTRATION

Students who are not seeking a degree can enroll in WSU-Rochester classes without being formally admitted to the University; however, they must apply through the Provisional Admission process. Students seeking a degree must apply for admission to the University. Some degree programs also require an additional admission process. For general information about undergraduate admissions, see page 5. For general information about registration and academic records, see page 15.

While students applying for graduate degree programs must apply through the Graduate School office, it is possible to enroll in graduate courses as a "Graduate Special" student without applying to a graduate program. The student must provide proof that he or she has earned an undergraduate degree. For information about graduate admissions, consult the *WSU Graduate Catalog*.

STUDENT SERVICES

Campus Visits

Students are encouraged to visit the WSU-Rochester campus any time. For more information about programs and services, call 800-366-5418 or 507-285-7100.

Career Services

Rochester Campus: SS 125 (507-280-5079)
Winona Campus: Maxwell Hall (507-457-5340)

www.winona.edu/career

Email: RochesterCareer@winona.edu

Career Services assists undergraduate and graduate students seeking career direction, part-time work on and off campus, work-study positions, summer opportunities, internships, and full-time employment. Alumni are also eligible for assistance in their search for full-time employment. Students are encouraged to register early to take full advantage of the broad range of services offered through Career Services.

Students may schedule individual advising appointments to discuss career direction and questions related to the job search, to critique resumes and cover letters, and to obtain tips on interviewing. They may also schedule appointments for mock interviews on the Career Services virtual interview kiosk.

Career Services provides opportunities for students to interact with employers through career fairs, job fairs, and on-campus interviews. Once students register with Career Services, employers have access to their resumes directly through our website. Additionally, students can access job openings or update their resumes via the Internet 24 hours a day, seven days a week. Employment information, graduate follow-up results, and additional resources are available in the office as well as our website.

The Career Services office is open from 8:00 a.m. to 4:30 p.m. during the academic year and from 7:30 a.m. to 4:00 p.m. during the summer. Evening and weekend hours are available by appointment.

Computer Facilities

WSU-Rochester is equipped with state-of-the-art technology for interactive television (ITV) and computer systems that link UCR students with the Winona campuses and the world. The computer facilities consist of multiple smart rooms, one open computer lab, and a laptop rental center. All labs allow students access to mainframes on the Winona campus.

Counseling

Academic counseling services are available through WSU-Rochester (507-285-7100). Staff members are professional counselors with extensive academic experience in counseling.

Financial Aid

Students must apply for financial aid online through the FAFSA website: www.fafsa.gov. Representatives from the WSU Financial Aid Office are available on the WSU-Rochester campus each week. Interested students should call to arrange an appointment with a financial aid advisor (507-285-7100).

Housing and Dining

The University Center at Rochester (UCR) is a commuter campus. However, a variety of housing options are available in the Rochester area, including furnished and unfurnished apartments, efficiencies, single room rentals, and houses. RCTC has a listing of housing information available for students. In addition, Professional Property Management, an independent local agency, provides housing information for UCR students. Students may obtain housing information from both of these sources at the UCR Information Desk or on the WSU-Rochester website, www.winona.edu/rochester.

The UCR cafeteria is located on the third floor of the College Center. In addition to the cafeteria, the Café Express offers light meals and snacks during the early evening hours. Students may also use the microwaves located in the cafeteria as well as food and beverage vending machines located throughout the campus complex.

International Students

Staff members from the Office of International Services are available on the WSU-Rochester campus. Students may schedule appointments or request information by calling the Office of International Services on the Winona campus (507-457-5303).

Disability Services

Services and accommodations for students with special needs are available by request. Students may schedule appointments or request information by contacting the WSU Disability Resources Center on the Winona campus (507-457-2391; drc@winona.edu).

Child Care

Child care for WSU-Rochester students is available on the UCR campus. Students may request information by contacting the UCR Child Care Center (507-285-7232).

Library

WSU-Rochester students have access to the UCR Goddard Library in Rochester and the Darrell W. Krueger Library on the Winona campus. WSU-Rochester's library holdings are integrated into UCR's Goddard Library holdings of over 57,000 volumes. This arrangement provides

students with an extensive resource of reference and research material on the WSU-Rochester campus. In addition, students may request overnight courier service to the Winona campus library for articles and books; they may also do online searches using MnPALS and a number of other systems.

Parking Services

Students will be charged a \$4.00 parking fee per credit with a maximum parking fee of \$60 per semester (subject to change). This fee will automatically be added to a student's semester billing for tuition and fees. No parking permit will be issued; student lots are designated.

Student Disclosure Policy

Educational records of students taking classes at the UCR campus may be made available to employees of WSU and RCTC while the student is attending the UCR campus if access to a student record is required in order to provide services to the student.

UNDERGRADUATE PROGRAMS

- 2+2 Accounting
- 2+2 Business Administration
- 2+2 Computer Information Systems
- 2+2 Computer Science
- 2+2 Computer Science - Bioinformatics
- 2+2 Elementary Education: K-6 with Middle Level Communication Arts and Literature 5-8 Specialty
- 2+2 Elementary Education: K-6 with Middle Level Social Studies 5-8 Specialty
- 2+2 Nursing: Generic Option
- 2+2 Psychology, Option A
- 2+2 Social Work
- Nursing: RN-to-BS Option
- Professional Studies (General Option) (See page 37 for program description.)



GRADUATE PROGRAMS

- Doctor of Nursing Practice (DNP)
- Specialist Degree in Educational Leadership (Ed.S.)
- Master of Science in Counselor Education:
 - Community Counseling
 - Professional Development
 - School Counseling
- Master of Science in Education:
 - Graduate Induction Program
 - Master Teacher Learning Communities
 - Traditional Master of Education Program
- Master of Science in Educational Leadership:
 - General Leadership
 - K-12 Principalship
 - Teacher Leadership
 - Outdoor Recreation/Adventure Based Leadership
 - Sports Management
- Master of Science in Nursing:
 - Adult/Family Nurse Practitioner
 - Clinical Nurse Specialist
 - Nurse Administrator
 - Nurse Educator
- Collaborative Master's Program with University of Minnesota with emphasis in Public/Psych/Mental Health Nursing
- Post-nursing Master's certificates available in Adult/Family Nurse Practitioner, Nurse Educator, and Clinical Nurse Specialist focus areas
- Post-Baccalaureate Secondary Licensure Program/Teacher Licensure Collaborative (TLC)
- Licensure programs for pK-12 Principal and Superintendent
- Post-Baccalaureate secondary teacher licensure program
- Certificate in Outdoor Recreation/Adventure Based Leadership (post-Master's degree)
- Certificate program in Sports Management (post-Master's degree)

ACADEMIC PROGRAMS: MAJORS AND 2+2 PROGRAMS

NURSING PROGRAMS

HS107, UCR (507-285-7349)

www.winona.edu/nursing

Email: nursing@winona.edu

Jo Stejskal (Chairperson)

The RN-to-BS Option is for those who already hold a registered nurse (RN) license and are seeking a BS degree. This option includes sequenced upper-division nursing courses that can be completed in one to two years after all other degree requirements are completed. The RN-to-BS Option can be completed on a full-time or part-time basis at the Rochester campus. The Department of Nursing also offers an adapted RN-to-MS Professional Pathway for registered nurses whose goal is to earn a master's degree in nursing.

B.S. MAJOR - NURSING: RN-TO-BS OPTION (NURN)

54 S.H. (Required courses must be taken for a letter grade.)

Note: Includes 24 S.H. of nursing in transfer or exam.

REQUIRED COURSES – NURS

- O 375 Nursing Research, Theory and Technology (3)
- 415 Holistic Caring (5)
- 435 Holistic Assessment (4)
- P 445 Management and Leadership (3)
- 455 Continuity of Care (4)
- 465 Nursing Roles and Health Promotion (4)
- P 475 Community Health Nursing (4)
- I 491 Capstone Experience in Role Synthesis (3)

Five semester hours of upper-division electives (300- and 400-level courses) are required for the nursing major; of these, two semester hours must be from nursing electives.

ELECTIVES

Electives may be taken as letter grade or pass/no credit if the courses are offered on a P/NC basis. See page 166 for more information on the RN-to-BS Option.

2+2 PROGRAMS

Note: Program requirements for the 2+2 Programs are subject to change. Students should check www.winona.edu/rochester for the most up-to-date program descriptions.

2+2 ACCOUNTING

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: Associate in Science (A.S.) degree in Liberal Arts & Studies at RCTC

Second two years: Bachelor of Science (B.S.) degree in Accounting at WSU

I. General Education Requirements.....40 Credits

Courses must be selected from those approved to satisfy the competencies of the Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine which courses satisfy the areas listed below.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics 3-5 Credits†

MATH 1119 Applied Calculus for Business Majors OR 3 Credits
MATH 1127 Calculus I..... 5 Credits

Goal 5: History and Social Sciences.....11 Credits

ECON 2214 Principles of Microeconomics..... 4 Credits
ECON 2215 Principles of Macroeconomics 4 Credits
3 credits from anthropology†, geography†, history†, political science, psychology†, or sociology..... 3 Credits

Goal 6: Humanities and Fine Arts 9 Credits

Choose from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech theatre.

† Honors equivalent available.

II. Health and Human Performance..... 2 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics PHED 1210-1236, 2210-2236.

III. Business Core Requirements21 Credits

ACCT	2217	Financial Accounting.....	4 Credits
ACCT	2218	Managerial Accounting.....	4 Credits
BUS	2212	Business & Economic Statistics.....	4 Credits
BUS	2227	Business Law I.....	3 Credits
ACCT	2234	Computerized Accounting.....	3 Credits
BUS	2201	Principles of Marketing.....	3 Credits

Total Credits..... 64 Credits

‡If a student takes only 3 credits of mathematics, 1 additional credit will be required to complete the A.S. degree.

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

Accounting.....21 Credits

ACCT	311	Intermediate Accounting I.....	3 Credits
ACCT	312	Intermediate Accounting II.....	3 Credits
ACCT	330	Accounting Information Systems.....	3 Credits
ACCT	361	Intermediate Managerial/Cost Accounting.....	3 Credits
ACCT	413	Advanced Financial Accounting.....	3 Credits
ACCT	421	Introduction to Taxation.....	3 Credits
P ACCT	471	Auditing I.....	3 Credits

Business Administration18 Credits

BUSA	311	Business Law II.....	3 Credits
BUSA	320	Intermediate Business Statistics.....	3 Credits
P MGMT	325	Organizational Dynamics.....	3 Credits
I MGMT	495	Strategic Management.....	3 Credits
MIS	362	Management Information Systems.....	3 Credits
OM	334	Production and Operation Management.....	3 Credits

Economics/Finance 3 Credits

FIN 360 Corporate Finance..... 3 Credits

Major Electives..... 9 Credits

Any 300-400 ECON elective 3 Credits
300-400 ACCT electives 6 Credits

Open Electives.....13 Credits

Note: Sixty-four non-business credits are required for the major. Of the math, statistics, and economics courses required for the major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.

Total Credits.....64 Credits

Required for a B.S. Degree in Accounting128 Credits

2+2 BUSINESS ADMINISTRATION

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: Associate in Science (A.S.) degree in Business Administration at RCTC

Second two years: Bachelor of Science (B.S.) degree in Business Administration at WSU

I. General Education Requirements.....40 Credits

Courses must be selected from those approved to satisfy the competencies of the Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine which courses satisfy the areas listed below.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics 3-7 Credits†

MATH 1113 Finite Math with College Algebra
OR higher..... 3 Credits

Goal 5: History and Social Sciences.....11 Credits

ECON 2214 Principles of Microeconomics 4 Credits
ECON 2215 Principles of Macroeconomics 4 Credits

3 credits from anthropology†, geography†, history†, political science, psychology, or sociology..... 3 Credits

Goal 6: Humanities and Fine Arts 9 Credits

Choose from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech/theatre.

† Honors equivalent available.

II. Health and Human Performance..... 2 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics 1210-1236, 2210-2236.

III. Business Core Requirements21 Credits

ACCT 2217	Financial Accounting	4 Credits
ACCT 2218	Managerial Accounting	4 Credits
BUS 2212	Business & Economic Statistics	4 Credits
BUS 2227	Business Law I	3 Credits
BTEC 2350	Microcomputer Business Applications	3 Credits
BUS 2201	Principles of Marketing	3 Credits

IV. Elective Credit..... 1 Credit

Total Credits.....64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

Business Administration 18 Credits

BUSA 311	Business Law II	3 Credits
BUSA 320	Intermediate Business Statistics	3 Credits
MGMT 315	Principles of Management OR	3 Credits
MGMT 455	International Business	3 Credits
P MGMT 317	Management of Human Resources	3 Credits
P MGMT 325	Organizational Dynamics	3 Credits
I MGMT 495	Strategic Management	3 Credits

Management of Information Systems & Operations..... 6 Credits

MIS 362	Management Information Systems	3 Credits
OM 334	Production and Operation Management	3 Credits

Economics and Finance..... 3 Credits

FIN 360	Corporate Finance	3 Credits
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Major Electives – Must be 300+ level electives 12 Credits

Courses from business administration (BUSA) or management (MGMT)..... 6 Credits
Courses from College of Business 6 Credits

Open Electives.....22 Credits

Note: Sixty-four non-business credits are required for the major. Of the math, statistics, and economics courses required for the major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.

Total Credits.....64 Credits

Required for a B.S. Degree in Business Administration..... 128 Credits

2+2 COMPUTER INFORMATION SYSTEMS

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: Associate in Science (A.S.) degree in Liberal Arts at RCTC

Second two years: Bachelor of Science (B.S.) degree in Applied Computer Science with Computer Information Systems Track at WSU

I. General Education Requirements43 Credits

Courses must be selected from those approved to satisfy the competencies of the Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine which courses satisfy the areas listed below.

Goal 1: Written and Oral Communication..... 11 Credits

ENGL 1117†, 1118†	Reading & Writing Critically I & II	8 Credits
SPCH 1114	Fundamentals of Speech	3 Credits

Goal 2: Critical Thinking – Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics 11 Credits†

MATH 2218	Discrete Mathematics	4 Credits
MATH 1119	Applied Calculus for Business & Economics	3 Credits
MATH 2208	Fundamentals of Statistics	4 Credits

Goal 5: History and Social Sciences.....6 credits

ECON 2214	Principles of Microeconomics OR	4 Credits
ECON 2215	Principles of Macroeconomics	4 Credits

Choose from the following disciplines with a minimum of 2 credits from two areas: anthropology†, geography†, history†, political science, psychology†, sociology†.

Goal 6: Humanities and Fine Arts 9 Credits

Choose from the following disciplines with a minimum of 2 credits from three different areas: art, English literature, foreign

culture, humanities†, journalism, music, philosophy†, speech/theatre.

† Honors equivalent available.

II. Health and Human Performance..... 2 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics 1210-1236, 2210-2236.

III. Computer Core Requirements19 Credits

COMP 1150	Computer Science Concepts	3 Credits
COMP 2243	Programming & Problem Solving	4 Credits
COMP 2247	Algorithms and Data Structure	4 Credits

Note: Students are encouraged to begin taking WSU computer science courses concurrently after completing the above core requirements.

ACCT 2217	Principles of Accounting I	4 Credits
ACCT 2218	Principles of Accounting II	4 Credits

Total Credits.....64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

Computer Science Core.....20 Credits

CS 310	Social Implications of Computing	3 Credits
O CS 341	Data Structures	4 Credits
CS 375	Computer Systems	4 Credits
P CS 385	Applied Database Management Systems	3 Credits
P CS 410	Software Engineering	3 Credits
I CS 471	Object Oriented Design and Development	3 Credits

Computer Information Systems Track Requirements12 Credits

Choose two of the following three courses:

CS 344	Introduction to Web Programming	3 Credits
CS 472	Reusable Software Architectures	3 Credits
CS 482	Internet/Web Architecture & Development	3 Credits
CS 485	Database System Design	3 Credits
MIS 362	Management Information Systems	3 Credits

Computer Information Systems Track Electives15 Credits

Choose 9 credits from the following courses:

BUSA 291	Legal Environment of Business	3 Credits
‡ ECON 201	Principles of Microeconomics	3 Credits
‡ ECON 202	Principles of Macroeconomics	3 Credits
FIN 360	Corporate Finance	3 Credits
MKTG 300	Principles of Marketing	3 Credits
OM 334	Operations Management	3 Credits
MGMT 315	Principles of Management	3 Credits
MGMT 325	Organizational Dynamics	3 Credits

Choose 6 credits from the following courses. At least 3 credits must be at the 400-level.

CS 313	Networking and Telecommunications	3 Credits
CS 368	Introduction to Bioinformatics OR	3 Credits
CS 369	Spatial Information Processing	3 Credits
CS 405	Operating Systems	3 Credits
I CS 411	Software Testing	3 Credits
CS 413	Adv. Networking & Telecommunications	3 Credits
CS 415	Principles of Programming Languages	3 Credits
CS 420	Computer Architecture	3 Credits
CS 425	Numerical Analysis	4 Credits
CS 430	Computer Graphics	3 Credits
CS 433	Digital Image Processing	3 Credits
CS 435	Theory of Computation	3 Credits
CS 440	Theory of Algorithms	3 Credits
CS 444	Human Computer Interaction	3 Credits
CS 445	Artificial Intelligence	3 Credits
CS 450	Compilers	3 Credits
CS 465	Topics: Computing Theory	1-3 Credits
CS 466	Topics: General Computing Applications	1-3 Credits
CS 467	Topics: Information System Applications	1-3 Credits
CS 476	Distributed System: Concept and Design	3 Credits
CS 491	Practicum in Computer Science	6 Credits

Note: Only 3 credits will count in the major.

P CS 495	Computer Science Research Seminar	3 Credits
PHYS 333	Microprocessor Electronics	4 Credits

Open Electives.....17 Credits

Total Credits.....64 Credits

Required for a B.S. Degree in Applied Computer Science 128 Credits

‡ **Note:** If the economics course is counted as a University Studies requirement, it will not be counted as part of the major.

2+2 COMPUTER SCIENCE

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate in Science (A.S.) degree in Liberal Arts at RCTC*

Second two years: *Bachelor of Science (B.S.) degree in Computer Science at WSU*

I. General Education Requirements46 Credits

Courses must be selected from those approved to satisfy the competencies of the Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine which courses satisfy the areas listed below.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
 SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics14 Credits†

MATH 2218 Discrete Mathematics..... 4 Credits
 MATH 1127 Calculus I 5 Credits
 MATH 1128 Calculus II 5 Credits

Goal 5: History and Social Sciences.....6 credits

Choose from the following disciplines with a minimum of 2 credits from two areas: anthropology†, geography†, history†, political science, psychology†, sociology†.

Goal 6: Humanities and Fine Arts 9 Credits

Choose from the following disciplines with a minimum of 2 credits from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech/theatre.

† Honors equivalent available

II. Health and Human Performance..... 2 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics 1210-1236, 2210-2236.

III. Computer Core Requirements.....11 Credits

COMP 1150 Computer Science Concepts..... 3 Credits
 COMP 2243 Programming & Problem Solving 4 Credits
 COMP 2247 Algorithms and Data Structure..... 4 Credits

Note: Students are encouraged to begin taking WSU computer science courses concurrently after completing the above core requirements.

Open Electives.....5 Credits

Total Credits..... 64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19)

MAJOR REQUIREMENTS AT WSU:

Computer Science Core.....20 Credits

CS 310 Social Implications of Computing 3 Credits
 O CS 341 Data Structures 4 Credits
 CS 375 Computer Systems 4 Credits
 P CS 385 Applied Database Management Systems 3 Credits
 P CS 410 Software Engineering 3 Credits
 I CS 471 Object Oriented Design and Development 3 Credits

Computer Science Option Requirements11 Credits

CS 405 Operating Systems 3 Credits
 CS 415 Principles of Programming Languages 3 Credits
 CS 435 Theory of Computation 3 Credits
 PHYS 332 Computer Organization..... 2 Credits

Computer Science Option Electives.....18 Credits

Choose 18 credits from the following list of courses:

CS 313 Networking and Telecommunications..... 3 Credits
 CS 344 Introduction to Web Programming 3 Credits
 CS 368 Introduction to Bioinformatics OR
 CS 369 Spatial Information Processing 3 Credits
 I CS 411 Software Testing 3 Credits
 CS 413 Adv. Networking & Telecommunications 3 Credits
 CS 420 Computer Architecture 4 Credits
 CS 425 Numerical Analysis 3 Credits
 CS 430 Computer Graphics 3 Credits
 CS 433 Digital Image Processing 3 Credits
 CS 440 Theory of Algorithms..... 3 Credits
 CS 444 Human Computer Interaction 3 Credits
 CS 445 Artificial Intelligence 3 Credits

CS 450 Compilers..... 3 Credits
 CS 465 Topics: Computing Theory1-3 Credits
 CS 466 Topics: General Computing Applications1-3 Credits
 CS 467 Topics: Information System Applications1-3 Credits
 CS 472 Reusable Software Architectures..... 3 Credits
 CS 476 Distributed System: Concept and Design..... 3 Credits
 CS 482 Internet/Web Architecture & Development..... 3 Credits
 CS 485 Database Systems Design 3 Credits
 CS 491 Practicum in Computer Science..... 6 Credits

Note: Only 3 credits will count in the major.

P CS 495 Computer Science Research Seminar 3 Credits
 PHYS 333 Microprocessor Electronics 4 Credits

Open Electives.....15 Credits

Total Credits.....64 Credits

Required for a B.S. Degree in Computer Science 128 Credits

2+2 COMPUTER SCIENCE - BIOINFORMATICS

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate in Science (A.S.) degree in Liberal Arts at RCTC*

Second two years: *Bachelor of Science (B.S.) degree in Applied Computer Science with Bioinformatics Track at WSU*

I. General Education Requirements51 Credits

Courses must be selected from those approved to satisfy the competencies of the Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine which courses satisfy the areas listed below.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
 SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science16 Credits

BIOL 1220 Concepts of Biology 4 Credits
 BIOL 2300 Genetics..... 4 Credits
 CHEM 1127 Chemical Principles I 4 Credits
 CHEM 1128 Chemical Principles II..... 4 Credits

Goal 4: Mathematics/Symbolic Reasoning 9 Credits

MATH 1127 Calculus I..... 5 Credits
 MATH 2218 Discrete Mathematics 4 Credits

Goal 5: History and the Social and Behavioral Sciences 6 Credits

Choose courses from two different areas: anthropology, economics, geography†, history†, political science, psychology†, sociology†

Goal 6: Humanities and Fine Arts 9 Credits

Choose courses from two different areas: PHIL 1125 Ethics, art, English literature, foreign culture, humanities†, journalism, music, speech/theatre.

† Honors equivalent available.

II. Health and Human Performance..... 2 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics 1210-1236, 2210-2236.

III. Computer Core Requirements.....11 Credits

COMP 1150 Computer Science Concepts..... 3 Credits
 COMP 2243 Programming & Problem Solving 4 Credits
 COMP 2247 Algorithms and Data Structure 4 Credits

Note: Students are encouraged to begin taking WSU computer science courses concurrently after completing the above core requirements.

Total Credits.....64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

Computer Science Core.....20 Credits

CS 310 Social Implications of Computing 3 Credits
 O CS 341 Data Structures 4 Credits
 CS 375 Computer Systems 4 Credits
 P CS 385 Applied Database Management Systems 3 Credits
 P CS 410 Software Engineering 3 Credits
 I CS 471 Object Oriented Design and Development 3 Credits

Bioinformatics Track Requirements..... 9 Credits

CS 368 Introduction to Bioinformatics..... 3 Credits
 CS 468 Algorithms in Bioinformatics 3 Credits
 CS 485 Database Systems Design 3 Credits

Bioinformatics Track CS Electives..... 6 Credits

Choose 6 credits from the following list of courses. At least 3 credits must be at the 400-level.

Table listing CS courses (CS 313 to CS 491) and their credit values. Includes a note: 'Note: Only 3 credits will count in the major.'

Table listing CS 495 and PHYS 333 with their credit values.

Bioinformatics Track Electives 3-4 Credits

One of the following courses OR any 400-level CS elective course listed above:

Table listing CHEM courses (CHEM 340, CHEM 350, CHEM 2127) and their credit values.

Other Major Requirements at WSU..... 7 Credits

Table listing STAT and BIOL courses (STAT 210, STAT 303, STAT 305, BIOL 242, BIOL 1230) and their credit values.

Open Electives.....18-19 Credits

Total Credits.....64 Credits

Required for a B.S. Degree in Computer Science

(Bioinformatics Track) 128 Credits

2+2 ELEMENTARY EDUCATION: K-6 W/MIDDLE LEVEL COMMUNICATION ARTS AND LITERATURE 5-8 SPECIALTY

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: Associate in Arts (A.A.) degree in Liberal Arts at RCTC

Second two years: Bachelor of Science (B.S.) Teaching Degree in Elementary Education with Middle Level Communication Arts & Literature (KMCL) at WSU

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. In addition, curriculum revisions are in process at RCTC and WSU-Rochester; this process will result in changes not reflected in this catalog. To obtain the latest course requirements, please contact the appropriate department.

I. General Education Requirements.....44 Credits

Courses must be selected from those approved to satisfy the competencies of Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine the specific courses that apply to the areas below. Some courses may be used to meet a goal in 1-6 and one goal in 7-10. All ten goal areas must be met.

Goal 1: Written and Oral Communication.....14 Credits

Table listing ENGL and SPCH courses (ENGL 1117, ENGL 1118, SPCH 1114, SPCH 2214) and their credit values.

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics 6 Credits

MATH 1111 Contemporary Concepts in Mathematics (or higher) AND 3 Credits

Note: Minimum grade of "C" in MATH 1111 required

MATH 1112 Mathematical Reasoning 3 Credits

Goal 5: History and Social Sciences..... 9 Credits

SOC 2627 Human Exceptionality..... 2 Credits

HIST 1624 U.S. History to 1865 OR 3 Credits

HIST 1625 U.S. History 1865 to Present 3 Credits

Choose remaining credits from the following disciplines:

anthropology, economics, geography, political science, psychology.

Goal 6: Humanities and Fine Arts 9 Credits

ENGL 2297 Children's Literature..... 3 Credits

SPCH 1125 Oral Interpretation 3 Credits

Choose from the following disciplines with a minimum of 2 credits from the following areas: art, foreign language, humanities†, journalism, music, philosophy†.

Select a course that meets Goals 7, 8, 9, and 10 if any of these goals have not been met by the courses used to meet Goals 1, 3, 4, 5, and 6.

† Honors equivalent available.

II. Health and Human Performance..... 4 Credits

Any combination of health and or physical education activity courses (1100-1199)

HLTH 1111 Health Education OR..... 3 Credits

HLTH 1132 Drug Use and Abuse..... 3 Credits

Any combination of health and/or physical activity courses 1100-1119 or varsity athletics PHED 1210-1236, 2210-2236..... 1 Credit

III. Electives16 Credits

Total Credits.....64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

License Requirements10-13 Credits

MTED 125 Mathematics for Elementary Teachers 4 Credits

PER 200 Teaching Elementary Physical Education 3 Credits

HERS 320 Health Education in Elementary Schools 3 Credits

EDUC 352 Integrating Microcomputers into the Classroom (OR competency).....0-3 Credits

Professional Education Sequence and Teaching Methods54 Credits

EDUC 304 Human Development and Learning: Middle Level & K-12..... 4 Credits

EDUC 308 Human Relations and Student Diversity..... 3 Credits

O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 3 Credits

P EDUC 449 Middle Level Philosophy, Organization & Interdisciplinary Planning 3 Credits

P EDUC 459 The Professional Educator 3 Credits

EDUC 328 Teaching Reading and Language Arts I 3 Credits

EDUC 329 Teaching Reading and Language Arts II 3 Credits

EDUC 330 Literacy for Second Language Learners 3 Credits

EDUC 333 Teaching Social Studies in the Elementary School..... 3 Credits

EDUC 334 Teaching Mathematics in the Elementary School..... 3 Credits

EDUC 335 Teaching of Science & Environmental Studies in the Elementary School..... 3 Credits

MUS 320 Music for Elementary Teachers 3 Credits

ART 300 Elementary Art Education 3 Credits

I EDST 464 Student Teaching/K-6 Middle Level..... 11-14 Credits

Total Credits.....64 Credits

Required for a B.S. Degree in Elementary Education:

K-6 with Middle Level Communication Arts & Literature 5-8 Specialty (KMCL)..... 128 Credits

2+2 ELEMENTARY EDUCATION: K-6 W/MIDDLE LEVEL SOCIAL STUDIES 5-8 SPECIALTY

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate in Arts (A.A.) degree in Liberal Arts at RCTC*

Second two years: *Bachelor of Science (B.S.) teaching degree in K-6 with Middle Level Social Studies 5-8 (KMSO) at WSU*

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. In addition, curriculum revisions are in process at RCTC and WSU-Rochester; this process will result in changes not reflected in this catalog. To obtain the latest course requirements, please contact the appropriate department.

I. General Education Requirements54 Credits

Courses must be selected from those approved to satisfy the competencies of Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine the specific courses that apply to the areas below. Some courses may be used to meet a goal in 1-6 and one goal in 7-10. All ten goal areas must be met.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
Note: Minimum grade of "B" in one of the two is required
 SPCH 1114 Fundamentals of Speech 3 Credits
Note: Minimum grade of "B" is required.

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science 6 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics 6 Credits

MATH 1111 Contemporary Concepts in Mathematics (or higher) AND 3 Credits
Note: Minimum grade of "C" in MATH 1111 required
 MATH 1112 Mathematical Reasoning 3 Credits

Goal 5: History and Social Sciences.....18 Credits

ECON 1101 Introduction to Economics 3 Credits
 GEOG 1614 Human Geography..... 3 Credits
 HIST 1613 Foundations of Western Civilizations OR..... 3 Credits
 HIST 1614 Europe in the Modern Ages 3 Credits
 HIST 1624 U.S. History to 1865 3 Credits
 HIST 1625 U.S. History 1865 to Present 3 Credits
 SOC 1614 Introduction to Sociology 3 Credits
 SOC 2627 Human Exceptionality..... 2 Credits
 ANTH 1612 Cultural Anthropology OR 3 Credits
 HIST 1631 Modern Asian Civilization OR 3 Credits
 SPAN 1001 Introduction to Hispanic Cultures (Goal 6) 3 Credits

Goal 6: Humanities and Fine Arts 9 Credits

ENGL 2297 Children's Literature 3 Credits
 Choose from the following disciplines with a minimum of 2 credits from two different areas: art, foreign culture, humanities†, journalism, music, philosophy†, speech/theatre.

Select a course that meets Goals 7, 8, 9, 10 if these goals have not been met by the courses used to meet Goals 1, 3, 4, 5, 6.

† Honors equivalent available.

II. Health and Human Performance 4 Credits

Any combination of health and/or physical education activity courses (1100-1199)

HLTH 1111 Health Education OR 3 Credits
 HLTH 1132 Drug Use and Abuse..... 3 Credits

Any combination of health and/or physical activity courses 1100-1119 or varsity athletics PHED 1210-1236, 2210-2236..... 1 Credit

III. Electives10 Credits

Total Credits.....64 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

License Requirements10-13 Credits

MTED 125 Mathematics for Elementary Teachers 4 Credits
 PER 200 Teaching Elementary Physical Education 3 Credits

HERS 320 Health Education in Elementary Schools 3 Credits
 EDUC 352 Integrating Microcomputers into the Classroom (OR competency) 0-3 Credits

Professional Education Sequence and Teaching Methods54 Credits

EDUC 304 Human Development and Learning: Middle Level & K-12..... 4 Credits
 EDUC 308 Human Relations and Student Diversity..... 3 Credits
 O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 3 Credits
 P EDUC 449 Middle Level Philosophy, Organization & Interdisciplinary Planning 3 Credits
 P EDUC 459 The Professional Educator 3 Credits
 EDUC 328 Teaching Reading and Language Arts I 3 Credits
 EDUC 329 Teaching Reading and Language Arts II 3 Credits
 EDUC 330 Literacy for Second Language Learners 3 Credits
 EDUC 333 Teaching Social Studies in the Elementary School 3 Credits
 EDUC 334 Teaching Mathematics in the Elementary School 3 Credits
 EDUC 335 Teaching of Science & Environmental Studies in the Elementary School..... 3 Credits
 MUS 320 Music for Elementary Teachers 3 Credits
 ART 300 Elementary Art Education 3 Credits
 I EDST 464 Student Teaching/K-6 Middle Level..... 11-14 Credits

Total Credits.....64 Credits Required for a B.S. Degree in Elementary Education: K-6 with Middle Level Social Studies 5-8 Specialty (KMSO)..... 128 Credits

2+2 NURSING (GENERIC OPTION)

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate in Science (A.S.) degree in Liberal Arts & Studies at RCTC*

Second two years: *Bachelor of Science (B.S.) degree in Nursing at WSU*

I. General Education Requirements60 Credits

Courses must be selected from those approved to satisfy the competencies of Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult The RCTC catalog listings to determine the specific courses that apply to the areas below. Some courses may be used to meet a goal in 1-6 and one goal in 7-10. All ten goal areas must be met.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
 SPCH 1114 Fundamentals of Speech OR 3 Credits
 SPCH 1130

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science20 Credits

BIOL 1217 Anatomy and Physiology I 4 Credits
 BIOL 1218 Anatomy and Physiology II..... 4 Credits
 BIOL 2021 General Microbiology..... 4 Credits
 CHEM 1117 General, Organic and Biological Chemistry I. 4 Credits
 CHEM 1118 General, Organic and Biological Chemistry II 4 Credits

Goal 4: Mathematics 4 Credits

MATH 2208 Fundamentals of Statistics 4 Credits

Goal 5: History and Social Sciences.....16 Credits

PSYC 2618 General Psychology 4 Credits
 PSYC 2626 Human Growth & Development 3 Credits
 SOC 1614 Introduction to Sociology 3 Credits
 SOC 2612 Marriage and the Family across the Life Span. 3 Credits
 3 credits from one of the following areas: anthropology†, geography†, history†, political science.

Goal 6: Humanities and Fine Arts 9 Credits

Choose from the following disciplines with a minimum of 2 credits from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech/theatre.

Select a Goal 7, 8, 9, 10 course if these areas have not been met by Goals 1, 3, 4, 5, 6.

† Honors equivalent available

II. Health and Human Performance..... 4 Credits

Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics PHED 1210-1236, 2210-2236.

III. Nursing Core Requirements	3 Credits
NUTR 1211 Principles of Nutrition.....	3 Credits
Total Credits	67 Credits

Note: The award of the A.S. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

Prior to applying to the nursing program, the follow prerequisite courses must be completed: ENGL 1117/1118 or 1917/1918 and four of the following: BIOL 1217, BIOL 1218, BIOL 2021, NUTR 1211, and both CHEM 117 AND CHEM 1118 (both are needed to meet the chemistry course minimum). All must be completed before a student can begin the Nursing program. MATH 2208 is prerequisite to WSU's NURS 375.

MAJOR REQUIREMENTS AT WSU:

Nursing	56 Credits
NURS 300 Caring Skills I.....	2 Credits
NURS 301 Caring Skills II.....	2 Credits
NURS 311 Clinical Decisions: Adult Health I.....	2 Credits
NURS 320 Caring Concepts I.....	3 Credits
NURS 321 Caring Concepts II.....	3 Credits
P NURS 330 Role Development I.....	3 Credits
NURS 331 Role Development II.....	4 Credits
NURS 345 Health Assessment I.....	3 Credits
NURS 360 Pharmacology.....	1 Credit
NURS 366 Pathophysiology.....	3 Credits
O NURS 375 Nursing Research, Theory and Technology.....	3 Credits
NURS 400 Emerging Health Care Systems.....	2 Credits
NURS 411 Clinical Decisions: Adult Health II.....	2 Credits
NURS 413 Nursing of Families Experiencing Mental Illness ..	2 Credits
NURS 421 Nursing of Childbearing Families.....	2 Credits
NURS 422 Nursing of Childrearing Families.....	2 Credits
P NURS 423 Role Development III.....	4 Credits
NURS 433 Role Development III Seminar.....	1 Credit
NURS 471 Community Health Care.....	2 Credits
NURS 472 Leadership/Management in Nursing.....	2 Credits
NURS 474 Role Development IV.....	4 Credits
NURS 484 Role Development IV Seminar.....	1 Credit
I NURS 491 Capstone Experience in Role Synthesis.....	3 Credits
Nursing Major Electives	5 Credits
5 credits of upper-division electives (300-400 level courses);	
2 of these credits must be nursing electives.	
Open Electives	3 Credits
Total Credits	64 Credits
Required for a B.S. Degree in Nursing	128 Credits

2+2 PSYCHOLOGY

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate (A.A.) degree in Liberal Arts and Science at RCTC*

Second two years: *Bachelor of Arts (B.A.) degree in Psychology (Option A) at WSU*

I. General Education Requirements.....42-44 Credits

Courses must be selected from those approved to satisfy the competencies of Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine the specific courses that apply to the areas below. Some courses may be used to meet a goal in 1-6 and one goal in 7-10. All ten goal areas must be met.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science.....6-8 Credits

Choose two courses with labs from two different areas: biology, chemistry, earth science, or physics.

Goal 4: Mathematics/Logical Reasoning.....3 Credits

MATH 1111 Contemporary Concepts in Mathematics
OR higher..... 3 Credits

Goal 5: History and Social Sciences.....13 Credits

Core Course Requirements..... 7 Credits
PSYC 2618 General Psychology (4 Credits)
PSYC 2626 Developmental Psychology (3 Credits)
Choose from the following disciplines with a minimum of two credits from two different areas: anthropology†, economics†, geography†, history†, political science, sociology†. 6 Credits

Goal 6: Humanities and Fine Arts9 Credits

Choose from the following disciplines with a minimum of two credits from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech/theater.

Select a Goal 7, 8, 9, 10 course if these areas have not been met by the courses used to meet Goals 1, 3, 4, 5, or 6.

† Honors equivalent available.

II. Health and Physical Education Requirements4 Credits

Any combination of health courses (numbered 1102, 1110, 1111, 1114, 1132, 1135, or 2126) and/or physical education courses (numbered 1100-1199). One credit may be from varsity athletics PHED 1210-1236, 2210-2236.

III. Open Electives16-18 Credits

Total Credits.....64 Credits

Note: The B.A. in Psychology requires a minor. Minors are available in business administration, computer science, and sociology. Students should consult with an advisor as early as possible to review course requirements for these minors.

The award of the A.A. degree waives WSU University Studies requirements except for the Flag requirements (page 19).

MAJOR REQUIREMENTS AT WSU:

Psychology.....29-32 Credits

O PSY 231 Statistics.....	3 Credits
PSY 308 Experimental Psychology.....	5 Credits
P PSY 350 Psychological Testing and Measurement.....	3 Credits
P PSY 434 History and Systems of Psychology.....	3 Credits
Psychology Electives to Complete the Major.....	18 Credits

Credits to Complete Minor and Open Electives.....32-35 Credits

Total Credits.....64 Credits

Required for a B.A. Degree in Psychology with a Minor128 Credits

2+2 SOCIAL WORK

Rochester Community and Technical College (RCTC) & Winona State University (WSU)

First two years: *Associate in Arts (A.A.) degree in Liberal Arts at RCTC*

Second two years: *Bachelor of Social Work (BSW) degree at WSU*

I. General Education Requirements.....42 Credits

Courses must be selected from those approved to satisfy the competencies of Minnesota Transfer Curriculum (MNTC) Goals 1-10. Consult the RCTC catalog listings to determine the specific courses that apply to the areas below. Some courses may be used to meet a goal in 1-6 and one goal in 7-10. All ten goal areas must be met.

Goal 1: Written and Oral Communication.....11 Credits

ENGL 1117†, 1118† Reading & Writing Critically I & II 8 Credits
SPCH 1114 Fundamentals of Speech..... 3 Credits

Goal 2: Critical Thinking - Met by any course in MNTC goals 1-10

Goal 3: Natural Science.....7 Credits

BIOL 1110 Human Biology..... 4 Credits
A second course with lab from the following areas: chemistry, earth science, or physics.

Goal 4: Mathematics.....4 Credits

MATH 2208 Fundamentals of Statistics..... 4 Credits
(Optional) This course, STAT 110, or PSY 231 at WSU is required in the major.

Note: Students should complete 64 credits before enrolling in STAT 110 at WSU-Rochester. Students with less than 64 credits should take an RCTC introductory statistics course.

Goal 5: History and Social Sciences.....13 Credits

PSYC 2618 General Psychology..... 4 Credits
PSYC 2626 Developmental Psychology..... 3 Credits
SOC 1614 Introduction to Sociology..... 3 Credits

A minimum of 3 credits from one of the following disciplines: anthropology, economics, geography†, history†, political science.

Goal 6: Humanities and Fine Arts9 Credits

Choose from the following disciplines with a minimum of two credits from three different areas: art, English literature, foreign culture, humanities†, journalism, music, philosophy†, speech/theater.

Select a Goal 7, 8, 9, 10 course if these areas have not been met by the courses used to meet Goals 1, 3, 4, 5, or 6.

† Honors equivalent available.

II. Health and Human Performance	4 Credits
Any combination of health and/or physical education activity courses 1100-1199. One credit may be from varsity athletics.	
III. Electives	18 Credits
Note: Concurrent enrollment at WSU in spring term of the final year at RCTC.	
I SOCW 340 Introduction to Social Work.....	3 Credits
SOCW 350 Field Experience.....	3 Credits
Total Credits	64 Credits
Note: The award of the A.A. degree waives WSU University Studies requirements except for the Flag requirements (page 19).	



MAJOR REQUIREMENTS AT WSU:

Social Work	46-49 Credits
O PSY 231 Statistics OR.....	3 Credits
STAT 110 Fundamentals of Statistics.....	3 Credits
Note: If MATH 2208 was taken at RCTC, neither of the above is required.	
I SOCW 340 Introduction to Social Work.....	3 Credits
SOCW 350 Field Experience.....	3 Credits
SOCW 365 Social Work Practice I- Ethics and Interviewing.....	3 Credits
SOCW 370 Human Behavior in the Social Environment....	3 Credits
SOCW 380 Social Welfare Policy I.....	3 Credits
SOCW 385 Social Work Practice II - Families and Groups.....	3 Credits
P SOCW 390 Social Work Research Process and Skills.....	3 Credits
SOCW 400 Social Work Practicum Preparation.....	4 Credits
O SOCW 410 Analysis of Social Welfare Policy.....	3 Credits
SOCW 415 Social Work Practice III - Organizations and Communities.....	3 Credits
SOCW 475 Social Work Senior Practicum.....	12 Credits
P SOCW 480 Integrative Social Work Seminar.....	3 Credits
SOCW 355 Multicultural Issues OR.....	3 Credits
SOCW 435 Social Work with Diverse Populations.....	3 Credits
Open Electives	15-18 Credits
Total Credits	64 Credits
Required for a Bachelor of Social Work Degree	128 Credits

WSU COLLEGES & UNDERGRADUATE PROGRAMS PROGRAM DESCRIPTIONS

The remainder of this catalog is arranged in the following major sections:

- Description of the colleges that make up the University: College of Business, College of Education, College of Liberal Arts, College of Nursing and Health Sciences, and College of Science and Engineering.
- Alphabetic listing of all academic programs (including pre-professional and professional sequences).

For each program, the catalog outlines the following information: majors, minors, program options, and licensure programs; program-specific academic requirements; graduation requirements; and course descriptions. Course descriptions include the following elements:

Course Number, Title, and Credits: The course number indicates the level at which the course should be taken. Generally, first-year students take 100-level courses; sophomores, 200-level; juniors, 300-level; and seniors, 400-level. Students are required to limit course selection to courses not more than one level above their class standing. First-year students are not permitted to enroll in 400-level courses.

Undergraduate students who need 12 or fewer semester credits to complete all baccalaureate degree requirements may request permission from the Director of Graduate Studies to take courses for graduate credit to complete a regular course load during the semester of graduation. However, undergraduate students may not enroll in courses at the 600-level or 700-level.

Course Content: A brief description of subject matter gives students an idea of what to expect in the course.

Prerequisites: A prerequisite is either a course that must be completed prior to enrolling in the course or some other requirement that must be met prior to enrolling in the course.

Grading Method: If a course is offered on a grade-only or pass/no credit-only basis, that status is included in the course description. A department's general pass/no credit policy is included in its listing of program requirements. Students should check the policy before enrolling in a course on a pass/no credit basis.

Frequency of Offering: Course descriptions may indicate how often the course is offered.

COLLEGE OF BUSINESS

James (Bill) Murphy, Dean
Somsen Hall, Room 309 (507-457-5014)

MISSION

The mission of the College of Business is to provide quality undergraduate business programs that prepare students to apply their knowledge and skills creatively, responsibly, and adaptively. In so doing, students will exemplify the qualities of engaged, well-educated citizens—successfully responding to the challenges of their work, lives, and the communities in which they live.

The College of Business fosters an engaging and supportive learning environment informed by pedagogical scholarship and enhanced by applied research that promotes both human and economic development in Southeast Minnesota. Based on an integrated liberal arts education core woven through the curriculum, our students learn effective communication skills, collaborative problem-solving abilities, analytical thinking skills, and the application of contemporary business practices. Thus, WSU graduates are prepared to react responsibly and creatively to social, economic, global, and technological changes in their careers.

Departments in the College use assessment techniques to ensure educational excellence; conduct periodic program reviews as required by the Minnesota State Colleges and Universities system; and solicit input from stakeholders—students, alumni, and businesses.

DEPARTMENTS

Accounting, Business Administration, Economics and Finance, Management of Information Systems and Operations, and Marketing.

FACULTY

Over 85 percent of College of Business faculty hold terminal degrees in their respective fields of study. In addition to their dedication to teaching, the majority engage in significant ongoing research in business. Faculty members also bring to their teaching the knowledge they gain from regularly consulting with businesses and nonprofit organizations and from attending professional conferences, seminars, and workshops. Many business faculty participate in developing innovative and interdisciplinary approaches to teaching that help to broaden student perspectives.

CAREER OPPORTUNITIES

The career opportunities for business majors continue to be strong and varied. Many graduates of the College of Business are employed by top accounting firms and leading international and domestic corporations. Some work in government agencies and nonprofit organizations. A significant number of WSU business majors attend graduate school sometime during their professional career.

INTERSHIPS

All departments in the College of Business offer internship opportunities that allow students to gain valuable business experience before they graduate. Many of these internships lead to job opportunities immediately after graduation.

SCHOLARSHIPS

In addition to general university scholarships, a number of scholarships are designated for majors in the College of Business. These scholarships are awarded on a competitive basis. Students should watch for the application deadlines during the spring semester and apply directly to the College of Business.

STUDENT ORGANIZATIONS

Several student organizations are available for majors and minors in the College of Business. These organizations provide students with numerous opportunities to prepare for their profession through attendance at conferences and workshops, interaction with practitioners in their field, and social networking. Student organizations are actively involved in bringing speakers to campus who present a broad range of business topics.

UNDERGRADUATE DEGREES OFFERED BY THE COLLEGE OF BUSINESS

Department/ Program	BA Major	BA Minor	BS Major	BS Minor
Accounting Department				
Accounting (ACCT)			X	X
Business Administration Department				
Business Administration (BA)			X	X
Business Law (BLAW)				X
Human Resources Management (HRMT)			X	
International Business (INTB)				X
Management (MGMT)				X
Economics and Finance Department				
Economics (ECON)	X	X		
Finance				
Option A (FIA)			X	
Option B (FIB)			X	
Management of Information Systems and Operations Department				
Management Information Systems (MIS)			X	X
Operations Management (OM)				X
Marketing Department				
Marketing (MKTG)			X	X



Sally N. Standiford, Dean
Gildemeister Hall, Room 135 (507-457-5570)

MISSION

The College of Education's mission is to provide continuing leadership and excellence in preparing classroom teachers, counselors, administrators, and other professionals in education, recreation, and therapeutic recreation. It accomplishes its mission by offering undergraduate and graduate programs, which prepare professionals for practice in both public and private sectors of society.

The College strives to provide the knowledge, skills, professionalism, and practice necessary to enable students to perform with excellence as professionals and leaders in the service region, state, nation, and world. The College endeavors to provide students with appropriate field experiences in the region, throughout Minnesota, and other states. Further, it provides opportunities for cross-cultural and international awareness through general education, professional work, and travel study.

Faculty members in the College are committed to the serious study of education and the promotion of professional standards to foster innovation in professional preparation.

ACADEMIC DEPARTMENTS

Counselor Education; Education; Educational Leadership; Physical Education and Sport Science; Recreation, Tourism and Therapeutic Recreation; and Special Education.

Note: The Department of Educational Leadership offers only graduate-level programs. See the *Graduate Catalog* for more information.

ADMISSION AND GRADUATION STANDARDS

Refer to the appropriate department for details. For a checklist of the University graduation requirements, see page 23.

ACCREDITATION AND PROFESSIONAL MEMBERSHIP

WSU is accredited by the National Council for Accreditation of Teacher Education (NCATE). All teacher education and school counselor programs have been approved by the Minnesota Board of Teaching. In addition, several programs have received national recognition from the following professional organizations: Association for Childhood Education International, Council for Exceptional Children, National Association for the Education of Young Children, National Association of Schools of Music, National Council of Teachers of English, National Council of Teachers of Mathematics, and the National Council for the Social Studies.

WSU's Counselor Education programs are accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and NCATE. Programs in the Department of Educational Leadership are also accredited by NCATE and approved by the Minnesota Board of School Administrators (MBSA).

The College of Education is a member of the American Association of Colleges for Teacher Education (AACTE) and the Minnesota Association of Colleges for Teacher Education (MACTE).

PARTNERSHIPS

The College of Education and the Professional Education Unit are committed to active and equal partnerships with local schools and other educational and recreational organizations as demonstrated by (but not limited to) the following ongoing partnerships including:

- Urban Teacher Education Partnership (UTEP) – A collaboration of St. Paul Public schools and the seven Minnesota State Colleges and Universities teacher preparation institutions.
- Student teaching exchange program with Fort Valley State University (Fort Valley, Georgia).
- Student teachers in over 40 contracted schools in Wisconsin and Minnesota.
- ELOSA – Educational Leaders on Special Assignment at WSU.
- Teacher exchanges of university faculty and school district faculty.
- The Partnership for Lifelong Learning – Phase I Early Childhood.
- Graduate Induction Program with Rochester Public Schools (Rochester, Minnesota).
- Transforming School Counseling Partnership with Rochester Public Schools (Rochester, Minnesota).
- Learning Community Master Teacher Program.
- Innovative Academic Programs.
- Teacher Licensure Collaborative Program (TLC).
- Pacific Challenge Australia/New Zealand Travel Study Program.

HONOR SOCIETIES AND STUDENT ORGANIZATIONS

Academically accomplished students are recognized by WSU chapters of the professional honor societies Kappa Delta Pi and Alpha Upsilon Alpha. Pre-professional students may join student chapters of professional organizations: American Therapeutic Association, Education Minnesota Student Program, Minnesota Recreation and Park Association, National Recreation and Park Association, Student Association for Supervision and Curriculum Development, Student Council for Exceptional Children, and the Student International Reading Association.

MAXWELL CHILDREN'S CENTER

The Maxwell Children's Center (located in Wabasha Hall and Madison Elementary School) provides a living laboratory of child development and exemplary practice for students in professional education programs at WSU. Future teachers have opportunities to work with and observe children from birth through school age. The Children's Center is an important part of the College of Education and the Professional Education Unit. The Center keeps the learning and development of children at the forefront of our professional education programs.

In addition to experiences at the Maxwell Children's Center, students in professional education programs in the College of Education are in schools and other professional settings throughout their programs. Teacher education majors can expect to spend time in Pre K-12 classrooms every semester while they are in the program, beginning as early as their second semester on campus. Recreation majors culminate their programs in an internship of their choosing after a variety of professional experiences within their major courses.

UNDERGRADUATE DEGREES OFFERED BY THE COLLEGE OF EDUCATION

	Teaching Major	Non-Teaching Major	Non-Teaching Minor
Bachelor of Science			
Education Department			
Business Education (BEDT)	X		
Elementary Education			
Early Childhood (Birth-6) (ELEC)	X		
Middle Level Communication Arts and Literature 5-8 Specialty (KMCL)	X		
Middle Level Mathematics 5-8 Specialty (KMMA)	X		
Middle Level Science 5-8 Specialty (KMSC)	X		
Middle Level Social Studies 5-8 Specialty (KMSS)	X		
Training and Development (TRDV)			X
Physical Education & Sport Science Department			
Coaching (COAC)			X
Physical Education (PET)	X		
Recreation, Tourism, & Therapeutic Recreation Department			
Adventure Tourism (ADVT)			X
Recreation, Tourism & Therapeutic Recreation			
Recreation and Tourism (RT)		X	
Therapeutic Recreation (TR)		X	
Special Education Department			
Special Education			
Developmental Disabilities (SEDD)	X		
Learning Disabilities (SELD)	X		

GRADUATE DEGREES OFFERED BY THE COLLEGE OF EDUCATION

See the *Graduate Catalog* for program descriptions and other pertinent information.

ADVANCED LICENSURE PROGRAMS

- Developmental Disabilities (DD)
- Learning Disabilities (LD)
- pK-12 Principal Superintendent
- Teacher Licensure Collaborative (TLC)

CERTIFICATE PROGRAMS

- Educational Technology Certificate
- Outdoor Education/Adventure Based Leadership
- Training and Development Certificate
- Sports Management

MASTER OF SCIENCE (M.S.)

Counselor Education

- Community Counseling
- Elementary School Counseling
- Secondary School Counseling
- Professional Development

Education

- Early Childhood
- Graduate Induction Program (GIP)
- K-12 Education
- Master Teacher Program
- Middle Level
- Secondary

Educational Leadership

- General School Leadership (non-licensure)
- K-12 Principalship (non-Minnesota licensure)
- Outdoor Recreation/Adventure-Based Leadership

Special Education

- Developmental Disabilities (DD)
- Learning Disabilities (LD)

EDUCATIONAL SPECIALIST (Ed.S.)

Educational Leadership

- PK-12 Principal
- Superintendent

COLLEGE OF LIBERAL ARTS

_____, Dean
Minné Hall, Room 206 (507-457-5017)

MISSION

The mission of the College of Liberal Arts is to offer degree programs in the arts, humanities, and social sciences as well as in specialized professional and occupational areas. The College also seeks to provide a comprehensive base of liberal arts studies as the foundation of all degrees. These two facets of the mission translate into the two major responsibilities for faculty members:

1. Providing a broad array of quality programs in the liberal arts and related professional fields.
2. Providing the majority of the University Studies curriculum to all WSU students.

The specific missions for the College of Liberal Arts are:

1. Develop a depth of knowledge in a primary liberal arts discipline.
2. Develop breadth through knowledge and appreciation of the arts, humanities, and social sciences beyond one's primary discipline.
3. Provide an intellectual, social, and cultural atmosphere for the development of self-education and lifelong learning.
4. Make individuals aware of the rights and responsibilities they have to themselves and a democratic society.
5. Prepare individuals to meet the career challenges of a rapidly changing and multicultural society. Contribute to the development of basic and applied knowledge in the liberal arts fields.

DEPARTMENTS/PROGRAMS

Art, Arts Administration, Child Advocacy Studies, Communication Studies, Criminal Justice, English, Foreign Language, Global Studies, Graphic Design, History, Law and Society, Mass Communication, Music, Paralegal, Philosophy, Political Science, Psychology, Public Administration, Social Work, Sociology, Theatre and Dance, and Women's and Gender Studies.

FACULTY

Over 80 percent of the liberal arts faculty members have terminal degrees in their fields from prominent universities. Many are widely known for their scholarly and creative efforts as well as for their excellence as teachers.

CAREER OPPORTUNITIES

The opportunities for career education within the College of Liberal Arts are many and varied. The B.A. degrees in all the College's disciplines provide opportunities for employment or preparation for advanced degree work in those areas. B.S. (teaching) degrees educate students for careers in teaching art, music, speech/theatre, English, foreign languages, and

social science. Departments within the College of Liberal Arts offer specific professional preparation in such areas as criminal justice, mass communication, paralegal, public administration, and social work.

Equally important in career planning is the fact that a liberal arts education provides students with career skills that are useful in many professions not listed above, but including business, law, and medicine. These skills have general applicability, and they provide considerable vocational choice and career flexibility.

RESEARCH, COMMUNITY SERVICE, AND PARTNERSHIPS

The College supports faculty/student research, community service, and partnerships with business and nonprofit agencies in a variety of ways. Examples of departments that encourage faculty/student research include Psychology, History, and Law and Society. Examples of partnerships include the National Child Protection Training Center and the Child Advocacy Program, Theater du Mississippi for the Frozen River Film Festival, and the Great River Shakespeare Festival. Several departments encourage or require internships, capstone experiences, and community service opportunities, which involve working with the City of Winona; the Women's Resource Center; Olmsted County and Winona County Prosecutor's Offices; the Winona County Historical Society; Fastenal Company; Catholic Charities' Refugee Resettlement in Rochester; and others.

The College also supports study abroad opportunities, including a joint degree arrangement with Soonchunhyang University in Seoul, South Korea; study of Spanish language and culture at the University of Granada; and study abroad agreements with Southern Cross University in Australia, Akita International University in Japan, and Hebei University of Technology in China. In addition, there are opportunities available through other universities.

SCHOLARSHIPS

In addition to general university scholarships, several departments offer scholarships for their majors. Such scholarships are available in art, history, music, paralegal, social work, sociology, psychology, and theatre. Contact the appropriate department for more details.

FACILITIES

The majority of the liberal arts faculty offices and facilities are located in Minné Hall or the Performing Arts Center. The Art Department is located in Watkins Hall; the Foreign Language Department is in Somsen Hall; the Psychology Department and the Mass Communication Department are in Phelps Hall. The Dance Studio is located in Memorial Hall.

UNDERGRADUATE DEGREES OFFERED BY THE COLLEGE OF LIBERAL ARTS

Department/Program	BA Major	BA Minor	BS Major	BS Minor	BSW Major	Department/Program	BA Major	BA Minor	BS Major	BS Minor	BSW Major
Art Department						Mass Communication Department					
Art						Mass Communication (MC)		X			
Graphic Design Option (ARTG)	X					Advertising Option (MCAD)	X				
Studio Art Option (ARTS)	X	X				Broadcasting Option (MCB)	X				
History of Art (ARTH)		X				Journalism Option (MCJ)	X				
Art (teaching) (ARTT)			X			Photojournalism Option (MCPJ)	X				
Arts Administration Program						Music Department					
Arts Administration (AAD)		X				Music (MUSA; MUSS)		X		X	
Child Advocacy Program						Liberal Arts Option (MUSL)	X				
Child Advocacy Studies (CAST)		X				Performance Option (MUSP)	X				
Communication Studies Department						Jazz Studies (MUJS)		X			
Communication Arts and Literature (teaching) (CALT)			X			Music Business (MUBU)			X		
Communication Studies (CS)	X	X				Music Education (teaching)					
Intercultural Communication (ITCO)		X				Instrumental Option (MSTI)			X		
English Department						Vocal Option (MSTV)			X		
English						Philosophy Department					
Literature and Language (ENGL)	X	X				Philosophy (PHIL)		X			
Applied Linguistics (ENGA)	X					Political Science Department					
Writing Option (ENGW)	X					Political Science (POLS)		X			
First Combining Major Literature and Language (ENGF)	X					General (Option A) (POLA)	X				
Second Combining Major Writing Option (ENGS)	X					International Studies (Option B) (POLB)	X				
Creative Writing (ENGC)		X				Public Administration (PUBA)			X	X	
Applied & Professional Writing (EAPW)		X				Professional Studies Program					
TESOL (ENGE)		X				Professional Studies (PS)		X			
Communication Arts and Literature (teaching) (CALT)			X			Aviation Maintenance					
Teaching English as a Second Language K-12 (teaching) (ESLT)			X			Management Option (PSAM)	X				
Foreign Languages Department						General Option (PSGE)	X				
French (FREN)	X	X				Leadership Option (PSLE)	X				
German (GERM)	X	X				Psychology Department					
Spanish (SPAN)	X	X				Psychology (PSY)		X			
French (teaching) (FRNT)			X			Option A (PSYA)	X				
German (teaching) (GRMT)			X			Option B (PSYB)	X				
Spanish (teaching) (SPNT)			X			Social Work Department					
Geography						Social Work (SOCW)					X
Geography (GEOG)		X				Sociology Department					
Global Studies Program						Sociology (SOC; SOCG)	X	X			
Global Studies (GLST)		X				Family Studies Option (SOCF)	X				
Asian Option (GSAS)	X					Gerontology (SGER)	X	X			
European Studies (GSEU)	X					Human Services Option (SOCH)	X				
Latin American Studies (GSLA)	X					Sociology: Criminal Justice					
North American Option (GSNA)	X					Corrections Option (SCJC)			X		
History Department						Law Enforcement Option (SCJL)			X		
History (HIST)	X	X				Theatre and Dance Department					
Law and Society (LWSO)	X					Dance (DANC)		X			
Paralegal (PLG)			X			Theatre (THTR)	X	X			
Social Science/History (Secondary Social Studies Teaching) (SSHT)	X					Women's and Gender Studies Program					
						Women's and Gender Studies (WAGS)		X			

GRADUATE DEGREES OFFERED BY THE COLLEGE OF LIBERAL ARTS

Master of Arts – English Master of Science – English
See the *Graduate Catalog* for program descriptions and other pertinent information.

COLLEGE OF NURSING AND HEALTH SCIENCES

Timothy M. Gaspar, Dean
Stark Hall, Room 301A (507-457-5122)

MISSION

The College of Nursing and Health Sciences provides quality undergraduate and graduate programs in nursing and the health sciences. These programs are designed to graduate caring, ethical, competent, and progressive professionals who are sensitive to diversity and prepared to work with clients through health promotion, prevention of health problems, and care during illness. In addition to its professional programs, the College seeks to promote health awareness at WSU. The College's educational environment supports lifelong wellness in the individual, the University, the community, and global society.

ACCREDITATION

All Bachelor of Science in Nursing and Master of Science in Nursing programs are fully accredited (2003-2013) by the Commission on Collegiate Nursing Education (CCNE), 1 Dupont Circle NW, Suite 530, Washington, DC 20036-1120. CCNE exclusively accredits baccalaureate and higher degree programs in nursing. The undergraduate nursing major is approved by the Minnesota Board of Nursing (2003-2013).

The Athletic Training major holds full accreditation by the Commission on Accreditation of Athletic Training Education (CAATE). All health education programs have continuing accreditation by the National Council for Accreditation of Teacher Education (NCATE) and approval by the Minnesota Board of Teaching.

DEPARTMENTS

- Nursing
- Health, Exercise and Rehabilitative Sciences

SCHOLARSHIP AND COMMUNITY SERVICE

The College supports faculty and student scholarship/research within the University and with educational partners in the region. Faculty hold joint appointments or consultant roles with agencies such as Gundersen-Lutheran Medical Center and Mayo-Franciscan Skemp (La Crosse, WI); Mayo Department of Nursing (Rochester, MN); Migrant Health Center and Community Clinic (Rochester, MN), Hawthorne Center (Rochester, MN), Winona Health (Winona, MN); Olmsted County Public Health Services (Rochester, MN); and the University of West Indies School of Nursing (Kingston, Jamaica, West Indies). Faculty collaborate with major clinical education partners on local, regional and national funded projects.

Community service is demonstrated in many ways within and outside the University. Faculty hold practice appointments in the Hiawatha Valley Mental Health Center (Winona, MN) and the Migrant Health and Community Clinic (Rochester, MN); manage the campus cardiopulmonary rehabilitation program; direct research in the campus human performance laboratory; and collaborate with major affiliates on local, regional, and national service-learning projects.

FACULTY

A majority of the faculty hold doctoral degrees earned at prominent universities throughout the United States. In addition, the learning environment in the classroom and practica/internship/clinical sites are supported by other professional experts in the region who hold graduate degrees in nursing and the health sciences. All faculty hold appropriate/required licensure and/or certifications in their respective discipline, maintain their clinical excellence, and are recognized for their expertise among their faculty/practice colleagues.

FACILITIES

The Department of Health, Exercise and Rehabilitative Sciences is located on the Winona campus in Memorial Hall. The Department of Nursing provides two locations for undergraduate nursing: Stark Hall on the Winona campus and WSU-Rochester in Rochester, MN. The Generic Option is offered at both sites, and the RN-to-BS Option is delivered primarily from the Rochester site. The Master's Program in Nursing is located at WSU-Rochester. (See the *Graduate Catalog* for information on the Master's Program in Nursing.)

UNDERGRADUATE DEGREES OFFERED BY THE COLLEGE OF NURSING AND HEALTH SCIENCES

Department/Program	BS Major Non-Teaching	BS Major Teaching
Health, Exercise and Rehabilitative Sciences Department		
Athletic Training (AT)	X	
Exercise and Rehabilitative Science		
Cardiopulmonary Rehabilitation (ERCR)	X	
Exercise Science (ERES)	X	
Movement Science (ERMS)	X	
Health Promotion		
Community Health (HPCH)	X	
School Health (HPST)		X
Nursing Department		
Nursing		
Nursing – Generic Option (NUGE)	X	
Nursing – RN-to-BS Option (NURN)	X	
RN-to-MS Professional Pathway	X	

GRADUATE DEGREES OFFERED BY THE COLLEGE OF NURSING AND HEALTH SCIENCES

Master of Science - Advanced Practice Nursing. Students choose from four focus areas:

- Nursing Administrator
- Nursing Educator
- Clinical Nurse Specialist
- Adult or Family Nurse Practitioner

Note: All focus areas offer a Post-Master's Degree Certificate. See the *Graduate Catalog* for program descriptions and other pertinent information.

COLLEGE OF SCIENCE AND ENGINEERING

W. Harold Ornes, Dean
 Pasteur Hall, Room 101 (507-457-5585)

MISSION

The College of Science and Engineering is committed to furthering 21st century advances in science, technology, engineering, and mathematics (STEM) by inspiring the next generation of innovators and teachers and by promoting research and scholarship across STEM disciplines.

Through a broad range of major, minor, and pre-professional programs, as well as through basic skills, interdisciplinary, and research-rich learning environments, the College endeavors to ensure the success of all students.

College curricula are intentionally designed to provide meaningful, challenging educational experiences and to build deep connections between STEM experiences and disciplinary interests, career goals, and societal issues. To achieve these goals, the College strives to integrate curriculum with vital research in a range of settings, which include research conducted in Upper Mississippi River region environments as well as significant experience at nearby healthcare centers, regional manufacturing and composites industries, state-of-the-art laboratory and computing facilities, and area school districts. These learning experiences help students develop purpose and passion for lifelong learning.

In fulfilling its mission, the College provides high quality undergraduate curricula in STEM leading to the Bachelor of Arts and Bachelor of Science degrees as well as pre-professional programs promoting student progression into a wide range of clinical, professional, and post-graduate studies at other institutions. Pre-professional sequences are not degree programs (e.g., majors or minors) at WSU. These programs are preparatory for an advanced degree at another college or university. WSU offers pre-professional sequences in dentistry, engineering, law, medicine (allopathic and osteopathic), optometry, pharmacy, physical therapy, physician assistant, podiatry, and veterinary medicine. See page 187 for pre-professional program descriptions.

DEPARTMENTS

Biology, Chemistry, Computer Science, Engineering, Geoscience, Mathematics and Statistics, and Physics.

RESEARCH AND COMMUNITY SERVICE

The College supports student and faculty research, industrial interaction, and community service. To further these goals, the College has established centers, under faculty supervision, which provide unique student employment opportunities in "real-world" research and problem-solving:

- **Southeast Minnesota Analytical Service (SEMAS):** Operated by the Chemistry Department, SEMAS serves local and regional cities, counties, businesses, and corporations that need analytical testing of water, industrial products, and chemicals. Chemistry majors work year-around in SEMAS as laboratory technicians and assistants.
- **Composite Materials Technology Center (COMTEC):** Managed by the Engineering Department, COMTEC tests manufactured materials and products for numerous local and regional companies that need quality assurance and specification testing. The center also serves as a working laboratory for instruction and engineering research.
- **Large River Studies Center (LRSC):** Administered through the Biology Department, LRSC provides students with the opportunity to conduct research on large river ecosystems and associated bodies of water. LRSC also is responsible for disseminating information about the upper Mississippi River and other large river ecosystems to local, regional, and scientific communities.
- **Southeastern Minnesota Water Resources Center (WRC):** Housed in the Geoscience Department, WRC is dedicated to scientific inquiry into the natural and hydrological resources of the Southeast Minnesota. The WRC strives to educate and inform students, citizens, and public agencies of the region about our natural resources through the development of partnerships and research.

INTERNSHIPS

Students are encouraged to include internships as part of their course of study. Internships provide valuable work experience with potential employers such as corporations or governmental agencies. Most internships are undertaken during the senior year under the supervision of a WSU faculty member.

PROGRAM PREREQUISITES

Degree programs in the College assume that students have taken proper college preparatory courses in high school including at least three years of mathematics. It is recommended that students have at least one year each of high school biology, chemistry, and physics. High school science and mathematics deficiencies can be remedied by taking equivalent courses at WSU.

UNDERGRADUATE DEGREES OFFERED BY THE COLLEGE OF SCIENCE AND ENGINEERING

Department/Program	BA Major	BA Minor	BS Major	BS Minor
Biology Department				
Biology (BIOL)		X		
Allied Health Option (BIAH)			X	
Cell and Molecular Option (BICM)			X	
Ecology Option (BIEC)			X	
Environmental Science Option (BIES)			X	
Clinical Laboratory Science (CLS)			X	
Cytotechnology (CYTO)			X	
Life Science (teaching) (BLST)			X	
Medical Technology (MEDT) ¹			X	
Chemistry Department				
Biochemistry (CHBC; BIOC)			X	X
Chemistry (CHEM)				X
Option A (CHA)			X	
Option B (CHB)			X	
Environmental Science Option (CHES)			X	
Polymer Chemistry (CHP)				X
Physical Science (teaching) (CPST)			X	
Chemistry (teaching) (CHET)			X	
Computer Science Department				
Computer Science (COMS)				X
Computer Science Option (CSCS)			X	
Applied Computer Science Option				
Bioinformatics Track (CSAB)			X	
Computer Information Systems Track (CSAC)			X	
Geographic Information Technology Track (CSAG)			X	
Human Computer Interaction Track (CSAH)			X	
Computer Technology (COMT)				X
Engineering Department				
Composite Materials Engineering (CME)			X	
Geoscience Department				
Earth Science (teaching) (ESCT)			X	
Geoscience (GEOS)				X
Environmental Science Option (GEES)			X	
Geology Option (GEGE)			X	
Geoscience Option (GSCE)	X			
Mathematics and Statistics Department				
Mathematics (MATH)	X	X		
Mathematics Education Option ² (MTED)				X
Mathematics: Statistics Option (MTST)			X	X
Mathematics: Secondary (teaching) (MTHT)			X	
Physics Department				
Airway Science/Aviation (ASAV)				X
Physical Science (teaching) (PPST)			X	
Physics (PHYS)				X
Physics (PHYYP)			X	
Electronics (PHYE; ELTR)			X	X
Physics (teaching) (PHST)			X	
Professional Studies: Aviation Maintenance Management Option ³ (PSAM)	X			

Notes:

1. Effective fall semester 2007, the Clinical Laboratory Science program (page 75) replaced the Medical Technology program (MEDT). Students currently majoring in MEDT will be able to complete the program and graduate with a B. S. major in Medical Technology.
2. The state of Minnesota no longer issues teaching licenses for Bachelor of Science minors.
3. The Aviation Maintenance Management program is offered as a Professional Studies major in the College of Liberal Arts; however, courses are taught by the Physics Department. See page 191 for the program description.

ACCOUNTING

Somsen Hall, Room 323A (507-457-5860)

Frederic Ibrke (Chairperson)

FACULTY

- J. Lawrence Bergin*, Professor; B.S., M.B.A., Northeastern University; 1981 –
James F. Hurley, Associate Professor; B.S., M.A., Ph.D., University of Nebraska; 1983 –
Frederic Ibrke, Professor; B.S., Bemidji State University; M.B.T., University of Minnesota-Twin Cities; J.D., William Mitchell College of Law; Certified Public Accountant (CPA) Minnesota; 1981 –
Gloria McVay, Associate Professor; B.S., M.B.A., Minnesota State University-Mankato; Ph.D., University of Kentucky; 2000 –
John D. Morgan, Associate Professor; B.A., University of Iowa; M.S., Arizona State University; Ph.D., University of Nebraska, Lincoln; Certified Public Accountant (CPA); Certified Management Accountant (CMA); 2006 –
William Ortega, Associate Professor; B.B.A., University of Iowa; M.B.A., Indiana University; Ph.D., Florida State University; Certified Management Accountant (CMA); 2003 –
Larry Sallee, Professor; B.S., University of Wisconsin-Superior; M.B.A., University of Wisconsin-La Crosse; D.B.A., U.S. International University; Certified Public Accountant (CPA); Certified Management Accountant (CMA); 1985 –

PURPOSE

The purpose of the accounting program is to prepare students for careers in business and government, with emphasis on preparation for professional certification.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in the Accounting major and minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted in the accounting course descriptions. Courses offered on a pass/no credit only or grade only basis are so designated in the course descriptions.

GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for accounting majors/minors are as follows:

1. Complete all coursework and satisfy all other WSU requirements for a B.S. major in Accounting.
2. Complete a minimum of 15 credit hours of 300/400-level ACCT courses at WSU.
3. Achieve a grade of "C" or better in each course listed under B.S. Major-Accounting.
4. Earn at least a 2.50 overall GPA and a 2.50 GPA in ACCT courses.
5. Complete a minimum of 50% of the College of Business credits required for the accounting major at WSU.
6. Sixty-four non-business credits are required for the Accounting major. Of the math, statistics, and economics courses required for the major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.

UNIVERSITY STUDIES FLAG REQUIREMENTS (12 S.H.)

Students may use flag courses to satisfy both University Studies and major requirements; flag courses will usually be in the student's major or minor program. University Studies Flag requirements are as follows: Oral Flag (3 S.H.), Math/Critical Analysis Flag (3 S.H.), and Writing Flag (6 S.H.). The Department of Accounting offers the following flag course in the University Studies Program:

Writing Flag P ACCT 471 Auditing (3)

For accounting majors and minors, flag courses are identified in the lists of required courses and electives in this section.

WSU-ROCHESTER

The department's major is available through the 2+2 Program at the WSU-Rochester campus. See page 37 for the articulation of the 2+2 Accounting Program.

B.S. MAJOR - ACCOUNTING (ACCT)

78-79 S.H. (No Minor Required)

Accounting majors must earn a "C" or better in accounting prerequisite courses in order to take the next course. All courses are offered each year on the Winona campus unless otherwise noted in the course descriptions.

REQUIRED COURSES (69-70 S.H.)

Accounting - ACCT (30 S.H.)

- 211 Financial Accounting Principles (3)
- 212 Managerial Accounting Principles (3)
- 220 Accounting Computer Applications (3)
- 311 Intermediate Accounting I (3)
- 312 Intermediate Accounting II (3)
- 330 Accounting Information Systems (3)
- 361 Intermediate Managerial/Cost Accounting (3)
- 413 Advanced Financial Accounting (3)

- 421 Introduction to Taxation (3)

- P 471 Auditing (3)

Economics/Finance (9 S.H.)

- * ECON 201 Principles of Microeconomics (3)

- * ECON 202 Principles of Macroeconomics (3)

- FIN 360 Business Finance (3)

Business Administration (24 S.H.)

- O BUSA 220 Business Statistics (3)

- O BUSA 320 Intermediate Business Statistics (3)

- BUSA 301 Business Law I (3)

- BUSA 311 Business Law II (3)

- MIS 362 Management Informational Systems (3)

- P MGMT 325 Organizational Dynamics (3)

- I MGMT 495 Strategic Management (3)

- OM 334 Operations Management (3)

Marketing (3 S.H.)

- MKTG 300 Principles of Marketing (3)

Mathematics (3-4 S.H.)

MATH 140 Applied Calculus (3) OR MATH 160 Calculus I (4)

ELECTIVES (9 S.H.)Any 300- or 400- level course from the Economics and Finance department (3)
300- or 400-Level ACCT electives (6)**Note:** Students should be aware that the following courses also satisfy flag requirements:

P	ECON	303	Intermediate Macroeconomics (3)
P	ECON	304	Money and Banking (3)
O	FIN	335	Forecasting Methods (3)
I	FIN	421	Institutional Investment and Financial Markets (3)
P	MGMT	317	Management of Human Resources (3)

B.S. MINOR - ACCOUNTING (ACCT)

21 S.H.

REQUIRED COURSES (18 S.H.)**Accounting - ACCT**

211	Financial Accounting Principles (3)
212	Managerial Accounting Principles (3)
220	Accounting Computer Applications (3)
311	Intermediate Accounting I (3)
421	Introduction to Taxation (3)

Business Administration - BUSA

291	Legal Environment of Business (3) OR
301	Business Law I (3)

ELECTIVES (3 S.H.)

Any accounting (ACCT) course

COURSE DESCRIPTIONS (ACCT)**211 - Financial Accounting Principles (3 S.H.)**

The study of topics in financial accounting, including the accounting cycle, forms of business organizations, assets, liabilities, owner's equity, and financial statement preparation and analysis. Examples are drawn from service, merchandising, and manufacturing organizations. Prerequisite: WSU math proficiency.

212 - Managerial Accounting Principles (3 S.H.)

The study of managerial accounting principles including cost behavior, job order costing, process costing, cost-volume-profit relationships, contribution costing, standard costs, relevant costs, and budgets. Additional topics may include the Statement of Cash Flows and financial statement analysis. Prerequisite: ACCT 211.

220 - Accounting Computer Applications (3 S.H.)

This course starts with an in-depth review and expansion of bookkeeping in a manual accounting system. The course assumes the student has a strong background in basic financial accounting. The course then moves to "hands on" experience with Excel (including construction of spreadsheet formulas involving IF, IF/OR, IF/AND commands, statistical and financial functions, graphing and spreadsheet links), Powerpoint, and accounting software. Working with a leading integrative computerized accounting software package is a main focus of the course. Prerequisites: ACCT 211 and ACCT 212 and completion of, or concurrent enrollment in, ACCT 311. (This course is designed to be taken during the same semester that the student is taking ACCT 311, Intermediate Accounting I.)

311 - Intermediate Accounting I (3 S.H.)

Major emphasis on financial accounting. Review of basic financial statements. Development of accounting principles and procedures related to assets (cash, receivables, investments, inventories, plant and equipment, intangibles, and the time value of money). Prerequisites: ACCT 212, ACCT 220, or ACCT 212 and concurrent enrollment in ACCT 220. Not open to students in their first year of college study.

312 - Intermediate Accounting II (3 S.H.)

Development of accounting principles and procedures related to liabilities, owner's equity, revenue recognition, and special topic areas such as pensions and leases. Prerequisite: ACCT 311.

330 - Accounting Information Systems (3 S.H.)

A study of the principles underlying the design and installation of accounting systems and survey of methods of processing data with an emphasis on internal control. Prerequisites: ACCT 311 or ACCT 212 and MIS 362.

340 - Governmental and Other Not-For-Profit Accounting (3 S.H.)

This course is designed to analyze the funds used by state and local units of government. Also covered are accounting methods and procedures used by hospitals, colleges and universities, voluntary health and welfare organizations, and other not-for-profit organizations. Prerequisite: ACCT 311.

361 - Intermediate Managerial/Cost Accounting (3 S.H.)

Cost accounting fundamentals including long-term planning, control, cost

allocation, quantitative analysis and behavioral considerations in systems design. Prerequisites: ACCT 212 and ECON 201.

380 - Topics and Issues in Accounting (1-4 S.H.)

An analysis of current topics, trends, issues, and software relevant to the milieu of accounting. The subject matter can vary by semester and is typically announced in advance by the instructor. This course may be repeated as topics change. Prerequisite: instructor's permission. Not offered every year.

398 - Internship (1-7 S.H.)

Credits are not counted in the accounting major; they are counted as general elective credits. Prerequisite: Concurrent enrollment in ACCT 399. P/NC only.

399 - Internship Problem (1-3 S.H.)

Prerequisite: minimum 2.50 GPA and instructor's permission. The student should have completed most, if not all, College of Business core courses, ACCT 311 (Intermediate Accounting I), and other specific accounting courses depending on the type of internship. See the Department Internship Coordinator for specific requirements. Grade only. Credits may only be counted as general elective credits.

413 - Advanced Financial Accounting (3 S.H.)

This course includes the study of business combinations resulting from acquisitions of assets of stock, foreign currency transactions, and partnership accounting. Prerequisite: ACCT 312.

414 - Advanced Financial Accounting Topics (3 S.H.)

A study of selected financial accounting topics including SEC regulations, bankruptcy, trusts and estates, reporting for segments and interim financial periods, and branch accounting. Prerequisite: ACCT 312. Not offered every year.

416 - Accounting Theory (3 S.H.)

A study of the foundations, statements, analyses, and evolution of the various accounting theories including those by the FASB, AICPA, AAA, IMA, and other organizations. A review of the research studies and literature relating to accounting theory and principles during the past 100 years. Prerequisite: ACCT 312. Not offered every year.

421 - Introduction to Taxation (3 S.H.)

A study of the history of taxation, the formation and application of federal tax law, and the basic methods and procedures of tax research. The course emphasizes the individual income tax, but also introduces the student to the taxes applicable to other entities. Tax preparation using the computer is also a significant component of the course. Prerequisites: ACCT 212 and ECON 202. Grade only.

422 - Advanced Taxation (3 S.H.)

A study of the federal tax law applicable to C corporations, S corporations, partnerships, estates, and trusts. In addition to income tax law, the course also addresses the major issues relating to the transfer of property through gifts and the estate. Methods and procedures of tax research also are stressed in the course. Prerequisite: ACCT 421. Grade only. Offered yearly.

423 - Tax Planning (3 S.H.)

This survey course provides an overview of the tax laws and their interrelationships in a way that has proven interesting, enlightening, and profitable to taxpayers, managers, tax planners, and defenders. Prerequisite: ACCT 421 or instructor's permission. Not offered every year.

424 - International Taxation (3 S.H.)

This course focuses on the complex tax issues involved in transnational transactions. It addresses major tax treaties, jurisdictional issues, problems of tracing income flow, fluctuations in currency valuations, and other pertinent subject matter. Prerequisite: ECON 202. Not offered every year.

462 - Advanced Managerial/Cost Accounting (3 S.H.)

An in-depth study of advanced topics in cost planning and control. A review of cost and managerial accounting literature and research. Prerequisite: ACCT 361. Offered yearly.

471 - Auditing (3 S.H.)

This course provides an introduction to financial statement auditing and an exposure to internal, governmental, operational, and fraud auditing. Topics include audit evidence, audit standards, audit procedures, professional ethics, fraud detection, and audit reports. Current issues facing the auditing profession are addressed. Prerequisites: ACCT 312, BUSA 220, and ACCT 330 (past or concurrent enrollment).

472 - Advanced Auditing (3 S.H.)

This course is primarily for students planning to pursue careers in auditing and take the CPA or CIA exam. Additional exposure to fraud detection and audit procedures is provided. Other topics include statistical sampling methods, legal liability, professional responsibilities, audit reporting topics, and other assurance services offered by CPA firms. Prerequisite: ACCT 471. Not offered every year.

490 - Independent Studies in Accounting (1-3 S.H.)

Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: Instructor's permission. Total credits may not exceed 6 S.H.

ART

Watkins Hall, Room 204 (507-457-5395)

www.winona.edu/art

Anne Plummer (Chairperson)

FACULTY

Vittorio Colaizzi, Assistant Professor; B.A., Mary Washington College, Fredericksburg, VA; M.F.A., Virginia Commonwealth University, Richmond; Ph.D., Virginia Commonwealth University; 2007 -

Seho Park, Professor; M.A.T., Whitworth College; M.F.A., Ph.D., University of Minnesota-Twin Cities; 1988 -

Anne Scott Plummer, Professor; B.F.A., Rhode Island School of Design; M.F.A., Claremont Graduate School; 1990 -

Don L. Schmidlapp, Professor; B.F.A., University of Kansas; M.F.A., Indiana University; 1981 -

PURPOSE

The Department of Art offers the Bachelor of Arts degree with options in Studio Art or Graphic Design and the Bachelor of Science degree in Art Education for K-12 teachers. Through a combination of studio and art history courses, art majors build cognitive skills and develop critical thinking, while engaging in the inherently creative activities of the art process. Majors acquire interrelated skills in visual perception, creative problem-solving, and critical thinking, all of which complement the objectives of a broad, liberal arts education. Majors and minors study the history of art, focusing on great achievements of the human spirit—both past and present—as well as the various criteria by which they are evaluated. Studio majors develop expertise in specific media areas such as painting, drawing, sculpture, ceramics, or printmaking. Graphic designers use their laptop computers and graphic design software for print and web-based visual communication. In addition to their classes taken in the Department of Education, Art Education majors pursue a broad range of experiences in a variety of media to prepare them for K-12 Minnesota teacher certification.

During their first two years, students complete the required series of foundation courses. At the advanced level, studio classes in specialized media offer more intensive experiences, in consideration of the student's capabilities and interests. Each successive course in a medium builds upon earlier achievements; instruction becomes more individualized as students search for more personal means of expression.

Studio and classroom instruction at all levels is enhanced by a changing series of exhibitions in the Paul Watkins Gallery and the Weber (student) Gallery, and by presentations from visiting artists and guest lecturers. Majors and minors, as well as interested non-majors, are urged to join the regularly scheduled field trips to art museums and galleries in nearby cities, which are organized by both faculty and the student Art Club.

CAREER OPPORTUNITIES

Grounded in the liberal arts, the art curriculum prepares graduates for a variety of career paths. Some studio majors continue their education, seeking advanced degrees to become professional artists and college level educators. Others find employment in art centers, galleries, and in businesses requiring art skills. Graphic design graduates pursue careers in business and in public and nonprofit sectors, developing visual strategies for designing marketing materials, business presentations, publications, websites, and more. Teaching majors, prepared for K-12 licensure, are employed by school districts throughout the state of Minnesota and the region.

ART STUDENT HANDBOOK

The *Art Student Handbook*, which supports the advising process, contains information vital to the successful study of art at WSU. Among other items, the Handbook includes suggested course registration programs for each of the three art degree programs/options for each semester leading to graduation, course prerequisites, the Junior Portfolio Review, scholarships, and Senior Exhibitions. Students should get a copy of the handbook from the Art Department office.

FALL ORIENTATION MEETING

All new entering students, including transfer students, are expected to attend this very important meeting held annually. New students get acquainted with their peers, teachers, and advisors and learn more about the material covered in the Art Student Handbook and this catalog.

ADVISING

The department's advising program is designed to ensure that majors properly fulfill the requirements of their degree programs in addition to other departmental obligations. Therefore, art majors meet regularly with the advisors assigned to them. Art studio minors may seek advice from any art faculty member; art history minors should consult with Dr. Colaizzi.

PRIORITY REGISTRATION

Because of limited space and the great demand for art classes, registration for virtually all art courses is by permission only. Just prior to the University online registration period each semester, the Art Department holds Priority Registration meetings that all advisors, majors, and minors attend. At that time, with an advisor's approval, students are granted electronic permission to register for art classes when their registration "window" opens. Minors meet with an art faculty advisor as described above.

FRESHMEN COHORT GROUP

Each fall semester, a cohort of freshmen art majors, including newly declared majors and transfer students, is established for those who wish to intensify their progress in art. This opportunity is available on a first-come, first-served basis. During the first semester, majors forming the cohort register in designated sections of ART 114, 2-D Design; ART 118, Drawing I; and ART 221, Art History I. Cohort students must register in all three classes concurrently. In the spring semester, the same group registers in ART 115, 3-D Design; ART 118, Drawing II; and ART 222, Art History II.

ART SCHOLARSHIPS

The Art Department awards a number of scholarships to majors in all three of its degree programs each year. All majors, including incoming students, are urged to apply. The scholarships include the Ruth Severud Fish, E. L. King, Thomas E. Mauszycki, Floretta Murray, Dorothy and Mo Weber, Max Weber, and Winona National Bank awards. Some of these awards require minimum GPAs; the Fish, King, and Murray awards are limited to teaching majors. First-year students, sophomores, juniors, and seniors are eligible. Award amounts range from \$400 to \$1000, and most are renewable.

The Art Department faculty makes the awards on the basis of portfolio reviews. Successful applicants may receive more than one award.

TRANSFER STUDENTS

Art majors transferring from other institutions must complete a minimum of 15 semester credit hours in art in residence at WSU at the upper-division (300/400-level classes).

GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for art majors/minors are as follows:

- B.A. students must earn a minimum grade of "C" in each studio art course and have a GPA of 2.50 in all studio and art history courses and a 2.50 overall GPA.
- Teaching majors in the B.S. program must maintain a 2.75 overall GPA and a 2.75 GPA in all art education, studio, and art history courses.

JUNIOR PORTFOLIO REVIEW

During their third year of study, art majors in all three programs are required to submit for review a group of works completed at that point. This provides the art faculty with a means of assessing the effectiveness of the curriculum. Secondly, it gives majors the benefits of an all-faculty evaluation irrespective of performance in individual classes, thus guiding them in their progress during their senior year. For more specific information about this requirement, majors should consult the *Art Student Handbook* with their advisors.

SENIOR EXHIBITIONS

Capstone exhibitions featuring the accomplishments of graduating seniors in all three programs are held in the Watkins and Weber galleries each year. Several shows are devoted to works of all graduating seniors; the Select Senior exhibitions highlight the efforts of students chosen competitively by the faculty on the basis of superior achievement. Select Senior exhibitions consist of two- or three-person shows, allowing participants to exhibit a larger number of works than in the all-senior shows.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in their major, minor, concentrations, and licensures on a grade-only basis. The P/NC option is available to students who are not art majors or minors; these students may elect the P/NC option for all 100-level art courses and for other courses as specified in the course descriptions. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions. (All prerequisites must be met before a student enrolls in a particular course.)

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Art Department offers the following flag courses in the University Studies Program (see "Overview of University Studies Components" on page 19):

FLAG

Oral I

- ART 444 Senior Seminar (3)
- ART 460 Graphic Design Capstone (3)

Math/Critical Analysis O

- ART 360 Graphic Design III (3)
- ART 417 Advanced Painting (3)
- ART 418 Advance Drawing II (3)
- ART 420 Ceramics II (3)
- ART 428 Advanced Sculpture (3)

Writing P

- ART 365 Graphic Design IV (3)
- ART 435 Italian Renaissance Art (3)
- ART 437 Nineteenth Century Art (3)
- ART 438 Early Twentieth Century Art (3)
- ART 439 Later Twentieth Century Art (3)

Flag courses that can be used to satisfy art major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - STUDIO ART OPTION (ARTS)

48 S.H. (No Minor Required)

PURPOSE

The Studio Art Option offers training in the fine arts—painting, sculpture, ceramics, and printmaking—within the context of a broadly based liberal arts education.

REQUIRED ART COURSES (30 S.H.)

- 114 2-D Design (3)
- 115 3-D Design (3)
- 118 Drawing I (3)
- 217 Painting I (3)
- 218 Drawing II (3)
- 221 Art History I (3)
- 222 Art History II (3)
- 228 Sculpture I (3)
- P 439 Later Twentieth Century Art (3)
- I 444 Senior Seminar (3)

ART HISTORY ELECTIVES (3-9 S.H.)

One 400-level art history course beyond the required ART 439 (3 S.H.):

- P 435 Italian Renaissance (3) OR
- P 437 Nineteenth Century Art (3) OR
- P 438 Early Twentieth Century Art (3)

Note: Majors may take any two art history classes in place of one studio media sequence (see below). These two classes must be above the 100-level and exclusive of the required ART 439 and the chosen upper-division art history elective (6 S.H.)

STUDIO ELECTIVES (9-15 S.H.)

Two-course sequences in two areas of concentration as follows (12 S.H.):

- Painting:** 317 (3) and 417 (3) O OR
- Drawing:** 318 (3) and 418 (3) O OR
- Ceramics:** 320 (3) and 420 (3) O OR
- Sculpture:** 328 (3) and 428 (3) O OR

Printmaking: 330 (3) and 430 (3)

Art History: As noted above, any two art history courses (above the 100-level) in addition to ART 439 and the required art history elective course (6 S.H.) may be substituted for a studio sequence.

One additional upper-division studio elective (3 S.H.): This may be continued study in a sequence area, or it may be in a different medium. With the permission of their advisor, majors also have the option of choosing a single four-course sequence (12 S.H.) in a single medium.

B. A. MAJOR - GRAPHIC DESIGN OPTION (ARTG)

66 total S.H. (No Minor Required)

PURPOSE

The Graphic Design Option is an interdisciplinary program based in the Art Department. Coursework is also required in the Mass Communication, Marketing, Communication Studies, and Computer Science departments. Building on a foundation in design, drawing, studio arts, and art history, students work with current graphic design software, gaining experience in print design and web design. The capstone experience includes required participation in the Senior Graphic Design Exhibition and a possible graphic design internship with a regional business.

Note: Graphic design students are required to use Macintosh laptop computers.

ADMISSION TO THE PROGRAM

Students are encouraged to declare the Graphic Design Option as their major upon entering WSU. Application for formal admission, which takes place every fall semester, requires that students:

1. Complete ART 114 (2-D Design), ART 115 (3-D Design), and ART 118 (Drawing I).
2. Complete an application form.
3. Submit a portfolio of drawings and 2-D design work along with the application form.

REQUIRED CORE COURSES (66 S.H.)

Art (45 S.H.)

ART 114	2-D Design (3)
ART 115	3-D Design (3)
ART 118	Drawing I (3)
ART 218	Drawing II (3)
ART 221	Art History I (3)
ART 222	Art History II (3)
ART 260	Graphic Design I (3)
ART 265	Graphic Design II (3)
O ART 360	Graphic Design III (3)
P ART 365	Graphic Design IV (3)
P ART 439	Later Twentieth Century Art (3)
I ART 460	Graphic Design Capstone (3)

Art Studio Elective (3 S.H.)

ART 217	Painting I (3) OR
ART 330	Printmaking I (3)

Mass Communication (9 S.H.)

MCOM 210	Visual Communication (3)
MCOM 215	Photocommunication (3)
MCOM 260	Advertising (3)

Marketing (6 S.H.)

MKTG 300	Principles of Marketing (3)
(no prerequisites required) AND one of the following:	
MKGT 329	Sports Marketing (3) OR
MKGT 333	Topics in Marketing (3) OR
MKGT 341	E-Commerce (3)

Communication Studies (3 S.H.)

CMST 266	Professional Communication Skills (3)
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Computer Science (3 S.H.)

CS 116	Web Technology (3)
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Internship (3 S.H.)

ART 399	Graphic Design Internship (3)
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Note: Majors who are unable to obtain an internship must substitute either:

MGMT 315	Principles of Management (3) OR
MGMT 325	Organization Dynamics (3)

ELECTIVE (3 S.H.)

• ENG 120	Introduction to Literature (3) OR
ENG 211	Writing in Communities (3) OR
ENG 221	Topics World Literature (3) OR
ENG 222	Introduction to Creative Writing

B. S. MAJOR - ART (Teaching) (ARTT)

128 total S.H. No Minor Required

PURPOSE

The teaching program prepares graduates for Minnesota certification in art (K-12) and is offered in conjunction with the College of Education. Teaching majors must take all courses in the art (K-12) Professional Education Sequence in addition to courses in the content area. For an up-to-date list of the professional education courses, majors should consult the *WSU Teacher Education Student Handbook*. Information is also available on the Education Advising website at www.winona.edu/education/advising.

OVERVIEW OF REQUIREMENTS FOR THE B.S. IN ART TEACHING:

- University Studies Requirements: 48 S.H.
- Art and Art Education Requirements: 51 S.H.
- Professional Education Sequence: 25 S.H. (in addition to 13 S.H. included in the University Studies Requirements)
- University Electives: 4 S.H.

REQUIRED UNIVERSITY STUDIES COURSES (48 S.H.)

Note: This requirement includes 13 S.H. of Professional Education Sequence courses, which also satisfy University Studies requirements. These courses are identified with an asterisk (*) below.

Basic Skills (13 S.H.)

ENG 111 (4), CMST 191 (3), and MATH 100 (3)
Physical Development and Wellness (3) may be fulfilled by HERS 204* (3)

Arts and Sciences Core (23 S.H.)

Humanities (6) fulfilled by classes other than ART 221 and ART 222
Natural Science (7) including one lab
Social Science (7) fulfilled by SPED 400* (3) and EDUC 305* (4)
Fine and Performing Arts (3) fulfilled by a class other than ART 110

Unity and Diversity (12 S.H.)

Critical Analysis (3); Science and Social Policy (3) and Global or Multicultural Perspectives (3) fulfilled by EDUC 308*; Contemporary Citizenship or Democratic Institutions (3)

PROFESSIONAL EDUCATION SEQUENCE (25 S.H.)

See Note above regarding 13 S.H. of required courses that satisfy both the Professional Education Sequence and University Studies requirements.

Notes:

1. These courses require formal admission to the teacher education program. (See page 19, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

O EDUC 312	Instructional Planning and Assessment: Secondary (3)
EDUC 429	Secondary Reading and Teaching Strategies (4)
P EDUC 449	Middle Level Philosophy, Organization and Planning (3)
P EDUC 459	The Professional Educator (3)
I EDST 460	Student Teaching—Elementary Education with Early Childhood Emphasis (12)

REQUIRED ART AND ART EDUCATION COURSES (45 S.H.)

114	2-D Design (3)
115	3-D Design (3)
118	Drawing I (3)
217	Painting I (3)
218	Drawing II (3)
221	Art History I (3)
222	Art History II (3)
228	Sculpture I (3)
300	Elementary Art Education (3)
320	Ceramics I (3)
402	Psychology of Art and Art Education (3)
410	Secondary Art Education (3)
412	Multimedia Crafts for the Classroom (3)
P 439	Later Twentieth Century Art (3)
I 444	Senior Seminar (3)

ART ELECTIVES (6 S.H.)

Choose one of the following two-course sequences (6 S.H.):

Painting:	317 (3) and 417 (3) O OR
Drawing:	318 (3) and 418 (3) O OR
Ceramics:	320 (3) and 420 (3) O OR
Sculpture:	328 (3) and 428 (3) O OR
Printmaking:	330 (3) and 430 (3)

UNIVERSITY ELECTIVES (4 S.H.)

B.A. MINOR - STUDIO ART (ARTS)

21 S.H.

REQUIRED ART COURSES (12 S.H.)

109	Introduction to Art (3)
114	2-D Design (3)
115	3-D Design (3)
118	Drawing I (3)

ART ELECTIVES (9 S.H.)

With the exception of graphic design courses, students pursuing the minor may choose any art or art history course above ART 110 to complete the nine semester hours, provided prerequisites are met.

B.A. MINOR - HISTORY OF ART (ARTH)

24 S.H.

The History of Art minor is a program of study with an emphasis on the major art trends and movements of the modern and contemporary periods in 19th and 20th century Europe and America in addition to various critical methods of approaching and evaluating art. Courses explore the visual culture that helped shape our contemporary world; they also acquaint students with the research skills of the art historian, both in terms of written material and the critical visual tools required to decipher images and objects.

REQUIRED ART COURSES (12 S.H.)

- 221 Art History I (3)
 222 Art History II (3)
 224 American Art (3)
 P 439 Later Twentieth Century Art (3)

ELECTIVES (12 S.H.)

At least two of the following three courses (6-9 S.H.)

- P ART 435 Italian Renaissance Art (3)
 P ART 437 Nineteenth Century Art (3)
 P ART 438 Early Twentieth Century Art (3)

The remaining elective(s) are to be chosen from two of the following groups (3-6 S.H.)

- ART 433 Independent Study (in art history) (3)
 No more than one of the following studio courses:
 ART 114 2-D Design (3)
 ART 115 3-D Design (3)
 ART 118 Drawing I (3)
 No more than one of the following recommended or cognate courses:
 ENG 223 Classical Mythology (3)
 ENG 224 The Bible as Literature (3)
 ENG 225 Topics in Literature (3)
 ENG 304 Victorian and post-Civil War Literature (3)
 ENG 305 Modernism and Beyond (3)
 * HIST 120 Western Civilization to 1500 (3)
 * HIST 121 Western Civilization 1500-1815 (3)
 * HIST 122 Western Civilization 1815 to Present (3)
 HIST 125 Classical History (3)
 * HIST 150 United States History to 1865 (3)
 * HIST 151 United States History since 1865 (3)
 * PHIL 110 Critical Thinking (3)
 PHIL 120 Introductory Philosophy (3)
 PHIL 270 Philosophy of Religion (3)
 PHIL 280 Philosophy of Art (3)
 PHIL 301 Early Modern Philosophy (3)
 PHIL 302 Contemporary Philosophy (3)

COURSE DESCRIPTIONS (ART)**109 - Introduction to Art (3 S.H.)**

Introductory course for the non-major that investigates the forms, expressive languages, functions and contexts of the visual arts. Non-chronological, thematic presentations explore cultural values and differences involving Western and some non-Western regions along with issues of representing gender, race, and ethnicity.

110 - Experiencing Art (3 S.H.)

Introductory course for the non-major that includes an experiential, art-making component. Elements of art and principles of design, materials and techniques, and issues of content and expression are investigated in a non-chronological and contemporary context.

114 - 2-D Design (3 S.H.)

Introduction to fundamental design concepts in the art process. Experiments and problems in abstract compositions.

115 - 3-D Design (3 S.H.)

Foundation experience in manipulating materials in three-dimensional space. Broad range of basic materials, tools, and techniques used to solve problems in creating objects and spaces.

117 - Drawing for the Sciences (3 S.H.)

An interdisciplinary course combining the art of drawing with science content. Students will acquire basic skills in drawing aimed at scientific study, preparing them for visual investigation in the classroom, the laboratory, and the field. This class develops visual perception, aesthetic judgment, and sound studio practice. Recommended for non-art majors.

118 - Drawing I (3 S.H.)

An examination of fundamental concepts in the art of drawing, while students acquire basic studio skills. This course develops visual perception, aesthetic judgment and sound studio practice. May include work from the nude model.

120 - Introduction to Ceramics (3 S.H.)

An introduction to basic ceramic techniques for art minors, B. S. art teaching majors, and non-art majors.

128 - Introduction to Sculpture (3 S.H.)

An introduction to basic sculpture techniques for art minors and non-art majors.

130 - Introduction to Printmaking (3 S.H.)

An introduction to basic printmaking techniques for art minors and non-art majors.

135 - Introduction to Watercolor (3 S.H.)

Painting with watercolor and other water-soluble materials, used alone or in combination. Prerequisites: ART 114 and ART 118 or instructor's

permission.

217 - Painting I (3 S.H.)

Beginning studio practice in oil and/or acrylic media. Students explore basic problems of form and space on a two-dimensional surface using traditional and contemporary methods. Visual analysis of historic and contemporary work is employed extensively in this course and is designed to broaden and facilitate the examination of form and technique in painting. Prerequisites: ART 114 and ART 118.

218 - Drawing II (3 S.H.)

Continued experience in drawing in a variety of media with emphasis upon thematic problems and on the human figure, including the nude model. Prerequisite: ART 118. Grade only.

221 - Art History I (3 S.H.)

The first of two courses in a year-long survey of the history of art, beginning with the Prehistoric Era and continuing through Antiquity and the Middle Ages. Emphasis on the formal and cultural foundations of Western Art. Grade only.

222 - Art History II (3 S.H.)

The second half of the year-long survey of the history of art extends from the Renaissance period through the modern age. The survey concludes with developments just prior to World War II. Prerequisite: ART 221. Grade only.

224 - American Art (3 S.H.)

Survey of the visual arts in the United States from the Colonial Era through the Great Depression. Emphasis on the emergence and evolution of American art traditions as indicative of national experience. Grade only.

228 - Sculpture I (3 S.H.)

Introduction to sculpture for art majors and minors. Modeling, carving, fabrication, and/or casting techniques used to explore abstract sculptural form as well as forms from nature and the model. Sculptural ideas investigated with the aid of slides, lectures, demonstrations, and critiques. Prerequisite: ART 115. Grade only.

252 - Survey of Women Artists (3 S.H.)

Lecture/discussion course surveying the history of European and American women artists from the 12th century to the present. Social and cultural environments for women in each era are considered, as well as individual artist's contributions to the history of art. A research paper is required. Core disciplinary course for women's and gender studies minor. Grade only.

260 - Graphic Design I (3 S.H.)

This course introduces students to current digital drawing practices and fundamental, conceptual design theory. In a series of exercises, students explore the creation of visual responses to solve visual problems. They acquire skills in illustration and design theory, using a Macintosh computer and graphic software. Prerequisites: ART 114 and ART 218. Grade only.

265 - Graphic Design II (3 S.H.)

This course introduces students to the design process of page layout and to typographic usages. The course emphasizes layout design software, principles of layout design, paragraph styles, grid systems, desktop publishing skills, letterforms, and typefaces used in publishing and design. Prerequisites: ART 218 and ART 260. Grade only.

300 - Elementary Art Education (3 S.H.)

Theories, processes, and philosophy in visual arts education for prospective elementary classroom teachers are explored; experience with art processes and classroom procedures to develop potential teachers' artistic sensitivities, skills, and thinking. Prerequisites: ART 109 strongly recommended; junior or senior standing. Student must be admitted to teacher education program in order to register. Grade only.

317 - Painting II (3 S.H.)

Continued intensive studio practice in oil and/or acrylic media; designed to expand and develop the student's skill and understanding in working with representational and abstract problems of form. Students are encouraged to initiate work in an individual direction and to engage in an ongoing study of relevant historic and contemporary painting, including emerging trends. Prerequisite: ART 217 or instructor's permission. P/NC option.

318 - Advanced Drawing I (3 S.H.)

Extensive studio practice in figure drawing. Emphasis in acquiring formal and technical proficiency using the drawing media. Development of the student's personal direction and expression through these media. Prerequisite: ART 218.

320 - Ceramics I (3 S.H.)

Introduction to ceramics with an emphasis on clay materials and on hand building and wheel throwing techniques. Vessel and sculptural concepts are explored with the aid of slides, lectures, demonstrations, and critiques. Prerequisite: ART 115.

328 - Sculpture II (3 S.H.)

Fabrication and/or casting techniques are practiced. Students build on previous skills and identify personal aesthetic concerns. Formal and conceptual sculptural issues are explored with the aid of slides, discussions, and critiques. Prerequisite: ART 228. Grade only.

330 - Printmaking I (3 S.H.)

Introduction to printmaking processes and the creation of “multiple” images. Experimental techniques, conceptualization, and studio practice are emphasized. Prerequisites: ART 114 and ART 118. Grade only.

360 - Graphic Design III (3 S.H.)

An introduction to basic digital imaging practices emphasizing fundamental skills, concepts, and creative thinking in a series of problem solving exercises. Student explorations will involve the integration of digital-imaging software with photographic capture, manipulation, enhancement, and application of images with type and page layout. Prerequisite: ART 265. Grade only.

365 - Graphic Design IV (3 S.H.)

An introduction to basic digital techniques emphasizing fundamental skills, concepts, and creative processes as applied to interactive media. Student explorations will involve the integration of WYSIWYG software, incorporating digital imagery, scripting, typography, and other design elements of interactive media as well as the architectural structures for information. Prerequisite: ART 360. Grade only.

399 - Internship (1-3 S.H.)

Work-related experience in appropriate settings such as museums, art centers, commercial offices or studios, and public relations offices. Credit hours to be arranged by a faculty member. May be used as a general art elective. Prerequisite: Junior or senior standing. May be repeated up to a maximum of 9 credits.

402 - The Psychology of Art and Art Education (3 S.H.)

Exploration of topics related to human behavior and the production and appreciation of visual art forms. The prospective art teachers’ understanding of the subject of art and effective instruction for K-12 learners are further concerns. Theories of perception, learning, and the creative processes are examined as they pertain to visual thinking, aesthetic perception and judgment, artistic motivation, art concept learning, formal and semantic organization, artistic styles, cognitive development, instructional strategies, art teacher-learner dynamics, learning environment, and the evaluation of learning and process with media in studio art. Prerequisites: ART 109 recommended, ART 300, and junior standing. Grade only.

410 - Secondary Art Education (3 S.H.)

An examination of programs in art education at the secondary level. Consideration of curricular and instructional problems related to teaching art in high school, review of research findings and designing exemplary programs in secondary art. Prerequisites: ART 300 and junior standing. Grade only.

412 - Multi-Media Crafts for the Classroom (3 S.H.)

An intensive and extensive art education laboratory experience affording the prospective art teacher familiarity with advanced art studio processes that produce craft outcomes across several media, including contemporary and experimental media. The learning content extends beyond the basic crafts processes introduced in ART 300. Prerequisite: ART 300. Grade only.

417 - Advanced Painting (3 S.H.)

Continued intensive studio practice aimed at formal and technical proficiency in the use of paint. Students work to establish a meaningful direction in their painting, as they begin to identify individual interests concerning form and content. Students engage in an ongoing study of relevant artists’ work, stylistic directions of the modern era and other recent trends including combined media. Preparation and exhibition of completed work is addressed at this level. Prerequisite: ART 317. Grade only. May be repeated up to a maximum of 9 credits.

418 - Advanced Drawing II (3 S.H.)

Intensive, individualized studio practice using the drawing media. Further development of the student’s personal direction and expression through these media. Prerequisite: ART 318. May be repeated up to a maximum of 9 credits.

420 - Ceramics II (3 S.H.)

Development of the student’s personal direction and expression through the ceramic medium. Increased involvement in clay body composition, glaze formulation, and firing techniques. Slides, critiques, and readings in contemporary criticism supplement textbook reading. Prerequisite: ART 320. Grade only. May be repeated up to a maximum of 9 credits.

428 - Advanced Sculpture (3 S.H.)

Personal direction and expression are developed using any appropriate sculptural medium. Slides, critiques, and readings in contemporary criticism contribute to the production of a cohesive body of work. Prerequisite: ART 328. Grade only. May be repeated up to a maximum of 9 credits.

430 - Printmaking II (3 S.H.)

Advanced printmaking processes, using a variety of techniques. Advanced conceptualization and drawing skills are required. Prerequisite: ART 330. May be repeated up to a maximum of 9 credits. Grade only.

433 - Independent Study (1-3 S.H.)

To be arranged with an instructor in studio, art history, or art education. Prerequisites: to be determined by the instructor; junior standing. The permission and signature of the instructor and the departmental stamp is required in order to register. May be repeated up to a maximum of 9 credits. Grade only.

435 - Italian Renaissance Art (3 S.H.)

The painting and sculpture of Italy from the late Gothic Era to about 1600. The course emphasizes the major school and some of the secondary schools, together with the innovations and achievements of individual masters. A research paper is required. Prerequisite: ART 222. Grade only.

437 - Nineteenth Century Art (3 S.H.)

This course traces the transformations in European and American art beginning with the revolutionary period of the late 18th century. It culminates with the rise of the bourgeoisie and the onset of European modernism in the final decades of the 19th century. A research paper is required. Prerequisite: ART 222. Grade only.

438 - Early Twentieth Century Art (3 S.H.)

The historic period of modernist innovation in Europe between 1900 and the World War I era, including American responses, is examined along with some of the art historical methodologies used in analyzing these works. Concludes with developments up to the outbreak of World War II. A research paper is required. Prerequisite: ART 222. Grade only.

439 - Later Twentieth Century Art (3 S.H.)

Emphasis is placed on post-World War II modernism in the United States and on the increasing internationalism, stylistic pluralism, and post-modernism marking the final quarter of the 20th century. Students will also examine the various critical and methodological approaches taken in the study of late 20th century art. A research paper is required. Prerequisite: ART 222. Grade only.

444 - Senior Art Seminar (3 S.H.)

Students present their concurrent studio projects for critique and also deliver PowerPoint presentations. Other topics include readings and discussion of art criticism and theory and portfolio preparation. Studio projects include photographing artwork and preparing and installing work for the Senior Exhibitions. The Senior Exhibition(s) constitutes the Art major’s capstone experience. Prerequisite: Senior standing; B.A. or B.S. major.

460 - Graphic Design Capstone (3 S.H.)

A continued exploration of advanced graphic design practices with primary emphasis on design theories of conceptual visualization for presentation and self-promotion. Through research, discussions, oral presentations, and practical explorations, students will prepare and finalize solutions for corporate identity, package, and label design. Students will also study readings in design criticism and semiotics, including recent or emerging design trends. This is the final step in the Graphic Design curriculum whereby students create portfolio pieces for their Senior Exhibition(s), which constitutes the department’s capstone experience. Prerequisite: ART 365. Grade only.

ARTS ADMINISTRATION

Performing Arts Center, Room 103 (507-457-2842)

<http://www.winona.edu/arts/>

_____ (Director)

PURPOSE

As arts organizations become increasingly complex, they will demand knowledgeable, skilled individuals who have an aesthetic sensibility, business acumen, and a keen understanding of current issues and trends relevant to an organization's health, prosperity and, in some cases, survival. Designed primarily, but not exclusively, for students in the performing and visual arts, the minor in Arts Administration will complement students' training as artists, teachers and practitioners, and help lay the foundation for their future participation in arts organizations either as leaders or as participants and supporters.

The Arts Administration minor will:

- Provide skilled individuals for the expanding arts/nonprofit sector whose increasingly complex institutions demand higher levels of sophistication and knowledge from their administrators.
- Promote the interdisciplinary nature of the arts and sciences.
- Encourage students to learn as they work and work as they learn. Through experiential learning opportunities, students will combine academic coursework and hands-on, relevant extracurricular opportunities on campus and in the community to become qualified to work in such areas as marketing, fundraising, operations, and general arts management.
- Build relevant, transferable management and leadership skills for social service agencies, educational institutions, commercial arts industries, and other for-profit and nonprofit sectors.
- Expose students to issues of arts policy, cultural management, emerging technologies, and leadership and organizational development.

B.A. MINOR - ARTS ADMINISTRATION (AAD)

24-27 S.H.

PASS/NO CREDIT (P/NC) COURSES

Students must take all courses in the minor on a grade-only basis.

CORE COURSES – AAD (9 S.H.)

- 301 The Arts Organization (3)
- 302 Introduction to Arts Administration (3)
- 303 Independent Study (3)

REQUIRED COURSES (15-18 S.H.)

College of Liberal Arts Courses

Students majoring or minoring in one of the visual or performing arts (Art, Music, Theatre and Dance) will successfully complete one introductory performing or visual arts course, in a discipline other than their major or minor, from the list below. Students not majoring or minoring in one of the visual or performing arts will successfully complete two courses in the visual or performing arts, but in separate disciplines. Substitution will be permitted only with permission of the Arts Administration Program Director.

- | | | |
|------|-----|----------------------------------|
| ART | 109 | Introduction to Art (3) |
| ART | 110 | Experiencing Art (3) |
| MUS | 109 | Introduction to Music (3) |
| MUS | 120 | Introduction to Music Theory (3) |
| THAD | 111 | Theatre Appreciation (3) |
| THAD | 115 | Dance Appreciation (3) |

College of Business Courses

- | | | |
|--------|-----|-------------------------------------|
| ACCT | 211 | Financial Accounting Principles (3) |
| BUSA | 291 | Legal Environment of Business (3) |
| MKTG | 300 | Principles of Marketing (3) |
| MGMT | 315 | Principles of Management (3) OR |
| P MGMT | 325 | Organizational Dynamics (3) |

COURSE DESCRIPTIONS (AAD)

301 - The Arts Organization (3 S.H.)

This seminar course will present a historic overview of arts and other nonprofit organizations in the United States, and explore current issues and emerging trends in technology, arts and cultural policy, intellectual property rights, career development in the arts sector, and the challenges facing administrative leaders of arts and cultural organizations. Prerequisite: This course is intended for students pursuing a minor in Arts Administration. Others may enroll with approval from the instructor.

302 – Introduction to Arts Administration (3 S.H.)

This course will introduce students to the practical skills required for the successful management of arts organizations. Areas covered will include budgeting, marketing/publicity, fundraising, audience development, analysis of financial statements, contracts, board governance, and issues associated with the founding of a nonprofit organization. Prerequisite: This course is intended for students pursuing a minor in Arts Administration. Others may enroll with approval from the instructor. Students pursuing a minor in Arts Administration must have successfully completed AAD 301.

303 – Independent Study (3 S.H.)

During this experiential learning course, students will be assigned to work with a local arts organization or on a project in support of one of WSU's visual or performing arts departments. Applying knowledge gained from their coursework, students will receive hands-on experience in such areas as marketing/publicity, budgeting, fundraising, audience development and others areas critical to leaders of arts organizations. Prerequisite: Successful completion of AAD 301 and AAD 302.

BIOLOGY

Pasteur Hall, Room 220, (507) 457-5270

<http://bio.winona.edu>

Edward Thompson (Chairperson)

Michael Delong Director, Large River Studies Center

Judith A. Loewen Director, Clinical Laboratory Science

Frances Ragsdale Director, Medical Technology

Edward Thompson Director, Cytotechnology

FACULTY

Kimberly M. Bates, Professor; B.S., University of Massachusetts-Amherst; M.S., Ph.D., University of Missouri-Columbia; 1997 –

Steven Berg, Professor; B.S., Pacific Lutheran University; Ph.D., Purdue University; 1986 –

Bruno Borsari, Assistant Professor; D.Ag.Sci., University of Bologna (Italy); Ph.D., University of New Orleans; 2005 –

Emmanuel Brako, Professor; B.V.M., University of Nairobi; B.S., Tuskegee University; M.S., Ph.D., Louisiana State University and A & M College; 1989 –

Michael D. Delong, Professor; B.S., University of Southern Mississippi; M.S., Memphis State University (TN); Ph.D., University of Idaho-Moscow; 1992 –

David Essar, Professor; B.S., Ferris State College (MI); M.S., Ph.D., University of Iowa; 1992 –

Kimberly J. Evenson, Professor; B.S., M.S., North Dakota State University, Fargo; Ph.D., University of Minnesota-Twin Cities; 1995 –

Neal Mundahl, Professor; B.A., Winona State University; M.S., Michigan Technological University; Ph.D., Miami University (Ohio); 1989 –

Frances Ragsdale, Professor; B.S. Eastern Oregon State College; M.S., Southeastern Louisiana University; Ph.D., University of Idaho, 1993 –

Lawrence Reuter, Professor; B.A., Saint Mary's College of Minnesota; Ph.D., Princeton University; 1979 –

Robin K. Richardson, Professor; B.S., Michigan State University; M.S., Central Michigan University, Mt. Pleasant; Ph.D., University of Oklahoma, Norman; 1992 –

Scott P. Segal, Assistant Professor; B.S., University of Wisconsin; Ph.D., Northwestern University; 2006 –

Edward Thompson, Professor; B.A., Macalester College, St. Paul; Ph.D., Medical College of Wisconsin, Milwaukee; 1992 –

Edward (Ted) Wilson, Assistant Professor; B.A., Luther College, Decorah, IA; M.S., Ph.D., Iowa State University, Ames; 2004 –

PROGRAMS AND CAREER OPPORTUNITIES

Majors

The Biology Department offers a biology major in which a WSU student may select one of five options: allied health, cell and molecular, ecology, environmental science, or life science (teaching). Each of these options leads to a B. S. degree and allows for many career opportunities. Many graduates pursue additional education in disciplines such as biology, biochemistry, medicine, physical therapy, dentistry, and veterinary medicine. Other graduates use the B.S. degree in biology to gain employment in the rapidly expanding field of health care and research or in more traditional areas such as wildlife and environmental management. The life science major prepares students for teaching at the middle school and high school levels.

The Biology Department also offers majors in clinical laboratory science, medical technology, and cytotechnology. (See separate program listings under “Clinical Laboratory Science” (page 75), “Medical Technology” (page 158), and “Cytotechnology” (page 86). Students interested in the medical technology and cytotechnology majors should contact the appropriate program director as soon as possible after arriving on campus.

Minor

For students majoring in other fields, the Biology Department offers a minor (38 S.H.), which includes courses in biology, chemistry, and mathematics. This minor is designed to supplement majors in all fields of study at Winona State University.

Pre-Professional Sequences

The Biology Department sponsors seven pre-professional sequences. These are not degree programs (i.e., major or minor) at WSU; rather these programs are designed to prepare students to pursue an advanced degree at another college or university.

Pre-Dentistry

Pre-Medicine (Allopathic and Osteopathic)

Pre-Optometry

Pre-Physical Therapy

Pre-Physician Assistant

Pre-Podiatry

Pre-Veterinary Medicine

For the specific program requirements, see the “Pre-Professional Sequences” section in this catalog.

GENERAL PROGRAM REQUIREMENTS

Students in all biology majors start with a core set of classes, which includes Basics of Life, Organismal Diversity, General Ecology, Cell Biology, and Genetics. They also take Principles of Chemistry, Organic Chemistry, and an appropriate mathematics class. After these courses are completed, students begin to take coursework that is specific for their chosen options. A year of physics and a capstone research project are required of students majoring in all biology options.

The requirements for the various biology options are not necessarily identical with the requirements for admission to graduate or professional schools. For example, if students plan to attend medical, dental, veterinary, physical therapy, or physician assistant schools or if students plan to pursue a doctorate in the sciences, they should expect to take additional courses in calculus, biochemistry, and molecular biology. Internships are encouraged.

For the qualified and interested student, the Biology Department sponsors an Honors Program (described below), which allows for a distinguished baccalaureate degree. The Biology Department is also home for the Gamma Delta Chapter of the Beta Beta Beta Biological Honor Society. More information about the Honors Program and “Tri-Beta” is available on the Biology Department website (<http://bio.winona.edu>).

As noted above, every student graduating with a degree in a biology option is required to complete a capstone research experience. This research must be supervised by a member of the biology faculty or someone approved by the Biology Department. Students are encouraged to meet with their advisors to discuss research projects and to identify a research advisor during the second semester of their junior year. Additional information about this capstone requirement is available on the Biology Department website.

PASS/NO CREDIT (P/NC) COURSES

BIOL 109, 117, 118, 171, 172, 173, and 400 must be taken for letter grade only. Biology majors and minors must take all required and elective courses for letter grades. Non-biology majors can take biology courses other than BIOL 117, 118, 171, 172, 173, or 400 on a P/NC basis. Courses offered on a “pass/no credit only” or “letter grade only” basis are so designated in the course descriptions.

HONORS IN BIOLOGY PROGRAM

Philosophy

Any science can be described as having two major aspects: (1) an organized body of knowledge and (2) a formal way of adding new information to the existing body of knowledge. Thus, science is related to method and process, and it is not merely a collection of factual information. The Biology Department at

WSU believes that students who desire advanced careers in biology need significant experiences that involve them directly in an intimate and meaningful process of biological inquiry. Together, the Honors Program and the capstone requirement provide this enhanced opportunity to eligible biology majors.

Student Benefits

Students participating in the Honors in Biology Program will receive a number of benefits which enhance their academic careers and which improve their likelihood of success in the field of biology. These benefits include:

1. The opportunity for extensive “one-on-one” research direction under one or more Biology Department faculty members. The research activity allows students and faculty to become very well acquainted.
2. The opportunity to have faculty members write highly specific and individual letters of recommendation on behalf of the student. These strong, distinctive letters will greatly improve the student’s chances of acceptance into various graduate, medical, dental, physical therapy, or other training programs. The letters will also improve students’ chances of gaining employment after their college career.
3. The opportunity to practice the process of real biological science. This research opportunity is the mark of a high quality science education at a selective institution.

Students who are admitted into the Honors in Biology Program and successfully complete the process will, upon graduation:

- Have their official transcripts stamped with the words “Graduated with Honors in Biology”
- Have their transcript show the title of their honors thesis
- Have their graduation status (Honors in Biology) indicated on the graduation program

To be eligible for the Honors in Biology Program, a student must:

1. Be a Biology major (any option)
2. Have completed the biology core sequence (Basics of Life, Organismal Diversity, Ecology, Cell Biology and Genetics) or its equivalent as well as Principles of Chemistry and Organic Chemistry
3. Have a 3.25 GPA both overall and within the major
4. Identify a WSU faculty member who is willing to serve as a research advisor to the student
5. Apply for and be granted admission into the Honors in Biology Program by the Biology Honors Committee

Completion

To receive Honors in Biology, students must satisfy the following requirements:

1. Complete the Honors in Biology seminar offered in the spring. Honors students graduating at the end of fall semester may satisfy this requirement by giving a seminar in which they describe their honors research to the department in another venue approved by the Honors Committee.
2. Present their research at an extramural research meeting or symposium.
3. Submit a written honors thesis in an appropriate format and style that is approved by both the research advisor and the Biology Honors Committee.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use Flag courses, which will usually be in the student’s major or minor program, to satisfy both University Studies and major requirements. The Biology Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

- BIOL 307 Cell Biology Laboratory (1)
- BIOL 309 Developmental Biology (3)
- BIOL 315 Environmental Biology (3)
- BIOL 409 General Microbiology (4)
- BIOL 423 Ecosystem Ecology (3)
- BIOL 460 General Parasitology (3)
- BIOL 462 Parasitology (4)

Math/Critical Analysis O

- BIOL 310 Genetics (3)

Writing P

- BIOL 308 Cell Biology (3)
- BIOL 323 General Physiology (5)
- BIOL 415 Ecology of Large Rivers (4)
- BIOL 431 Molecular Biology Lab (4)
- BIOL 445 Immunology (3)
- BIOL 499 Capstone Project (1-3)

Flag courses that can be used to satisfy biology major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR BIOLOGY - ALLIED HEALTH OPTION (BIAH)

73 S.H. (No Minor Required)

BIOLOGY CORE COURSES - BIOL (18 S.H.)

- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- 312 General Ecology (3)
- P 308 Cell Biology (3)
- O 310 Genetics (3)
- I 307 Cell Biology Laboratory (1) OR
- 311 Genetics Laboratory (1)

Note: BIOL 241 and 242 should be taken prior to BIOL 312, 307, 308, and 310. BIOL 308 should be taken prior to or concurrently with BIOL 307.

ALLIED HEALTH OPTION REQUIREMENTS (8 S.H.)

- BIOL 201 Human Anatomy (4)
- P BIOL 323 General Physiology (4)

ALLIED HEALTH OPTION ELECTIVES (18 S.H.)

Courses totaling 17 semester hours to be chosen from the biology electives listed on page 61.

BIOLOGY CAPSTONE REQUIREMENT (3 S.H.)

- P BIOL 499 Capstone Project (1-3)

OTHER REQUIRED COURSES (26 S.H.)

Chemistry (12 S.H.)

- CHEM *212, *213 Principles of Chemistry I, II (8)
- CHEM 340 Organic Chemistry (4)

Note: Organic Chemistry 350 and 351 (both must be taken) may be substituted for CHEM 340.

Mathematics (6 S.H.)

- MATH 150 Modeling Using Precalculus and Statistics (3)
- MATH 155 Calculus Based Modeling (3)

Note: MATH 120 (Precalculus) and MATH 160 (Calculus) (both must be taken) may be substituted for MATH 150 and MATH 155.

Physics (8 S.H.)

- PHYS *201, *202 General Physics I, II (8)

Note: University Physics I and II (*221, *222) (both must be taken) may be substituted for General Physics I and II (201, 202).

B.S. MAJOR BIOLOGY - CELL AND MOLECULAR OPTION (BICM)

71 S.H. (No Minor Required)

BIOLOGY CORE COURSES - BIOL (18 S.H.)

- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- 312 General Ecology (3)
- P 308 Cell Biology (3)
- O 310 Genetics (3)
- I 307 Cell Biology Laboratory (1) OR
- 313 Ecology Laboratory (1)

Note: BIOL 241 and 242 should be taken prior to BIOL 312, 307, 308 and 310. BIOL 308 should be taken prior to or concurrently with BIOL 307.

CELL AND MOLECULAR OPTION REQUIREMENTS (14-15 S.H.)

- CHEM 400 Chemistry (Biochemistry I) (4)
- BIOL 430 Molecular Biology (3)

*“Additional Requirements” course as defined in Item 3, page 18

Two of the six courses listed below (7-8 S.H.):

- I BIOL 309 Developmental Biology (3)
- BIOL 393 Animal Cell Culture (4)
- BIOL 394 Plant Tissue Culture, Principles and Application (4)
- I BIOL 409 General Microbiology (4)
- P BIOL 431 Molecular Biology Lab (3)
- P BIOL 445 Immunology (3)

CELL AND MOLECULAR OPTION ELECTIVES (9-10 S.H.)

Courses totaling 9-10 semester hours to be chosen from the biology electives listed on page 61.

BIOLOGY CAPSTONE REQUIREMENT (3 S.H.)

- P BIOL 499 Capstone Project (1-3)

OTHER REQUIRED COURSES (26 S.H.)

Chemistry (12 S.H.)

- CHEM *212, *213 Principles of Chemistry I, II (8)
- CHEM 340 Organic Chemistry (4)

Note: Organic Chemistry 350 and 351 (both must be taken) may be substituted for CHEM 340.

Mathematics (4-6 S.H.)

- MATH 150 Modeling Using Precalculus and Statistics (3)
- MATH 155 Calculus Based Modeling (3)

Note: MATH 160 (Calculus 4 S.H.) may be substituted for MATH 150 and MATH 155.

Physics (8 S.H.)

- PHYS *201, *202 General Physics I, II (8)

Note: University Physics I and II (*221, *222) (both must be taken) may be substituted for General Physics I and II (201, 202).

B.S. MAJOR BIOLOGY - ECOLOGY OPTION (BIEC)

71 S.H. (No Minor Required)

BIOLOGY CORE COURSES - BIOL (18 S.H.)

- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- 312 General Ecology (3)
- 313 General Ecology Laboratory (1)
- P 308 Cell Biology (3)
- O 310 Genetics (3)

Note: BIOL 241 and 242 should be taken prior to BIOL 312, 313, 308 and 310. BIOL 312 should be taken prior to or concurrently with BIOL 313.

ECOLOGY OPTION REQUIREMENTS (10-11 S.H.)

At least one course must be completed from each of the following three groups:

Group A - Organismal/Systematic Ecology

- BIOL 303 Biology of Algae and Fungi (4)
- BIOL 318 Invertebrate Zoology (4)
- BIOL 319 Vertebrate Biology (4)
- BIOL 320 Ornithology (4)
- BIOL 350 Plant Taxonomy (4)
- BIOL 360 Entomology (4)

Group B - Field and Quantitative Techniques

- BIOL 335 Plant Ecology (4)
- P BIOL 415 Ecology of Large Rivers (4)
- BIOL 420 Limnology (4)
- STAT 305 Biometry (3)

Group C - Principles and Processes

- I BIOL 315 Environmental Biology (3)
- BIOL 380 Evolution (3)
- I BIOL 423 Ecosystem Ecology (3)
- BIOL 424 Biogeography (3)
- BIOL 425 Animal Behavior (3)

ECOLOGY OPTION ELECTIVES (13-14 S.H.)

Courses may be chosen from the biology electives listed on page 61. The required and elective ecology option courses must total 24 S.H.

BIOLOGY CAPSTONE REQUIREMENT (3 S.H.)

- P BIOL 499 Capstone Project (1-3)

OTHER REQUIRED COURSES (26 S.H.)

Chemistry (12 S.H.)

- CHEM *212, *213 Principles of Chemistry I, II (8)
- CHEM 340 Organic Chemistry (4)

Note: Organic Chemistry 350 and 351 (both must be taken) may be substituted for CHEM 340.

Mathematics (6 S.H.)

- MATH 150 Modeling Using Precalculus and Statistics (3)
- MATH 155 Calculus Based Modeling (3)

Note: Students are encouraged to take Biometry (STAT 205); Calculus I, II (MATH 160, 165) (Both must be taken.) May be substituted for MATH 150 and MATH 155.

Physics (8 S.H.)

- PHYS *201, *202 General Physics I, II (8)

Note: University Physics I and II (*221, *222) (both must be taken) may be substituted for General Physics I and II (201, 202).

B.S. MAJOR BIOLOGY - ENVIRONMENTAL SCIENCE OPTION (BIES)

124 S.H. (No Minor Required)

Alliance with environmental science options of other departments is given under "Environmental Science" on page 109.

UNIVERSITY STUDIES COURSES (30 S.H.)

A number of courses required by the biology-environmental science option also satisfy requirements of the University Studies Program. Students should consult with their academic advisor for more information.

BIOLOGY CORE COURSES - BIOL (18 S.H.)

- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- 312 General Ecology (3)
- 313 General Ecology Laboratory (1)
- P 308 Cell Biology (3)
- O 310 Genetics (3)

Note: BIOL 241 and 242 should be taken prior to BIOL 312, 313, 308 and 310. BIOL 312 should be taken prior to or concurrently with BIOL 313.

ENVIRONMENTAL SCIENCE OPTION REQUIREMENTS - BIOL (12 S.H.)

- 318 Invertebrate Zoology (4) OR BIOL 319 Vertebrate Biology (4)
- 335 Plant Ecology (4) OR BIOL 350 Plant Taxonomy (4)
- I 315 Environmental Biology (3)
- 495 Seminar - Environmental Science (1)

ENVIRONMENTAL SCIENCE OPTION ELECTIVES - BIOL (7 S.H.)

Courses totaling 7 S.H. to be chosen from:

- 303 Biology of Algae and Fungi (4)
- 318 Invertebrate Zoology (4)
- 319 Vertebrate Biology (4)
- 320 Ornithology (4)
- 335 Plant Ecology (4)
- 350 Plant Taxonomy (4)
- 360 Entomology (4)
- 380 Evolution (3)
- 405 Fishery Biology (3)
- I 409 Microbiology (4)
- P 415 Ecology of Large Rivers (4)
- 420 Limnology (4)
- I 423 Ecosystem Ecology (3)
- 424 Biogeography (3)
- 425 Animal Behavior (3)

BIOLOGY CAPSTONE REQUIREMENT (3 S.H.)

- P BIOL 499 Capstone Project (1-3)

OTHER REQUIRED COURSES (54-55 S.H.)

Chemistry (16 S.H.)

- CHEM *212, *213 Principles of Chemistry I, II (8)
- CHEM 320 Environmental Chemistry (4)
- CHEM 340 Organic Chemistry Survey (4)

Note: Organic Chemistry 350 and 351 (both must be taken) may be substituted for CHEM 340.

Geoscience (12 S.H.)

- * GEOS 120 Dynamic Earth (4)
- * GEOS 130 Earth and Life Through Time (4)
- GEOS 240 Watershed Science (4)

Mathematics (9 S.H.)

- MATH 150 Modeling Using Precalculus and Statistics (3)
- MATH 155 Calculus Based Modeling (3)
- STAT 305 Biometry (3)

Note: Calculus I, II (MATH 160, 165) (both must be taken) may be substituted for MATH 150, 155.

Physics (8 S.H.)

PHYS *201, *202 General Physics I, II (8)

Note: University Physics I & II (*221, *222) (both must be taken) may be substituted for General Physics I, II (201, 202).**Both of the following courses (6 S.H.)**

ECON 315 Environmental and Natural Resources (3)

POLS 340 Environmental Policy (3)

One of the following six courses (3-4 S.H.)**Chemistry**

CHEM 425 Analytical Chemistry I (4)

CHEM 435 Topics in Environmental Chemistry (3)

Geoscience

GEOS 310 Non-Renewable Natural Resources (3)

GEOS 315 Surficial Processes and Soils (4)

GEOS 325 Environmental Geoscience (3)

GEOS 420 Applied Hydrogeology (4)

B.S. MAJOR - LIFE SCIENCE (Teaching) (BLST)

128 S.H. (No Minor Required)

Notes:

- The Biology Department, in cooperation with other science departments and the College of Education, is developing a Board of Teaching-approveable program to better fulfill the needs of 21st century science teachers.
- Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area. Refer to these requirements in the Education section in this catalog (page 90). For more information, refer to the *WSU Teacher Education Student Handbook*.
- Students majoring in Biology Life Science must have both a 2.75 overall GPA and 2.50 GPA or higher in the major.

UNIVERSITY STUDIES COURSES (19 S.H.)

A number of courses required by the life science major also satisfy requirements of the University Studies Program. Students should consult with their academic advisor for more information.

BIOLOGY CORE COURSES - BIOL (18 S.H.)

241 Basics of Life (4)

242 Organismal Diversity (4)

312 General Ecology (3)

P 308 Cell Biology (3)

O 310 Genetics (3)

I 307 Cell Biology Laboratory (1) OR

313 Ecology Laboratory (1)

Note: BIOL 241 and 242 should be taken prior to BIOL 312, 313, 307, 308 and 310. BIOL 308 should be taken prior to or concurrently with BIOL 307. BIOL 312 should be taken prior to or concurrently with BIOL 313.

LIFE SCIENCE REQUIREMENTS (6 S.H.)

I BIOL 315 Environmental Biology (3)

P BIOL 499 Capstone Project (1-3) (This course also satisfies the biology capstone requirement.)

LIFE SCIENCE ELECTIVES - BIOL (9 S.H.)

At least 9 S.H. of approved elective courses to be chosen from the biology electives listed below. It is strongly recommended that the elective requirements be fulfilled from the following courses; students should carefully choose electives with the aid of the life science advisor to ensure broad knowledge and skill in biology:

201 Human Anatomy (4)

303 Biology of Algae and Fungi (4)

314 Plant Physiology (4)

318 Invertebrate Zoology (4)

319 Vertebrate Biology (4)

320 Ornithology (4)

335 Plant Ecology (4)

350 Plant Taxonomy (4)

360 Entomology (4)

I 409 General Microbiology (4)

441 Comparative Vertebrate Physiology (3)

OTHER REQUIRED COURSES (76 S.H.)**Chemistry (12 S.H.)**

CHEM *212, *213 Principles of Chemistry I, II (8)

CHEM 340 Organic Chemistry (4)

Note: Organic Chemistry 350 and 351 (both must be taken) may be substituted for CHEM 340.

Education (38 S.H.)**Notes:**

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

* EDUC 305 Human Development and Learning: Secondary (4)

EDUC 308 Human Relations and Student Diversity (3)

O EDUC 312 Instructional Planning Assessment: Secondary (3)

EDUC 429 Secondary Reading and Teaching Strategies (4)

P EDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)

P EDUC 459 The Professional Educator (3)

I EDST 465 Student Teaching (12)

Health, Exercise and Rehabilitative Sciences

HERS 204 Personal and Community Health (3)

Special Education

SPED 400 Education of Exceptional Children/Youth (3)

Geoscience (8 S.H.)

* GEOS 120 Dynamic Earth (4)

* GEOS 130 Earth and Life Through Time (4)

Mathematics (6 S.H.)

MATH 150 Modeling Using Precalculus and Statistics (3)

MATH 155 Calculus Based Modeling (3)

Physics (12 S.H.)

PHYS *201, *202 General Physics I, II (8)

PHYS 311 Science Teaching Methods (4)

Note: University Physics I and II (221, 222) (both must be taken) may be substituted for General Physics I and II (201, 202).

B.A. MINOR BIOLOGY (BIOL)

38 S.H.

REQUIRED COURSES (23 S.H.)**Mathematics (3 S.H.)**

MATH 150 Modeling Using Precalculus and Statistics (3)

Note: Any higher level math class of at least 3 S.H. may be substituted for MATH 150.

Biology (8 S.H.)

BIOL 241 Basics of Life (4)

BIOL 242 Organismal Diversity (4)

Chemistry (12 S.H.)

* CHEM 212 Principles of Chemistry I (4)

* CHEM 213 Principles of Chemistry II (4)

CHEM 340 Organic Chemistry (4)

Note: Organic Chemistry 350 and 351 may be substituted for CHEM 340.

ELECTIVES (15 S.H.)

Any biology course (required or elective) that is part of the B.S. Biology major (any option).

BIOLOGY ELECTIVES

The following courses may be used as electives in any biology major option or in the biology minor.

Biology (BIOL)

201 Human Anatomy (4)

303 Biology of Algae and Fungi (4)

I 307 Cell Biology Laboratory (1)

I 309 Developmental Biology (3)

311 Genetics Laboratory (1)

313 General Ecology Laboratory (1)

314 Current Issues in Plant Biology (4)

I 315 Environmental Biology (4)

318 Invertebrate Zoology (4)

319 Vertebrate Biology (4)

320 Ornithology (4)

P 323 General Physiology (4)

324 General Physiology Laboratory (2)

327 Developmental Biology Laboratory (1)

330 Biomedical Ethics (3)

335 Plant Ecology (4)

340 Virology (3)

* "Additional Requirements" course as defined in Item 3, page 18

- 350 Plant Taxonomy (4)
 360 Entomology (4)
 365 Cultures & Ecology of East Africa – Tanzania (4)
 380 Evolution (3)
 393 Animal Cell Culture (4)
 394 Plant Tissue Culture, Principles and Application (4)
 400 Individual Problems in Biology (1-3)
 405 Fishery Biology (3)
 I 409 General Microbiology (4)
 410 Membrane Biology (4)
 411 Protein Structure and Function (1)
 P 415 Ecology of Large Rivers (4)
 420 Limnology (4)
 I 423 Ecosystem Ecology (3)
 424 Biogeography (3)
 425 Animal Behavior (3)
 427 Advanced Topics in Biology (1-4)
 430 Molecular Biology (3)
 P 431 Molecular Biology Laboratory (4)
 441 Comparative Vertebrate Physiology (3)
 443 Urinalysis (1)
 444 Immunochemistry and Hematology (2)
 P 445 Immunology (3)
 446 Immunology Laboratory (1)
 I 460 General Parasitology (3)
 I 462 Parasitology (4)
 470 Histology (4)
 490 Issues in Biology (3)
 495 Seminar in Biology (1)
 496 Undergraduate Thesis (1)
 P 499 Capstone Project (1-3)
Statistics (STAT)
 305 Biometry (3)
Health, Exercise and Rehabilitative Sciences (HERS)
 370 Mechanical Kinesiology (3) (This is an elective for the Allied Health Option only.)
Chemistry (CHEM)
 400 Biochemistry I (4)
 401 Biochemistry II (4)
Psychology (PSY)
 433 Neuroscience (4)

COURSE DESCRIPTIONS (BIOL)

104 - Environment, Society, and Conservation (3 S.H.)

Problems in the wise use of renewable resources with emphasis on human impacts and sustainable living. Lecture only. Offered each semester.

109 - Microbes and Society (3 S.H.)

An exploration of the microbial world and how that world influences life on earth. Through lectures, assigned readings, Internet explorations, videotapes, writing assignments, and discussions, this course examines the power and influence of selected microorganisms on history, medicine, economics, the environment, demography, the arts, and human lives. Letter grade only. Offered yearly.

117 - Human Biology (3 S.H.)

An introductory study of the anatomy, physiology, development, and heredity of the human for students who are not majoring in biology. Lecture only. Letter grade only. Offered each semester.

118 - General Biology (4 S.H.)

A course that promotes critical thinking about the process of studying living organisms. Students are exposed to a sampling of major living groups while utilizing the scientific method. Lecture and laboratory. Letter grade only. Offered each semester.

171 - Medical Terminology (1 S.H.)

Scientific terminology as it applies to human and veterinary medicine, dentistry, and related professions. Topics include prefixes and suffixes, numbers, amounts, colors, and positions as well as the integumentary, respiratory, and digestive systems. Independent study using CDs and study guide. Letter grade only. Offered each semester.

172 - Medical Terminology (1 S.H.)

Scientific terminology as it applies to human and veterinary medicine, dentistry and related professions. Topics include cardiovascular, hematic, lymphatic, urinary, and reproductive systems. Independent study using CDs and study guide. Letter grade only. Offered each semester.

173 - Medical Terminology (1 S.H.)

Scientific terminology as it applies to human and veterinary medicine, dentistry, and related professions. Topics include the nervous, endocrine, and musculoskeletal systems as well as medical specialties. Independent study using CDs and study guide. Letter grade only. Offered each semester.

201 - Human Anatomy (4 S.H.)

A study of the human body from both systemic and regional perspectives, integrating microscopic and macroscopic information. Includes cat dissection as an example of mammalian anatomy and demonstrations of prosected cadavers. Lecture and lab. Prerequisites: CHEM 212, CHEM 213, and BIOL 241. Offered yearly.

203 - Natural History (4 S.H.)

Ecology, life history, behavior and identification of plants and animals in local habitats including forests, prairies, lakes, and streams. Lecture, laboratory and field trips. Offered yearly.

204 - Elements of Anatomy and Physiology (4 S.H.)

Introduction to the structure and function of the human body designed especially for physical education, recreation, and health majors. Offered according to demand.

206 - Normal Nutrition (3 S.H.)

Basic principles of nutrition and the nutritional needs of individuals at different age levels. Lecture only. Prerequisite: CHEM 210. Offered each semester.

209 - Microbiology (3 S.H.)

Introduction to microbiology including study of prokaryotic, eukaryotic, and viral microorganisms important to human health, microbial growth, microbial control, microbial nutrition, and microbial cultivation. Lecture and laboratory. Prerequisite: CHEM 210. Offered yearly.

211 - Anatomy and Physiology I (4 S.H.)

First course of a year-long sequence for students in Nursing and Health, Exercise and Rehabilitative Sciences. Includes terminology and orientation of the body, basics of chemistry, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems. Lecture and laboratory. Offered yearly.

212 - Anatomy and Physiology II (4 S.H.)

The second course of a year-long sequence for students in Nursing and Health, Exercise and Rehabilitative Science. Includes structure and function of the endocrine, circulatory, immune, respiratory, digestive, urinary, and reproductive systems; nutrition and metabolism; fluid and ionic balance. Lecture and laboratory. Prerequisite: BIOL 211. Offered yearly.

241 - Basics of Life (4 S.H.)

One of two introductory courses, both of which are required of all biology majors. Introduces the basic life processes at the molecular, cellular, tissue, and organismal levels. Lecture and laboratory. Offered each semester.

242 - Organismal Diversity (4 S.H.)

One of two introductory courses, both of which are required of all biology majors. Introduces ways in which organisms carry out basic life processes (e.g., gas exchange, nutrition) and interactions between organisms and their environment. Lecture and laboratory. Offered each semester.

269 - Human Reproduction (3 S.H.)

The biology of human reproduction. The aim of this course is to present a basic but comprehensive survey of many aspects of human reproduction. Topics include anatomy, physiology, biochemistry, and normal and abnormal functions of all aspects of reproduction. Lecture and discussion. Offered yearly.

303 - Biology of Algae and Fungi (4 S.H.)

A systematic, morphological and evolutionary overview of fungi, photosynthetic protists, and plants other than the angiosperms. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered according to demand.

307 - Cell Biology Laboratory (1 S.H.)

An experimental study of the cell as a biological unit. Use of histochemistry, spectrophotometry, electrophoresis, centrifugation, microscopy, and statistics in analysis of ultrastructure, macromolecular organization, and function of cell components in plants and animals. Prerequisites: BIOL 241, BIOL 242, and current or previous enrollment in BIOL 308 and either CHEM 340 or CHEM 350. Offered each semester.

308 - Cell Biology (3 S.H.)

A study of the cell as a biological unit. Emphasizes analysis of ultrastructure, macromolecular organization, and function of cell components in plants and animals. Lecture only. Prerequisites: BIOL 241, BIOL 242, and current or previous enrollment in either CHEM 340 or CHEM 350. Offered each semester.

309 - Developmental Biology (3 S.H.)

A study of the mechanisms of the sequent changes that occur within organelles, cells, tissues, organs, and organ systems of plants and animals during their life spans. Lecture only. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

310 - Genetics (3 S.H.)

A survey of the principles of Mendelian, molecular, cytological, population, and human genetics. Lecture only. Prerequisites: BIOL 241 and BIOL 242. Offered each semester.

311 - Genetics Laboratory (1 S.H.)

An optional laboratory to accompany Genetics (BIOL 310). Includes experiments from classical, molecular, and cytogenetics. Prerequisite: Concurrent or previous enrollment in BIOL 310. Offered yearly.

312 - General Ecology (3 S.H.)

Relationships between organisms and their environment with an emphasis on fundamental principles. Lecture only. Prerequisites: BIOL 241 and BIOL 242. Offered each semester.

313 - General Ecology Laboratory (1 S.H.)

Laboratory and field studies of fundamental ecological principles. Prerequisites: BIOL 241 and BIOL 242. Corequisite: BIOL 312. Offered yearly.

314 - Current Issues in Plant Biology (4 S.H.)

This course reviews a broad range of current topics/issues in plant biology by way of discussion and laboratory. Some of the topics are controversial and will intersect with social, ethical, and political aspects of biology (i.e., biotechnology, ethnobotany). Other topics will introduce students to current methodologies (i.e., forensic botany, genetic engineering, phytoremediation) and unorthodox ways of thinking about plants (is there a plant intelligence?, plant sex and sex change, tales from the underground, etc.). Lecture and laboratory. Prerequisites: BIOL 241 and BIOL 242. Offered alternate years.

315 - Environmental Biology (3 S.H.)

A study of human impacts on the natural environment. Modern conservation measures, pollution prevention, and habitat management procedures are treated in depth. Lecture, laboratory, and field trips. Prerequisite: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

318 - Invertebrate Zoology (4 S.H.)

Survey of invertebrate animals. Emphasis on structure, function, evolution, and ecology of the major invertebrate groups. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

319 - Vertebrate Biology (4 S.H.)

A study of the structure, function, evolution, and taxonomy of all the groups of vertebrates. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

320 - Ornithology (4 S.H.)

Structure, classification, behavior, distribution, and identification of birds. Lecture, laboratory, and fieldwork. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and CHEM 212 or instructor's permission. Offered alternate years.

323 - General Physiology (4 S.H.)

Lectures, demonstrations, and discussions are designed to provide the basis for understanding physiological mechanisms and the functional organization of body systems. This is an examination of how the human body works. Lecture only. Prerequisites: BIOL 201, BIOL 241, BIOL 242, CHEM 212, and CHEM 213. Offered yearly.

324 - General Physiology Laboratory (2 S.H.)

An extensive laboratory course intended to introduce students to the classic physiology exercises as well as new techniques used to address questions about how a body functions. Exercise topics may include muscle physiology, neurophysiology, ECG, blood pressure, sensory investigations, respiratory functions, and diving response. Prerequisite: Concurrent or previous enrollment in BIOL 323. Offered yearly.

327 - Developmental Biology Laboratory (1 S.H.)

An experimental study of the mechanisms of changes that occur during embryonic development. Laboratory. Prerequisites: concurrent or previous enrollment in BIOL 309. Offered alternate years.

330 - Biomedical Ethics (3 S.H.)

Ethical issues in health care such as abortion, termination of treatment, euthanasia, truth-telling and confidentiality, medical experimentation and informed consent, transplant surgery, artificial insemination, surrogate pregnancy, or the allocation of medical resources. Lecture only. Offered yearly.

333 - Clinical Laboratory Techniques (1 S.H.)

Introduction to basic and specialized clinical laboratory techniques. These include formulating chemical solutions and compounds, phlebotomy, collection and processing of clinical specimens, aseptic techniques and culturing of organisms, and the safe handling and disposal of laboratory materials. Includes off-site visits to observe hospital and clinical laboratories. Prerequisites: CHEM 212 and CHEM 213. Offered yearly.

335 - Plant Ecology (4 S.H.)

A study of the interactions of plants with each other and their environment. Emphasis is on applied and theoretical physiological, population, and community ecology. Lecture, fieldwork, and laboratory. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and BIOL 313. Offered alternate years.

340 - Virology (3 S.H.)

Basic properties of viruses. Includes viral structure, assays, replication, diseases, genetic properties, mechanisms of interaction with cells, viral

oncogenesis, and interference with viral multiplication. Lecture only. Prerequisite: BIOL 308. Offered alternate years.

350 - Plant Taxonomy (4 S.H.)

An introduction to the principles and practices of plant classification, systematics and identification, as applied to vascular plants with special emphasis on the local flora. Lecture, laboratory, and field trips. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

360 - Entomology (4 S.H.)

The largest group of organisms on earth is explored through personal collections, projects, lecture, and laboratory exercises. Students sample morphology, life history strategies, and the diversity of the group through lecture discussions and laboratory exercises. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

365 - The Cultures and Ecology of East Africa - Tanzania (4 S.H.)

This is a four-week specialized travel study course, which deals with the cultural and natural resources of east Africa, specifically Tanzania. An immersive classroom experience is followed by a three-week study tour in Tanzania. Specific attention is paid to the cultural and natural resources of the area. Students visit traditional villages, schools, hospitals, national parks and game reserves, and cultural sites. Grade only. Prerequisites: Sophomore standing or higher and instructor's permission. Offered summers of alternate years.

380 - Evolution (3 S.H.)

Overview of principles and processes of biological evolution with emphasis on selection, variation, and macroevolution. Lecture only. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

393 - Animal Cell Culture (4 S.H.)

Introduction to basic and specialized techniques of eukaryotic cell culture. Techniques include aseptic technique, in vitro cell cultivation, cell enumeration, viability determination, hybridoma technique for monoclonal antibody production, cryopreservation, and cell cloning. Lecture and laboratory. Prerequisites: BIOL 308, and BIOL 310. Offered yearly.

394 - Plant Tissue Culture, Principles and Application (4 S.H.)

Basic plant tissue culture techniques. Use of these methods in commercial propagation of plants, production of disease-free plants, and genetic improvement of ornamental and crop plants. Laboratory and discussions. Prerequisite: BIOL 308. Offered alternate years.

399 - Internship (1-12 S.H.)

Supervised experiences at a government, industrial, or research institution. Credits do not replace other required or elective courses in the Biology Major, but count as general elective credit. May be repeated up to 12 S.H. Only 3 S.H. may be taken for letter grade. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered each semester.

400 - Individual Problems in Biology I (1-3 S.H.)

An opportunity for the qualified advanced undergraduate student to work independently. May be repeated to a total of 3 S.H. Prerequisite: Instructor's permission. Letter grade only. Offered each semester.

405 - Fishery Biology (3 S.H.)

Examination of the concepts, methodologies, and problems of modern-day fishery management. Lecture and fieldwork. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

409 - General Microbiology (4 S.H.)

The anatomy, physiology, biochemistry, genetics, taxonomy, and ecology of microorganisms, especially bacteria; includes applications to agriculture, medicine, and industry. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and CHEM 340. Offered yearly.

410 - Membrane Biology (4 S.H.)

Study of the structure and function of biological membranes. Includes detailed discussions of membrane preparation, membrane components, membrane carbohydrates, membrane transport, and membrane bioenergetics. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and CHEM 340. Offered according to demand.

411 - Protein Structure and Function (1 S.H.)

An advanced study of protein primary, secondary, tertiary, and quaternary structure using the data found in the National Institutes of Health Protein Data Bank, along with software for visualization and presentation of crystallographic data. Protein functions will be correlated with the structural features through primary literature, monographs, and textbooks. Lecture and demonstration. Prerequisites: BIOL 308, and CHEM 340 or CHEM 350. Offered according to demand.

415 - Ecology of Large Rivers (4 S.H.)

Examination of the geological, physical, chemical, and biological characteristics of large river ecosystems. Includes review of several river systems with comparisons to the upper Mississippi River. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and BIOL 312 or instructor's permission. Offered alternate years.

420 - Limnology (4 S.H.)

Analysis of the geological, physical, chemical, and biological aspects of

inland waters. Lecture, laboratory, and fieldwork. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and CHEM 212 or instructor's permission. Offered alternate years.

423 - Ecosystem Ecology (3 S.H.)

The structure and function of ecosystems including biochemical cycling, food webs, and introduction to modeling. Lecture only. Prerequisites: BIOL 308, BIOL 310, BIOL 312, MATH 150, and MATH 155. Offered alternate years.

424 - Biogeography (3 S.H.)

A study of the dynamics of ranges and distribution changes of plants and animals on earth, with emphasis on the evolutionary, ecological, geological, and climatic influences on dispersal, extinction, and diversification. Lecture only. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

425 - Animal Behavior (3 S.H.)

A study of how and why animals behave in the ways they do. Special attention is given to the observation and description of behavior and to the ensuing questions of immediate causation, development, evolution and function of behavior. Lecture and demonstration. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered alternate years.

427 - Advanced Topics in Biology (1-4 S.H.)

In-depth study of an emerging field or relevant issue of special interest to faculty or advanced students of biology. Lecture only, or lecture and laboratory. Topic announced in advance. May be repeated for credit as topics change. Prerequisites: BIOL 308, BIOL 310, and BIOL 312. Offered according to demand and staffing availability.

430 - Molecular Biology (3 S.H.)

A study of the various molecular aspects of DNA, RNA, and protein structure, function, and expression. Topics include DNA replication, DNA transcription into RNA, RNA translation to protein, DNA repair mechanisms, plasmids and transposons, recombinant DNA and genetic engineering, and regulation of gene activity in prokaryotes and eukaryotes. Lecture only. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and CHEM 340. Offered yearly.

431 - Molecular Biology Laboratory (4 S.H.)

An intensive laboratory course introducing modern methods and instrumentation in molecular biology. Selected exercises in recombinant DNA technology, including DNA isolation and quantification, restriction enzyme analysis, gene cloning, Southern hybridization, DNA amplification via the polymerase chain reaction, DNA sequencing and introduction to sequence analysis software. Prerequisites: BIOL 430 or concurrent enrollment; instructor's permission. Offered yearly.

440 - Clinical Physiology (3 S.H.)

This course will review applied theory and practice in clinical chemistry and human physiology. This will be a review of basic and advanced information in clinical laboratory chemistry and how it relates to patient health and care. Laboratory and discussions. Prerequisites: BIOL 323 and admission into the Clinical Laboratory Science program. Offered yearly.

441 - Comparative Vertebrate Physiology (3 S.H.)

Lectures and demonstrations provide an understanding of physiological mechanisms in an evolutionary context. Focus will be on organismal physiology, but will also include mechanisms of interaction between the cellular, tissue, organ, and organismal levels. Topics include temperature, water and solutes, respiration/circulation, sensory/nervous systems, endocrinology/reproduction. Prerequisites: BIOL 241, BIOL 242, BIOL 312, BIOL 308, and CHEM 340 or CHEM 350. Offered alternate years.

442 - Clinical Laboratory Management (1 S.H.)

A comprehensive presentation of information relating to management skills within the clinical laboratory, including organizational structure, job descriptions, personnel and financial management, revenue generation, measurement standards, and compliance with governmental regulations. Grade only. Prerequisite: Admission into the Clinical Laboratory Science program. Offered yearly.

443 - Urinalysis (1 S.H.)

An introduction to the clinical study of human urine for students majoring in medical technology. The topics included are physiology, methodologies, and test performance as well as clinical significance in the areas of urinalysis, cerebrospinal fluids, and gastric analysis. Laboratory only. Letter grade only. Prerequisites: BIOL 308, BIOL 310, and CHEM 340. Offered yearly.

444 - Immunochemistry and Hematology (2 S.H.)

Study of blood and blood-forming tissues for medical technology majors. Includes development, cytology, immunocytology, histology, and functions of all formed elements and plasma composition. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and CHEM 340 or CHEM 350. Offered yearly.

445 - Immunology (3 S.H.)

An introduction to the theory and practice of modern immunology. Emphasis

on the immune response in humans. Lecture only. Prerequisites: BIOL 308, BIOL 310, and CHEM 340. Offered yearly.

446 - Immunology Laboratory (1 S.H.)

This course introduces students to the theory and application of modern immunological techniques. Topics include antibody detection methods using precipitation, agglutination, ELISA, western blot analysis, immunofluorescence, and immunoelectrophoresis. Other methods include SDS-PAGE, antigen preparation, protein analysis, T Cell isolation, and differential white blood cell counts. Prerequisite: Concurrent or previous enrollment in BIOL 445. Offered yearly.

450, 451 - Medical Technology I and II (12 S.H. each)

Laboratory medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator, and staff of the affiliated hospital. Letter grade only. Prerequisite: Medical technology majors with senior standing and instructor's permission. Offered yearly.

452, 453 - Medical Technology III and IV (4 S.H. each)

Laboratory medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator, and staff of the affiliated hospital. Letter grade only. Prerequisite: Medical technology majors with senior standing and instructor's permission. Offered yearly.

460 - General Parasitology (3 S.H.)

An introduction to the study of parasites of humans and domestic animals, and the etiology of associated pathologic states. This course is especially intended for students in the medical technology program. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and CHEM 340. Offered yearly.

462 - Parasitology (4 S.H.)

This course will examine medically and veterinary important parasites of the world. Each parasite will be studied thoroughly to include details of taxonomic classification, host spectrum, geographic distribution, morphology, life cycle requirements, pathogenesis, control measures, and public health significance. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, and CHEM 340 or instructor's permission. Offered yearly.

470 - Histology (4 S.H.)

A microscopic study of animal cells, tissues, and organs and correlating structure and function. Emphasis is placed on the mammal. Laboratory includes histotechniques for preparing sections and histochemical staining. Lecture and laboratory. Prerequisites: BIOL 308, BIOL 310, CHEM 212, and CHEM 213. Offered yearly.

481, 482 - Cytotechnology I and II (12 S.H. each)

Cytotechnology clinical education. Courses and content to be determined by the program director, educational coordinator, and staff of the affiliated clinical education facility. Letter grade only. Prerequisites: Cytotechnology major with senior standing and instructor's permission. Offered yearly.

483, 484 - Cytotechnology III and IV (4 S.H. each)

Cytotechnology clinical education. Courses and content to be determined by the program director, educational coordinator, and staff of the affiliated clinical education facility. Letter grade only. Prerequisites: Cytotechnology major with senior standing and instructor's permission. Offered yearly.

490 - Issues in Biology (3 S.H.)

A course, intended for seniors, that promotes student understanding of the interrelated concerns of society and biology. Students will explore the social, ethical, and political implications of current issues in biology. Next, students will analyze a specific issue, develop arguments and counter-arguments used by opposing positions, write a formal paper documenting at least two opposing views, and defend a position in a formal debate. Prerequisites: BIOL 308, BIOL 310, BIOL 312 and senior standing or instructor's permission. Offered yearly.

495 - Seminar in Biology (1 S.H.)

Students prepare an in-depth written paper and/or an oral presentation based on original biological literature, and learn to access and use scientific databases. May be taken twice for credit. Prerequisite: Senior standing or instructor's permission. Offered each semester.

496 - Undergraduate Thesis (1 S.H.)

Students who have completed an extensive undergraduate research project (such as the projects completed by students in the Honors in Biology Program) are given the opportunity to work closely with a professor in writing and editing their own undergraduate theses. The finished thesis is expected to be an example of excellent collegiate scholarship and writing in scientific style. The manuscript will correctly use and cite appropriate current literature. Prerequisite: Instructor's permission. Offered each semester.

499 - Capstone Project (1-3 S.H.)

An opportunity for an advanced biology student to work with a faculty member on an independent research project to fulfill the capstone requirement. Written report on results of research required. May be repeated to a maximum of 3 S.H. Prerequisites: BIOL 308, BIOL 310, BIOL 312, and instructor's permission. Offered each semester.

BUSINESS ADMINISTRATION

Somsen Hall, Room 324 (507-457-5170)

www.winona.edu/businessadministration/

JoEll Bjorke (Chairperson)

FACULTY

JoEll W. Bjorke, Professor; B.S., St. Cloud State University; J.D., William Mitchell College of Law; 1981 –
Shashi Dewan, Professor; B.S., Malviya Regional Engineering College; M.B.A., Ph.D., Indian Institute of Technology; 1988 –
Joseph Foegen, Professor; B.B.A., M.B.A., Ph.D., University of Wisconsin-Madison; 1958 –
Judy M. Germander, Professor; B.A., Mankato State University; J.D., University of Minnesota-Twin Cities; 1970 –
Kathryn Ready, Associate Professor; B.A., M.B.A., University of Wisconsin-La Crosse; Ph.D., University of Iowa; 2006 –
Vartan Safarian, Professor; B.S., Pahlavi University; M.S., M.B.A., Indiana University; 1983 –
Daniel Sauers, Professor; B.S., Slippery Rock State University; M.B.A., Ph.D., Florida State University; 2002 –
Marvin Wolfmeyer, Professor; B.S., University of Missouri-Columbia; M.S., Ph.D., University of Wisconsin-Madison; 1969 –
Hamid Yeganeh, Assistant Professor; B.A., Isfahan University; M.B.A., Ph.D., Laval University; 2007 –

PURPOSE

The purpose of the Business Administration program is to prepare students for careers in management and administration positions in all types of organizations in the private, nonprofit, and public sectors. The management curriculum is designed to provide students with the tools to pursue professional careers in management of operating units or groups and more specialized areas such as human resources management.

GRADUATION REQUIREMENTS

1. Complete all course work required for the major.
2. No more than two courses may be counted toward the major with a passing grade lower than “C.”
3. Complete a minimum 15 credit hours of 300/400-level courses from the Department of Business Administration at WSU.
4. None of the courses required for a major, minor, option, or concentrations may be taken on a P/NC basis.
5. Complete a minimum of 50% of the business courses in the major at WSU.
6. Sixty-four non-business credits are required for all majors in the department. Of the math, statistics, and economics courses required for the major, 3 credits of math, 6 credits of statistics, and 9 credits of economics can be counted toward the requirement for 64 non-business credits.
7. Meet all WSU graduation requirements. For a checklist of the University’s graduation requirements, see page 23.

WSU-ROCHESTER

The department’s major is available through the 2+2 Program at WSU-Rochester. See page 37 for the articulation of the 2+2 program in Business Administration.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student’s major or minor program. The Business Administration Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

MGMT 495 Strategic Management (3)

Math/Critical Analysis O

BUSA 220 Business Statistics (3)

BUSA 320 Intermediate Business Statistics (3)

Writing P

MGMT 317 Management of Human Resources (3)

MGMT 325 Organizational Dynamics (3)

Flag courses that can be used to satisfy Business Administration major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - BUSINESS ADMINISTRATION (BA)

66 S.H. (No Minor Required)

UNIVERSITY STUDIES REQUIREMENTS

Mathematics (3 S.H.)

MATH 110 Finite Mathematics (3) or higher. Students considering graduate school should take MATH 140 (Applied Calculus).

REQUIRED COURSES (51 S.H.)

Accounting (6 S.H.)

ACCT 211 Financial Accounting Principles (3)
ACCT 212 Managerial Accounting Principles (3)

Business Administration (12 S.H.)

- O BUSA 220 Business Statistics (3)
- BUSA 301 Business Law I (3)
- BUSA 311 Business Law II (3)
- O BUSA 320 Intermediate Business Statistics (3)

Economics and Finance (9 S.H.)

- * ECON 201 Principles of Microeconomics (3)
- * ECON 202 Principles of Macroeconomics (3)
- FIN 360 Corporate Finance (3)

Management Information Systems and Operations Management (9 S.H.)

MIS 202 Microcomputers in Business (3)
MIS 362 Management Information Systems (3)

OM 334 Operations Management (3)

Marketing (3 S.H.)

MKTG 300 Principles of Marketing (3)

Management (12 S.H.)

MGMT 315 Principles of Management (3) OR MGMT 455, International Business (3)

P MGMT 317 Management of Human Resources (3)

P MGMT 325 Organizational Dynamics (3)

I MGMT 495 Strategic Management (3)

ELECTIVES (12 S.H.)

Notes: Must be 300+ level courses:

- Courses from the Department of Business Administration (6)
- Courses from the College of Business (6)

B.S. MAJOR - HUMAN RESOURCES MANAGEMENT (HRMT)

66 S.H. (No Minor Required)

UNIVERSITY STUDIES REQUIREMENTS (3 S.H.)

Mathematics (3 S.H.)

MATH 110 Finite Mathematics (3) or higher. Students considering graduate school should take MATH 140 (Applied Calculus).

REQUIRED COURSES (51 S.H.)

Accounting (6 S.H.)

ACCT 211 Financial Accounting Principles (3)
ACCT 212 Managerial Accounting Principles (3)

*“Additional Requirements” course as defined in Item 3, page 18

Business Administration (9 S.H.)

- O BUSA 220 Business Statistics (3)
- BUSA 291 Legal Environment of Business (3)
- O BUSA 320 Intermediate Business Statistics (3)

Economics and Finance (9 S.H.)

- * ECON 201 Principles of Microeconomics (3)
- * ECON 202 Principles of Macroeconomics (3)
- FIN 360 Corporate Finance (3)

Management (18 S.H.)

- MGMT 315 Principles of Management (3)
- P MGMT 317 Management of Human Resources (3)
- P MGMT 325 Organizational Dynamics (3)
- MGMT 417 Compensation (3)
- MGMT 467 Staffing and Evaluation (3)
- I MGMT 495 Strategic Management (3)

Management Information Systems (3 S.H.)

- MIS 202 Microcomputers in Business (3)

Marketing (3 S.H.)

- MKTG 300 Principles of Marketing (3)

Operations Management (3 S.H.)

- OM 334 Operations Management (3)

ELECTIVES (12 S.H.)

Note: All 12 elective credits must be in 300+ level courses.

Business Administration

- BUSA 399 Internship Problems (3)
- BUSA 486 Independent Studies in Business (1-3)
- MGMT 365 Independent Readings in Management (1-3)
- MGMT 377 Independent Readings in Human Resources (1-3)
- MGMT 387 Independent Readings in Labor Relations (1-3)
- MGMT 415 Theories of Management (3)
- MGMT 427 Management Development (3)
- MGMT 437 Labor Relations (3)
- MGMT 457 Problems in Management of Human Resources (3)
- MGMT 477 International Human Resources Management (3)

Business Education

- BUED 440 Training and Employee Development (3)

Economics

- ECON 420 Labor Economics (3)

Other Electives

Related courses offered by other departments may be taken. A list of acceptable courses is available in the department office for human resources management majors.

B.S. MINOR - BUSINESS ADMINISTRATION (BA)

33 S.H.

REQUIRED COURSES (33 S.H.)**Accounting (6 S.H.)**

- ACCT 211 Financial Accounting Principles (3)
- ACCT 212 Managerial Accounting Principles (3)

Business Administration/Management (9 S.H.)

- O BUSA 220 Business Statistics (3)
- BUSA 291 Legal Environment of Business (3)
- MGMT 315 Principles of Management (3) OR
- P MGMT 325 Organizational Dynamics (3)

Economics and Finance (9 S.H.)

- * ECON 201 Principles of Microeconomics (3)
- * ECON 202 Principles of Macroeconomics (3)
- FIN 360 Corporate Finance (3)

Management Information Systems (3 S.H.)

- MIS 202 Microcomputers in Business (3)

Marketing (3 S.H.)

- MKTG 300 Principles of Marketing (3)

Operations Management (3 S.H.)

- OM 334 Operations Management (3)

B.S. MINOR - BUSINESS LAW (BLAW)

24 S.H.

REQUIRED COURSES (12 S.H.)**Accounting (6 S.H.)**

- ACCT 211 Financial Accounting Principles (3)
- ACCT 212 Managerial Accounting Principles (3)

Business Administration (6 S.H.)

- BUSA 301 Business Law I (3)
- BUSA 311 Business Law II (3)

ELECTIVES (12 S.H.)**Accounting**

- ACCT 421 Introduction to Taxation (3)

Business Administration

- BUSA 101 Introduction to Law and the Legal Process (3)
- BUSA 376 Topics in Business (1-3)

Note: BUSA 376 requires prior written approval from department chairperson.

- BUSA 401 Insurance Law (3)
- BUSA 411 International Business Law (3)
- BUSA 421 Consumer Law (3)
- BUSA 431 Real Estate Law (3)
- BUSA 491 Seminar in Business Law (3)

Note: The following courses require written approval from department chairperson:

Philosophy

- PHIL 332 Philosophy of Law (3)

Political Science

- POLS 320 Constitutional Law (3)
- POLS 420 Administrative Law (3)

Additional courses may be used with prior written approval from department chairperson.

B.S. MINOR - INTERNATIONAL BUSINESS (INTB)

33 S.H.

REQUIRED COURSES (15 S.H.)**Economics**

- ECON 404 International Economics (3) OR
- ECON 415 International Economic Development (3)

Finance

- FIN 440 International Finance (3)

Management

- MGMT 355 International Business (3)
- MGMT 475 Seminar in International Management (3)

Marketing

- MKTG 331 International Marketing (3)

FOREIGN LANGUAGE (9 S.H.)

A minimum of three semesters in a single foreign language; may also be applied toward fulfilling University Studies requirements.

ELECTIVES (9 S.H.)

Select three of the following:

- ACCT 424 International Taxation (3)
- BUSA 411 International Business Law (3)
- ECON 404 International Economics (3)
- ECON 415 International Economic Development (3)
- MGMT 447 International Labor Relations (3)
- MGMT 477 International Human Resources Management (3)

B.S. MINOR - MANAGEMENT (MGMT)

30 S.H.

REQUIRED COURSES (12 S.H.)

Select at least one course from each of the following four sections:

Organizational Component

- MGMT 315 Principles of Management (3)
- P MGMT 317 Management of Human Resources (3)
- P MGMT 325 Organizational Dynamics (3)
- MGMT 415 Theories of Management (3)
- MGMT 417 Compensation (3)
- MGMT 427 Management Development (3)
- MGMT 437 Labor Relations (3)
- MGMT 457 Problems in Management of Human Resources (3)
- MGMT 467 Staffing and Evaluation (3)

Operational Component

- MGMT 340 Management Science (3)
- MGMT 435 Managing for Quality (3)
- OM 334 Operations Management (3)
- OM 344 Purchasing (3)
- OM 434 Quality and Productivity Management (3)
- OM 464 Project Management (3)

International Component

- MGMT 355 International Business (3)
- MGMT 475 Seminar in International Management (3)
- MGMT 477 International Human Resources Management (3)
- MGMT 425 Small Business Management (3)
- I MGMT 495 Strategic Management (3)

ELECTIVES (18 S.H.)

Select any additional 18 S.H. from the above list.

COURSE DESCRIPTIONS

Note: All courses except BUSA 101, 106, and 398 are offered on a grade-only basis.

BUSINESS ADMINISTRATION (BUSA)**101 - Introduction to Law and the Legal Process (3 S.H.)**

A study of the law as part of a liberal education. Included are historical background, court systems and jurisdiction, criminal and civil procedure, common law, statutory law, administrative law, contracts, torts, family law, alternate dispute resolution, and remedies. Not open to students who have completed 15 or more credits in business.

106 - Introduction to Business (3 S.H.)

Develops broad, basic understanding of business institutions, functions, practices, and problems. Provides students with a good overview of the major business functional areas and current issues in business, as well as important topics such as international business and business ethics. Not open to students who have completed 15 or more credits in business.

220 - Business Statistics (3 S.H.)

Elementary business statistics including descriptive measures, elementary probability, sampling of distributions, and statistical inference. Competence in the use of Excel is necessary. Prerequisites: MATH 110, MATH 120, MATH 140, or instructor's permission. Grade only.

291 - Legal Environment of Business (3 S.H.)

An introduction to the legal environment of business including dispute resolution systems and regulations affecting managerial decision making. Grade only.

301 - Business Law I (3 S.H.)

Legal background, contracts, criminal law, bailments, carriers, agency, torts, sales, and commercial paper. Grade only.

311 - Business Law II (3 S.H.)

Partnerships, corporations, bankruptcy, secured transactions, real and personal property, trusts and estates, antitrust, securities, insurance, trademark, copyright, employment law, wills, and consumer protection. Prerequisite: BUSA 301 or instructor's permission. Grade only.

320 - Intermediate Business Statistics (3 S.H.)

A continuation of Business Statistics I, including Chi-Square Tests, regression and correlation, and analysis of variance. Prerequisite: BUSA 220 or instructor's permission. Grade only.

326 - Business and the Future (3 S.H.)

This course includes a combination of lectures, student presentations, selected readings, and discussion that stimulate students to look into the future and imagine what changes will be taking place. The objective is to enhance competitiveness, stimulate creative thinking and innovation and, in so doing, to broaden horizons and career potential of graduates. Prerequisite: Junior or senior standing or instructor's permission. Grade only.

340 - Management Science (3 S.H.)

Quantitative analysis of management decision-making problems using a systematic and scientific approach. In particular, the focus is on application of quantitative and decision models including linear and dynamic programming, distribution and network models, inventory models, queuing theory, and Markov analysis and simulation. Prerequisite: BUSA 320 or instructor's permission. Grade only.

376 - Topics in Business (1-3 S.H.)

An analysis of current topics and issues relevant to the milieu of business. The subject matter to be offered each semester is announced in advance by the department. May be repeated as topics change. Grade only.

398 - Internship (1-9 S.H.)

Credits will not be counted in the business administration major, but as general elective credits. Prerequisite: Concurrent enrollment in BUSA 399. P/NC only.

399 - Internship Problems (3 S.H.)

Prerequisite: Courses that must be completed prior to an internship vary by program. See department website for a list of requirements. Minimum 2.0 GPA. Grade only.

401 - Insurance Law (3 S.H.)

A study of the sources of insurance law. Analysis of the contractual relationships as to the scope of the obligations of the parties, risks covered, performance and termination. Areas of insurance included are casualty liability, life, property, auto, and group insurance among others. Prerequisite: BUSA 301. Grade only.

411 - International Business Law (3 S.H.)

A study of a variety of transnational business transactions and applicable legal regulations. Prerequisite: BUSA 291 or BUSA 301 or instructor's permission. Grade only.

421 - Consumer Law (3 S.H.)

A study of the major issues affecting consumers. Included are sales practices, warranties, advertising, credit extension, rates and disclosure requirements, collections, remedies, and housing. Prerequisite: BUSA 291 or BUSA 301. Grade only.

431 - Real Estate Law (3 S.H.)

An analysis of the legal system and real property, including the transfer of real estate, land use and regulations, landlord, tenant, estates and interests in real estate, and financing of the real estate transaction. Prerequisite: BUSA 311. Grade only.

486 - Independent Studies in Business (1-3 S.H.)

Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: Instructor's permission. Total credits may not exceed 6 S.H. Grade only.

491 - Seminar in Business Law (3 S.H.)

An advanced analysis of current legal issues. Focus of the course to be determined by the instructor and announced in class schedule. Prerequisite: Senior standing. Enrollment limited. Grade only.

MANAGEMENT (MGMT)**315 - Principles of Management (3 S.H.)**

Analysis of the functions performed by managers of all organizations and related theory and research. Important management topics such as current changes and trends in management, ethics, and global management are addressed. Prerequisites: Junior standing. Grade only.

317 - Management of Human Resources (3 S.H.)

Problems involved in developing an organization's human resources so that benefits to both the individual and the organization are maximized. Prerequisites: Junior standing. Grade only.

325 - Organizational Dynamics (3 S.H.)

Examination of different types of leadership skills used to resolve organizational problems and to achieve the goals of the organization. The behavioral sciences are stressed, with emphasis on leadership and motivation theories. Prerequisite: Junior standing. Grade only.

355 - International Business (3 S.H.)

A study of how managing abroad differs from managing at home, from strategic and operations-oriented perspectives. Prerequisite: Junior standing or instructor's permission. Grade only.

365 - Independent Readings in Management (1-3 S.H.)

To provide more background in management, three books of the student's choice (with faculty advisor approval) are read for each credit desired. Primary source is WSU library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each of the books. Prerequisite: Junior standing or instructor's permission. Limit of 9 credits of independent study per program. Grade only.

377 - Independent Readings in Human Resources (1-3 S.H.)

To provide more background in human resources, three books of the student's choice (with faculty advisor approval) are read for each credit desired. Primary source is WSU library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each of the books. Prerequisite: Junior standing or instructor's permission. Limit of 9 credits of independent study per program. Grade only.

387 - Independent Readings in Labor Relations (1-3 S.H.)

To provide more background in labor relations, three books of the student's choice (with faculty advisor approval) are read for each credit desired. Primary source is WSU library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each of the books. Prerequisite: Junior standing or instructor's permission. Limit of 9 credits of independent study per program. Grade only.

415 - Theories of Management (3 S.H.)

Study of various modern theories of management and organization. Application of these theories to actual management situations is also examined. Prerequisite: MGMT 315 or MGMT 325. Grade only.

417 - Compensation (3 S.H.)

Issues, theories, and policies in the areas of wage and salary administration and employee compensation. Prerequisites: ACCT 211, ECON 201, ECON 202, MGMT 315, and MGMT 317 or instructor's permission. Grade only.

425 - Small Business Management (3 S.H.)

Explore, investigate, and analyze small businesses and their management practices. Develop business plans and feasibility studies of small business. Study all operational and managerial aspects of small business operations. Extensive usage of case study methods. Prerequisites: BUSA 220 and MGMT 315 or MGMT 325 or instructor's permission. Grade only.

427 - Management Development (3 S.H.)

This course focuses on management development and its applications in organizations. It will cover the basics of development including

determination if a development problem exists, needs assessment, establishing objectives, choice of development techniques, evaluations of programs and means for successful implementation in an organization. Prerequisites: MGMT 315 or MGMT 325 and MGMT 317 or instructor's permission. Grade only.

435 - Managing for Quality (3 S.H.)

An overview of the philosophy and principles of Total Quality Management (TQM) in general, and of Deming's approach in particular. Many of the most important contributors to the quality literature and movement are studied within the historical context of the development of Quality Management philosophy, methods, and technology. An overview of the basic tools and methods of TQM is given with applications. Prerequisites: OM 334 and senior standing or instructor's permission. Grade only.

437 - Labor Relations (3 S.H.)

Examination of labor organization structure, conflict, and practice, including the scope of major labor legislation, and the practical differences between labor and management, both public and private sector, over wages, hours, and working conditions. Prerequisites: MGMT 315 or MGMT 325 and MGMT 317 or instructor's permission. Grade only.

457 - Problems in Management of Human Resources (3 S.H.)

Controversial, practical situations involving people at work are examined with an eye to giving greater insight into the complexities of working effectively with others within immediate work groups and beyond. Prerequisites: ACCT 211, ECON 201, MGMT 315 or MGMT 325 and MGMT 317 or instructor's permission. Grade only.

467 - Staffing and Evaluation (3 S.H.)

Examination of staffing and evaluation including EEO and Affirmative Action requirements. Areas covered will include recruitment, selection, job analysis, and performance appraisal. Prerequisites: ACCT 211, ECON 201, BU5A 220, MGMT 315 or MGMT 325 and MGMT 317 or instructor's permission. Grade only.

475 - Seminar in International Management (3 S.H.)

A study of how and why multinational organizations need to adapt their management tasks and practices to the different international settings in which they operate. The course will incorporate the study and intensive discussion of latest literature and case studies in this field. Prerequisite: MGMT 455 or instructor's permission. Grade only.

477 - International Human Resources Management (3 S.H.)

This course focuses on issues involved in international human resource management. It reviews adaptations that human resources management must make to work in today's global environment. Prerequisite: Junior standing. Grade only.

495 - Strategic Management (3 S.H.)

An advanced, integrative course for senior business administration majors. Uses cases to stress interrelationships of all functional areas, organization life stages, strategy development, and policy formation. Prerequisites: MKTG 300, OM 334, MGMT 325, FIN 360, and senior standing. Grade only.

BUSINESS EDUCATION

Somsen Hall, Room 319 (507-457-5165)

www.winona.edu/bued

Jeanette Karjala, Advisor

The Business Education program offers the following degree and certificate programs:

- Bachelor of Science: Business Education (Teaching)
- Bachelor of Science: Training and Development Minor
- Certificate: Training and Development

For general teacher education requirements, see the Department of Education section on page 90; for specific business education requirements and course descriptions, see page 97.

CHEMISTRY

Pasteur Hall, Room 320 (507-457-5290)

www.winona.edu/chemistry/

Charla Miertschin (Chairperson)

FACULTY

John C. Deming, Assistant Professor; B.S., Ph.D., University of Montana; 2006 –
Mark A. Engen, Professor; B.S., Bemidji State University; Ph.D., Montana State University; 1997 –
Jeanne L. Franz, Professor; B.A., Augustana College; Ph.D., University of Minnesota-Twin Cities; 1996 –
Sara M. Hein, Associate Professor; B.S., University of Wisconsin-La Crosse; Ph.D., University of Iowa; 2000 –
Robert W. Kopitzke, Associate Professor; B.S., M.S., Ph.D., Florida Institute of Technology; 1999 –
Charla S. Miertschin, Professor; B.S., Abilene Christian University; Ph.D., Texas A&M University; 1993 –
Thomas W. Nalli, Professor; B.S., Union College (NY); M.S., Ph.D., University of Rochester; 1995 –
C.B. William Ng, Professor; B.S., M.S., Ph.D., University of British Columbia; 1986 –
Bruce A. Svingen, Professor; B.A., St. Olaf College; Ph.D., Michigan State University; 1987 –

PURPOSE

The Chemistry Department offers four Bachelor of Science majors to prepare students to enter business, industry, professional schools, graduate schools in chemistry, and the environmental field. Students in these programs have ample opportunity for part-time employment in work related to chemistry either in the department or in local industry. They are encouraged to become involved in research projects with members of the department in preparation and characterization of novel inorganic compounds; synthesis and isolation of natural products; study of organic reaction mechanisms; analytical work and environmental studies for local industries and government; thermodynamics, kinetic, and quantum mechanical studies of multi-component systems; toxicology and drug metabolism; computer molecular computation and modeling in chemistry; and synthesis, characterization, and applications of polymers.

In addition, the department offers B.S. Chemistry (Teaching) and B.S. Physical Science (Teaching) majors for students wishing to teach chemistry or physical science. The major meets Minnesota teacher certification requirements. Wisconsin certification requires minor modifications. Students preparing for certification in other states should consult with the department to learn of any necessary modifications. The department also offers three minors in chemistry: biochemistry, polymer chemistry, and chemistry.

The Chemistry Department is home to the Southeast Minnesota Analytical Service (SEMAS), which provides educational opportunities through part-time employment.

PRE-PROFESSIONAL SEQUENCES

The Chemistry Department sponsors pre-professional sequences, which are not degree programs (e.g., major or minor) at WSU. The programs are preparatory for a degree at another college or university. The pre-professional sequences offered through the Chemistry Department are pre-medicine (Allopathic and Osteopathic) and pre-pharmacy. For detailed course descriptions, see "Pre-Professional Sequences" in this catalog.

ACCREDITATION AND MEMBERSHIP

The American Chemical Society (ACS) has examined all aspects of the Department of Chemistry and has approved its overall program. A student completing the B.S. Chemistry Major-Option B will be "certified" by the ACS as a professional chemist.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in their major, minor, options, concentrations, and licensures on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Chemistry Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

- CHEM 360 Chemical Information (2)
- CHEM 436 Topics in Environmental Chemistry (3)
- CHEM 475 Seminar in Chemistry (1)

Math/Critical Analysis O

- CHEM 412 Physical Chemistry I (3)
- CHEM 414 Physical Chemistry II (3)

Writing P

- CHEM 400 Biochemistry I (4) (**Note:** Only 1 S.H. of CHEM 400 counts as a Writing Flag.)
- CHEM 402 Biochemistry II Lab (1)
- CHEM 413 Physical Chemistry Lab I (1)
- CHEM 415 Physical Chemistry Lab II (2)
- CHEM 426 Analytical Chemistry II (4)
- CHEM 430 Individual Problems in Chemistry (1-3)

Flag courses that can be used to satisfy chemistry major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR CHEMISTRY - OPTION A (CHA)

63-67 S.H. (No Minor Required)

REQUIRED COURSES (57-61 S.H.)

Chemistry - CHEM (41 S.H.)

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- I 360 Chemical Information (2)
- O 412 Physical Chemistry I (3)
- P 413 Physical Chemistry I Lab (1)
- O 414 Physical Chemistry II (3)
- P 415 Physical Chemistry II Lab (2)
- 425 Analytical Chemistry I (4)
- P 426 Analytical Chemistry II (4)
- 450 Advanced Inorganic Chemistry I (4)
- I 475 Seminar in Chemistry (1)

Note: Students should begin the math and chemistry sequences at the same time.

Mathematics (8-12 S.H.)

- MATH 120 Precalculus (4)
- MATH 160, 165 Calculus I, II (8)

Note: Precalculus, MATH 120 (4), may be omitted if a student has otherwise met the prerequisite for MATH 160.

Physics (8 S.H.)

- PHYS *221, *222 University Physics I, II (8)

ELECTIVES (6 S.H.)

CHEM 320, 401, 402 (P), 410, 411, 420, 427, 428, 430 (O), 436 (I), 438, 439, 447, 451, 470, 472

Note: CHEM 430 cannot account for more than 3 S.H. of chemistry electives.

B.S. MAJOR CHEMISTRY - OPTION B (CHB)

74-78 S.H. (No Minor Required)

Note: American Chemical Society certification will be given to students completing this option.

REQUIRED COURSES (61-65 S.H.)

Chemistry - CHEM (45 S.H.)

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- I 360 Chemical Information (2)
- P 400 Biochemistry I (4)
- O 412 Physical Chemistry I (3)
- P 413 Physical Chemistry I Lab (1)
- O 414 Physical Chemistry II (3)
- P 415 Physical Chemistry II Lab (2)
- 425 Analytical Chemistry I (4)
- P 426 Analytical Chemistry II (4)
- 450 Advanced Inorganic Chemistry I (4)
- I 475 Seminar in Chemistry (1)

Note: Students should begin the math and chemistry sequences at the same time.

Mathematics - MATH (8-12 S.H.)

- 120 Precalculus (4)
- 160, 165 Calculus I, II (8)

Note: Precalculus, MATH 120 (4), may be omitted if a student has otherwise met the prerequisite for MATH 160.

Physics - PHYS (8 S.H.)

- *221, *222 University Physics I, II (8)

ADDITIONAL REQUIREMENTS - CHEM (5 S.H.)

- P 430 Individual Problems in Chemistry (3)
- 451 Advanced Inorganic Chemistry II (2)

CHEMISTRY ELECTIVES (8 S.H.)

CHEM 401, 402 (P), 410, 411, 420, 427, 428, 436 (I), 438, 439, 447, 470, 472

OTHER SUGGESTED ELECTIVES

Computer programming, biology, geology, and German

B.S. MAJOR - BIOCHEMISTRY (CHBC)

75-79 S.H. (No Minor Required)

REQUIRED COURSES (75 S.H.)

Chemistry - CHEM (40 S.H.)

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- I 360 Chemical Information (2)
- P 400 Biochemistry I (4) (**Note:** Only 1 S.H. of CHEM 400 counts as a Writing Flag.)
- 401 Biochemistry I, II (3)
- 402 Biochemistry Laboratory (1)
- O 412 Physical Chemistry I (3)
- P 413 Physical Chemistry Laboratory I (1)
- 425 Analytical Chemistry I (4)
- 450 Advanced Inorganic Chemistry I (4)
- I 475 Seminar in Chemistry (1)

Note: Students should begin the math and chemistry sequences at the same time.

Mathematics - MATH (8-12 S.H.)

- 120 Precalculus (4)
- 160, 165 Calculus I, II (8)

Note: Precalculus, MATH 120 (4) may be omitted if students have otherwise met the prerequisite for MATH 160.

Physics - PHYS (8 S.H.)

- *221, *222 University Physics I, II (8)

Biology - BIOL (14 S.H.)

- * 241 Basics of Life (4)
- * 242 Organismal Diversity (4)
- P 308 Cell Biology (3)
- O 310 Genetics (3)

CHEMISTRY ELECTIVES (5 S.H.)

CHEM 414 (O), 415 (P), 426 (P), 427, 430 (P), 438, 439, 447, 451

Note: CHEM 430 cannot account for more than 3 S.H. of chemistry electives.

OTHER SUGGESTED ELECTIVES

STAT	210	Statistics (3) OR
STAT	305	Biometry (3)
MATH	260	Differential Equations and Linear Algebra (4)
ENG	210	Advanced Expository Writing (3)
BIOL	430	Molecular Biology (3) OR
P BIOL	431	Molecular Biology Laboratory (4)

B.S. MAJOR CHEMISTRY - ENVIRONMENTAL SCIENCE OPTION (CHES)

92-93 S.H. (No Minor Required)

Note: Alliance with environmental science options of other departments is described under "Environmental Science" on page 109.

CHEMISTRY CORE COURSES (29 S.H.)

	212, 213	Principles of Chemistry I, II (8)
	350, 351	Principles of Organic Chemistry I, II (9)
O	412	Physical Chemistry I (3)
P	413	Physical Chemistry I Lab (1)
	425	Analytical Chemistry I (4)
P	426	Analytical Chemistry II (4)

ENVIRONMENTAL SCIENCE OPTION REQUIREMENTS (10 S.H.)

	320	Environmental Chemistry (4)
P	430	Individual Problems (2)
I	436	Topics in Environmental Chemistry (3)
I	475	Chemistry Seminar (1)

ENVIRONMENTAL SCIENCE OPTION ELECTIVES (4 S.H.)

	400	Biochemistry I (4) (Note: Only 1 S.H. of CHEM 400 counts as a Writing Flag.)
	401	Biochemistry II (3)
	410	Polymer Chemistry (3)
O	414	Physical Chemistry II (3)
P	415	Physical Chemistry II Lab (2)
	420	Topics in Industrial Chemistry (2)
	427	Topics in Instrumental Chemistry (2)
	428	Chemical Separations (3)
	450	Advanced Inorganic Chemistry (2)
	470	Isotope, Nuclear and Radiochemistry (2)
I	475	Seminar in Chemistry (1) or other advanced chemistry electives as approved by the Chemistry Department

OTHER REQUIRED COURSES (49-50 S.H.)

Biology – BIOL (12 S.H.)

*	241	Basics of Life (4)
*	242	Organismal Diversity (4)
	312, 313	General Ecology Lecture and Lab (4)

Geoscience – GEOS (12 S.H.)

*	120	Dynamic Earth (4)
*	130	Earth and Life through Time (4)
	240	Watershed Science (4)

Mathematics – MATH (8 S.H.)

160, 165 Calculus I, II (8)

Physics – PHYS (8 S.H.)

*221, *222 University Physics I, II (8)

The following two courses (6 S.H.)

ECON	315	Environmental and Natural Resource Economics (3)
POLS	340	Environmental Policy (3)

One of the following courses (3-4 S.H.)

Biology – BIOL

I	315	Environmental Biology (3)
	335	Plant Ecology (4)
	360	Entomology (4)
P	415	Ecology of Large Rivers (4)
	420	Limnology (4)

Geoscience – GEOS

	315	Surficial Processes and Soils (4)
	325	Environmental Geoscience (3)
O	420	Applied Hydrogeology (4)

TEACHING OPTIONS: B.S. MAJOR - CHEMISTRY (Teaching) (CHET)

B.S. MAJOR - PHYSICAL SCIENCE (Teaching) (CPST)

The Chemistry Department, in cooperation with other science departments and the College of Education, has developed a Minnesota Board

of Teaching (BOT)-approved program. Students should be aware that the program described below may continue to change as the BOT considers changes to the Science Licensure Programs. Students will need to work closely with their academic advisor to ensure that they will be able to graduate with a BOT-approved degree. Successful completion of the Chemistry Teaching program will enable a student to apply for licensure in both 5-8 middle level general science and 9-12 high school chemistry upon achieving passing scores for both the Praxis I and II tests. Successful completion of the Physical Science Teaching program will enable a student to apply for licensure in both 9-12 high school chemistry and 9-12 high school physics upon achieving passing scores for both the Praxis I and II tests.

Notes:

1. Teaching majors must gain admission through a competitive admission process to the Education Program before they can enroll in Professional Education Sequence courses. (See the Department of Education section on page 90).
2. Students must have and maintain a cumulative GPA of 2.75 to be admitted to and continue in the Professional Education program.
3. Students must have a minimum GPA of 2.50 in all courses completed in the declared major.
4. Teaching majors must take all courses in the Professional Education Sequence in addition to the courses in the content area listed below. EDUC 305 and EDUC 312 must be taken together in the semester immediately following admission to the Education Program. EDUC 429 and EDUC 459 should be taken together in the semester prior to student teaching.
5. Individuals holding a college degree who need only a certification for grades 9-12 physics are required to satisfy the standard content competencies gained through successful completion of PHYS 221, 222, 223, 311, 320, 340, 345, 350, 330, 370, and 460; CHEM 212, 213; MATH 160, 165, 270; EDUC 305, 308, 312, 429, 449, 459, and EDST 465.
6. Individuals holding a college degree who need only a certification for grades 9-12 chemistry are required to satisfy the standard content competencies gained through successful completion of CHEM 212, 213, 320, 340, 360, 400, 412, 413, 425, 430, 431 and 475; PHYS (221, 222) or (201, 202), and 311; MATH 160, 165; EDUC 305, 308, 312, 429, 449, 459, 459, and EDST 465.

B.S. MAJOR - CHEMISTRY (Teaching) (CHET)

80 S.H. (No Minor Required)

REQUIRED COURSES (30 S.H.)

Chemistry – CHEM (30 S.H.)

	212, 213	Principles of Chemistry I, II (8)
	320	Environmental Chemistry (4)
	340	Organic Chemistry Survey OR
	350	Principles of Organic Chemistry I (4)

Note: Only students planning to take CHEM 351 as the chemistry elective below should take CHEM 350.

I	360	Chemical Information (2)
O	412	Physical Chemistry I (3)
P	413	Physical Chemistry I Lab (1)
	425	Analytical Chemistry I (4)
P	430	Individual Problems (1)
	431	Guided Study in Teaching Chemistry (2)
I	475	Seminar in Chemistry (1)

OTHER REQUIREMENTS (46 S.H.)

Biology – BIOL (8 S.H.)

*	241	Basics of Life (4)
*	242	Organismal Diversity (4)

Geoscience – GEOS (12 S.H.)

*	105	Astronomy (4) OR
*	110	Oceanography (4) OR
*	115	Meteorology (4)
*	120	Dynamic Earth (4)
*	130	Earth and Life through Time (4)

Mathematics – MATH (8 S.H.)

	160	Calculus I (4)
	165	Calculus II (4)

Physics – PHYS (12 S.H.)

	*221, *222	University Physics I, II (8) OR
	*201, *202	General Physics (8)
	311	Science Teaching Methods (4)

Health, Exercise and Rehabilitative Sciences – HERS (3 S.H.)

	204	Personal and Community Health (3)
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Special Education – SPED (3 S.H.)

*	400	Education of Exceptional Children/Youth (3)
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ELECTIVES (4 S.H.)**Chemistry (4 S.H.)**

Any 300-level or higher chemistry courses, or other advanced chemistry electives as approved by the Chemistry Department, or CHEM 351 for students taking CHEM 350.

PROFESSIONAL EDUCATION SEQUENCE (32 S.H.)**Notes:**

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 305 Human Development and Learning: Secondary (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 449 Middle Level Philosophy, Organization and Planning (3)
- P EDUC 459 Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

B.S. MAJOR - PHYSICAL SCIENCE (Teaching) (CPST)

80 S.H. (No Minor Required)

REQUIRED COURSES (62 S.H.)**Chemistry - CHEM (28 S.H.)**

- 212, 213 Principles of Chemistry I, II (8)
- 320 Environmental Chemistry (4)
- 340 Organic Chemistry Survey (4)
- I 360 Chemical Information (2)
- O 412 Physical Chemistry I (3)
- P 413 Physical Chemistry I Lab (1)
- 425 Analytical Chemistry I (4)
- 431 Guided Study in Teaching Chemistry (2)

Physics - PHYS (32 S.H.)

- *221, *222, 223 University Physics I, II, III (12)
- 311 Science Teaching Methods (4)
- 330 Electronics (4)
- P 340 Modern Physics (4)
- 350 Mechanics (4)
- P 370 Optics (4)

Physics or Chemistry (2 S.H.)

- P CHEM 430 Individual Problems (1) AND
- I CHEM 475 Seminar in Chemistry (1) OR
- I PHYS 460 Undergraduate Research (2)

OTHER REQUIREMENTS (18 S.H.)**Mathematics - MATH (12 S.H.)**

- 160 Calculus I (4)
- 165 Calculus II (4)
- 270 Differential Equations (4)

Health, Exercise and Rehabilitative Sciences - HERS (3 S.H.)

- HERS 204 Personal and Community Health (3)

Special Education - SPED (3 S.H.)

- * SPED 400 Education of Exceptional Children/Youth (3)

PROFESSIONAL EDUCATION SEQUENCE (29 S.H.)**Notes:**

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 305 Human Development and Learning: Secondary (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 459 Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

B.S. MINOR - CHEMISTRY (CHEM)

30-34 S.H.

REQUIRED COURSES (28-32 S.H.)**Chemistry - CHEM (24 S.H.)**

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- O 412 Physical Chemistry I (3)
- 425 Analytical Chemistry I (4)

Mathematics - MATH (4-8 S.H.)

- 120 Precalculus (4)
- 160 Calculus (4)

Note: Precalculus, MATH 120 (4), may be omitted if a student has otherwise met the prerequisite for MATH 160. MATH 150 (3) and MATH 155 (3) can be used to satisfy MATH 160 in this minor.

ELECTIVES (2 S.H.)

Chemistry electives

B.S. MINOR - BIOCHEMISTRY (BIOC)

29 S.H.

REQUIRED COURSES (29 S.H.)**Chemistry - CHEM (25 S.H.)**

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- 400 Biochemistry I (4) (**Note:** Only 1 S.H. of CHEM 400 counts as a Writing Flag.)
- 401 Biochemistry II (3)
- 402 Biochemistry Laboratory II (1)

Note: CHEM 340, Organic Chemistry (4), may be substituted for CHEM 350.

Mathematics - MATH (4 S.H.)

- 120 Precalculus (4) OR
- 160 Calculus I (4)

Note: Precalculus, MATH 120 (4), may be omitted if a student has otherwise met the prerequisite for MATH 160. MATH 150 (3) and MATH 155 (3) can be used to satisfy MATH 160 in this minor.

B.S. MINOR - POLYMER CHEMISTRY (CHP)

27-31 S.H.

REQUIRED COURSES (27-31 S.H.)**Chemistry - CHEM (23 S.H.)**

- 212, 213 Principles of Chemistry I, II (8)
- 350, 351 Principles of Organic Chemistry I, II (9)
- 410 Polymer Chemistry (3)
- 411 Synthesis and Characterization of Polymers (3)

Note: CHEM 340, Organic Chemistry (4), may be substituted for CHEM 350.

Mathematics - MATH (4-8 S.H.)

- 120 Precalculus (4)
- 160 Calculus I (4)

Note: Precalculus, MATH 120 (4), may be omitted if a student has otherwise met the prerequisite for MATH 160. MATH 150 (3) and MATH 155 (3) can be used to satisfy MATH 160 in this minor.

COURSE DESCRIPTIONS (CHEM)**100 - Chemistry Appreciation (3 S.H.)**

Chemical concepts presented as lecture-demonstrations for students who wish to gain an appreciation of the chemical world. Meets University Studies requirements; not intended as preparation for other chemistry courses. Does not preclude taking any other chemistry courses for credit. No laboratory. Not open to students with credit in higher numbered chemistry courses. Offered each semester.

106 (3 S.H.), 107 (4 S.H.) - Chemistry in Our World

Intended to introduce students to chemistry and give them an appreciation and understanding of the role chemistry plays in their everyday lives. Topics covered include atomic structure, bonding, water, acid rain, and energy. This course is intended both for University Studies students and as a first course for students who have not had high school chemistry and wish to prepare to take other chemistry classes. Students may elect to take the course with lab (CHEM 107, 4 S.H.) or without lab (CHEM 106, 3 S.H.). **Note:** Students may enroll in either CHEM 106 or CHEM 107, but they cannot earn credit for both courses. Offered each semester.

108 - Introductory General Chemistry (4 S.H.)

Intended to introduce the students to chemistry. Three lectures and one laboratory/discussion period per week. Intended to be the first course

*"Additional Requirements" course as defined in Item 3, page 18

in chemistry for students who have not had high school chemistry and wish to prepare for entrance into CHEM 210 or CHEM 212. Students completing the course may later elect CHEM 210 or 212 for credit or, with the department's permission, they may go directly into CHEM 213. Offered yearly.

190 - Forensic Chemistry (4 S.H.)

This interdisciplinary course in forensic science meets the needs of criminal justice majors as well as students who desire a course that offers a broad scientific experience. This course will offer non-science majors opportunities to see the relevance of chemistry, biology, geology, and physics to their chosen professional life. It will provide an informative overview of techniques used by modern criminalistics labs and offer students a hands-on opportunity to explore the intricacies of how criminal investigation relies on forensic science. Through this course, students will gain an appreciation of how local law enforcement agencies rely on scientific studies for technical field work. Offered yearly.

210 - Chemistry for Health Sciences (5 S.H.)

A study of the principles of general, organic, and biological chemistry with emphasis on the numerous connections between chemistry and human health. Four lectures and one laboratory period per week. Prerequisites: High school chemistry or CHEM 108 and MATH 100 or qualifying score on mathematics placement exam. Recommended for pre-nursing majors. Offered fall and spring semesters.

212, 213 - Principles of Chemistry I, II (4 S.H. Each)

An in-depth study of the principles of chemistry including atomic structure, the chemical bond, solutions, thermodynamics, kinetics, acid-base theory, oxidation-reduction, complex ion equilibrium, and electrochemistry. Organic and inorganic examples are used when appropriate throughout the courses, and a short unit on organic chemistry is included. Laboratory and lecture are coordinated. Prerequisite: High school intermediate algebra or concurrent enrollment in MATH 120 or a higher-numbered mathematics course. Offered yearly.

320 - Environmental Chemistry (4 S.H.)

An introductory study of current environmental issues, emphasizing the chemistry and chemical interactions underlying these topics. The topics may include, but are not limited to, global warming, depletion of stratospheric ozone, ground level air chemistry and air pollution, organic chemicals in the environment, toxic heavy metals, chemistry of natural waters, and energy production and its environmental consequences. Lecture and Laboratory. Prerequisite: One year of general chemistry or instructor's permission. Offered yearly.

340 - Organic Chemistry Survey (4 S.H.)

A survey of the chemistry of organic compounds with emphasis on structure, properties, synthesis, and reactions of the major functional group families. Mechanisms of major reaction types are explored. Laboratory emphasizes separation techniques and synthesis. Prerequisites: CHEM 212 and CHEM 213. Not open to students who expect to take CHEM 350. Offered yearly.

341 - Organic and Polymer Chemistry (4 S.H.)

An introduction to the organic chemistry of synthetic polymers. The introduction to nomenclature, properties, synthesis, and characterization of organic compounds is followed by the application of these concepts to commercially important polymeric materials. Laboratories focus on the synthesis and characterization of addition and condensation polymers. Three lecture periods and one laboratory per week. Prerequisite: CHEM 213. Not open to students expecting to take CHEM 350, CHEM 351, and CHEM 410. Offered yearly.

350 (4 S.H.), 351 (5 S.H.) - Principles of Organic Chemistry I, II

A thorough study of the chemistry of organic compounds, with emphasis on structure, properties, synthesis, purification, principles and mechanisms of reactions, instrumental methods, compound identification, and important biological and economic applications. Prerequisites: For CHEM 350: CHEM 212 and CHEM 213; for CHEM 351: CHEM 350 or CHEM 340 or CHEM 341 with instructor's permission. Offered yearly.

354 - Characterization of Organic Compounds (2 S.H.)

Using instrumental methods in the identification of organic compounds. Focus will be on gaining proficiency in instrument use and utilizing them in conjunction with various elucidation techniques. Prerequisite: CHEM 351 or instructor's permission. Offered irregularly.

360 - Chemical Information (2 S.H.)

Finding chemical information by on- and off-line searching of data bases by computer and by hand-searching print-form reference works such as Chemical Abstracts, dictionaries, encyclopedias, index serials, formularies, treatises, and review serials. Lecture topics will also include units on patents, institutional publications and the primary periodical literature. Includes chemical information retrieval from the Internet, the preparation of a bibliography on a chemical topic using exhaustive manual and computer searching of the world's literature. Prerequisite: Credit or concurrent enrollment in CHEM 340 or CHEM 350. Offered yearly.

399 - Chemistry Internship (1-6 S.H.)

Supervised industrial, business, or government experience designed by the WSU chemistry faculty advisor, the work supervisor, and the student. Open only to the chemistry major or minor whose GPA in science and mathematics is 2.5 or better and who receives departmental approval. P/NC option available, but only up to 4 S.H.; may be taken for letter grade. Prerequisite: CHEM 425. Offered yearly.

400 (4 S.H.), 401 (3 S.H.) - Biochemistry I and II

Introduction to the chemistry of living organisms; emphasis on the structure and function of proteins, carbohydrates, lipids, and nucleic acids; enzymatic catalysis, thermodynamics, control and integration of metabolic processes; nucleotide metabolism and expression and transmission of genetic information. Prerequisite for CHEM 400: CHEM 340 or CHEM 350 and CHEM 412 (or instructor's permission); prerequisite for CHEM 401: CHEM 400. Offered yearly.

402 - Biochemistry Laboratory II (1 S.H.)

Experiments accompanying CHEM 401. Laboratory work should be taken concurrently with CHEM 401 but can be taken following successful completion of CHEM 401. Prerequisite: CHEM 400. Offered yearly.

410 - Polymer Chemistry (3 S.H.)

An overview of polymer chemistry is presented. Major topics include polymerization reactions and kinetics, polymer morphology, polymer properties, and polymer characterization. Prerequisite: CHEM 351 or CHEM 340. Credit or concurrent registration in CHEM 412 or ENGR 300 or instructor's permission. Offered yearly.

411 - Synthesis and Characterization of Polymers (3 S.H.)

An in-depth study of polymer synthesis and characterization. The lecture portion of the course will focus on the controlled synthesis of polymeric materials including strategies for controlling polymer molecular weight, polymer architecture, and polymer microstructure. Characterization of polymers using spectroscopy, microscopy, and diffraction techniques will also be covered. The laboratory portion of the course will include synthesis of polymers using traditional addition and condensation polymerization techniques and using more recently developed methods including ROMP and ATRP. Characterization of polymers will include viscometry, thermal analysis, and spectroscopic methods. Prerequisite: CHEM 410. Offered every other year.

412 - Physical Chemistry I (3 S.H.)

States of Matter and Equation of States. Thermodynamics of one component and multi-component systems. Equilibria. Computer applications. An introduction to quantum mechanics and spectroscopy. Prerequisites: One year each of college chemistry and physics, and credit or concurrent enrollment in Calculus. Offered yearly.

413 - Physical Chemistry Laboratory I (1 S.H.)

Experiments accompanying CHEM 412. Laboratory work should be taken concurrently with CHEM 412 but can be taken following successful completion of the course. Computer applications. Prerequisite: CHEM 412. Offered yearly.

414 - Physical Chemistry II (3 S.H.)

Quantum Chemistry. Chemical Kinetics: rate laws, mechanisms, temperature-dependence, catalysis. Boltzmann's distribution. Theories of reaction rates: collision model, transition state theory, diffusion and activation-controlled reactions, quantum mechanical tunneling, isotope effects. Properties of multi-component solutions. Electrochemistry. Statistical Mechanics. Prerequisite: CHEM 412. Offered yearly.

415 - Physical Chemistry Laboratory II (2 S.H.)

Experiments accompanying CHEM 414. Laboratory work should be taken concurrently with CHEM 414 but can be taken following successful completion of the course. Prerequisite: CHEM 412. Offered yearly.

420 - Topics in Industrial Chemistry (2 S.H.)

Applications of chemistry in industry. The chemistry and technology of selected industrial processes. Prerequisite: CHEM 340 or CHEM 350. Offered every two or three years.

425, 426 - Analytical Chemistry I & II (4 S.H. Each)

A sequence of courses stressing modern analytical chemistry. A study of the theory and practice of the quantitative examination of chemical systems. CHEM 425 covers volumetric and fundamental visible spectrophotometric methods. CHEM 426 covers the instrumental methods of UV-vis, emission, and AA spectroscopy, electrical methods, and gas and liquid chromatography. Prerequisite for CHEM 425: one year of chemistry; prerequisites for CHEM 426: CHEM 425 and CHEM 412. Offered yearly.

427 - Topics in Instrumental Chemistry (1-2 S.H.)

Selected topics from the principles and application of the instrumental methods of IR, UV-vis, and AA spectroscopy; NMR and mass spectrometry; gas and liquid chromatography. Prerequisites: Organic and analytical chemistry and instructor's permission. Offered every two or three years.

428 - Chemical Separations (3 S.H.)

A lecture and laboratory course addressing problems encountered in

separating chemical species on both the analytical and production scale. Both theory and practice will be considered. Prerequisite: CHEM 425. Offered irregularly.

430 - Individual Problems in Chemistry (1-3 S.H.)

An opportunity for the qualified advanced undergraduate to work independently on chemical research under the direction of a chemistry faculty member. A careful write-up of results is required. Time-arranged. Prerequisites: 13 semester hours in chemistry and instructor's permission. May not be taken for more than 3 credits per semester; may be repeated to a total of 11 credits. Offered each semester.

431 - Guided Study in Teaching Chemistry (2 S.H.)

An opportunity for the qualified teaching candidate to obtain practical knowledge about and experience with teaching chemistry contents, techniques of planning and safely presenting chemical lecture demonstrations, and planning and safely carrying out student laboratory exercises. Prerequisites: One year of university chemistry and organic chemistry; junior or senior standing. Credits may not be applied toward "electives" category of other programs in chemistry.

436 - Topics in Environmental Chemistry (3 S.H.)

This course covers advanced topics in environmental chemistry. Topics studied will depend upon the interest of the class and may include topics such as acid rain, endocrine disruption, risk assessment, global warming, and bioaccumulation. Prerequisite: CHEM 320 or instructor's permission. Offered every other year.

438 - Medicinal Chemistry (2 S.H.)

An introductory course describing selected topics in the chemistry of synthetic and naturally occurring organic medicinals. Chemical structure and its relationship to biological activity. Lecture and problem-solving discussions. Prerequisite: CHEM 340 or CHEM 350. Offered every two or three years.

439 - Biochemistry of Drug Metabolism (2 S.H.)

An advanced elective that emphasizes the qualitative and quantitative chemistry of drug metabolism. Topics include pharmacokinetics and pharmacodynamics, drug absorption, distribution and excretion, phase I and phase II biotransformation, principles of therapeutics, and toxicology. Prerequisite: CHEM 401 or instructor's permission. Offered every three years.

447 - Advanced Organic Chemistry (2 S.H.)

Chemical kinetics, thermodynamics, stereochemical concepts, and the use of

isotopes are applied to organic reaction mechanisms. The study of molecular orbital theory forms the basis for predicting reaction mechanisms. Lecture course. Prerequisites: CHEM 351 and CHEM 412. Offered every two or three years.

450 - Advanced Inorganic Chemistry I (4 S.H.)

Descriptive and theoretical approaches to inorganic reactions and structures with emphasis on structural concepts including symmetry and group theory and molecular orbital theory. Laboratory work includes the preparation of various main group and transition metal compounds and use of modern instruments in characterizing these compounds. Prerequisite: CHEM 412. Offered yearly.

451 - Advanced Inorganic Chemistry II (2 S.H.)

A continuation of the treatment of theoretical and descriptive inorganic chemistry introduced in CHEM 450. Prerequisites: CHEM 414 and CHEM 450. Offered yearly.

465 - History of Chemistry (1 S.H.)

A chemistry course emphasizing the fascinating interplay of ideas during the development of the chemical body of knowledge. Prerequisite: One semester of organic chemistry. Offered irregularly.

470 - Isotope, Nuclear and Radiochemistry (2 S.H.)

Introduction and basic treatment of the nucleus with emphasis on concepts in chemistry. Interactions of radiation with matter. Nuclear structure, stabilities and associated radioactive decay processes. Applications in nuclear reactors, particle accelerators, and medical therapies. Prerequisite: CHEM 412. Offered every two or three years.

472 - Quantum Chemistry and Spectroscopy (2 S.H.)

Description of quantum mechanics and application to spectroscopy of atoms and molecules. Discussion of spectroscopic techniques includes detailed derivations of microwave, infra-red, Raman, electronic, NMR, and ESR spectra. Perturbation Theory and Group Theory are introduced to determine structure of polyatomic molecules. Prerequisite: CHEM 412. Offered every two or three years.

475 - Seminar in Chemistry (1 S.H.)

Students are expected to make oral and poster presentations on literature or laboratory research. Exploration of presentations by persons outside the department is included. Additional outreach opportunities will be scheduled as permitted. Prerequisite: 20 semester hours of chemistry. Offered yearly.

CHILD ADVOCACY STUDIES

Stark Hall, Room 341 (507-457-5131)

Jacqueline Hatlevig (Program Director)

Email: jhatlevig@winona.edu

FACULTY

Jacqueline Hatlevig, Professor, Nursing; B.S.N., Winona State University; M.S.N., Ph.D., University of Wisconsin-Milwaukee; 1987 -

Carole Madland, Professor, Social Work; M.S.W., University of Tennessee-Nashville; B.A., Ph.D., Washington University (St. Louis, Missouri); 1991 -

ASSOCIATED FACULTY

Tamara Berg, Associate Professor; B.A., University of Wisconsin; M.A., Ph.D., Indiana University, Bloomington; 1995 -

J. Mark Norman, Associate Professor; B.A., M.S., St. Cloud State University; Ph.D., South Dakota State University; 1996 -

Todd Paddock, Assistant Professor; B.S., University of Michigan; M.S., Cornell University; Ph.D., Indiana University; 2004 -

PURPOSE

The Child Advocacy Studies curriculum focuses on experiential, interdisciplinary, ethical, and culturally sensitive content that provides professionals working with children a common knowledge base for responding to child maltreatment. This program focuses on developing students' understanding of the numerous factors that lead to child maltreatment and existing responses to child maltreatment. The goal is to prepare students to work effectively within systems and institutions that respond to these incidents. Students will learn about the various disciplinary responses to child maltreatment and develop a multidisciplinary understanding of the most effective responses. Students completing the courses in this program will be better equipped to carry out the work of agencies and systems (health care, criminal justice, and social services) as they advocate on behalf of the needs of children as victims and survivors of child abuse.

B.A. MINOR CHILD ADVOCACY STUDIES (CAST)

21 S.H.

REQUIRED COURSES—CAST (18 S.H.)

301 Perspectives on Child Maltreatment & Child Advocacy (3)

302 Global Child Advocacy Issues (3)

401 Professional & System Responses to Child Maltreatment (4)

402 Responding to the Survivor of Child Abuse and Survivor Responses (4)

407 CAST Capstone Experience (4)

ELECTIVES—CAST (3 S.H.)

403 Child Exploitation, Pornography & the Internet (3)

404 Sociology of Child Poverty (3)

405 Gender, Violence and Society (4)

406 Child Advocacy Research Studies (3)

Students must apply for the child advocacy studies minor; applications for the minor are accepted in the fall and spring semesters. Please contact the Program Director for information about the application process. Students who wish to pursue the child advocacy studies certification are not required to complete an application.

CHILD ADVOCACY STUDIES CERTIFICATION

Students who complete all three CAST certification courses receive a certificate of completion from WSU and the National Child Protection Training Center (NCPTC).

REQUIRED CERTIFICATION COURSES – CAST (11 S.H.)

- 301 Perspectives on Child Maltreatment & Child Advocacy (3)
- 401 Professional & System Responses to Child Maltreatment (4)
- 402 Responding to the Survivor of Child Abuse and Survivor Responses (4)

CERTIFICATION AND MINOR REQUIREMENTS

Students must receive a “C” or better in each course to obtain certification. In addition, students are expected to adhere to the ethical standards of the program.

COURSE DESCRIPTIONS (CAST)

301 - Perspectives on Child Maltreatment & Child Advocacy (3 S.H.)

This is the introductory course for child advocacy studies. This course covers the history, comparative perspectives, legal framework, responses to child maltreatment, skills necessary to do the work, other pertinent issues pertaining to child maltreatment and child advocacy, and the future. The field of child maltreatment is fraught with controversy. Much of the class focuses on these controversies. The approach of the course will be from a variety of professional perspectives, including that of a prosecuting attorney versus a defense attorney. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas in which knowledge of child maltreatment and advocating for children might be necessary. Much of the work will be hands-on. Prerequisite: None. CAST 301 is in the University Studies Critical Analysis category.

302 - Global Child Advocacy Issues (3 S.H.)

This is a core course for the child advocacy studies minor. The purpose is to prepare students to recognize child advocacy issues around the world. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas in which knowledge of child maltreatment and advocating for children will be necessary. Multidisciplinary approaches to advocacy in different countries throughout the world will be presented and discussed. Prerequisite: None. CAST 302 is in the University Studies Unity and Diversity, Global Perspective category.

401 - Professional & System Responses to Child Maltreatment (4 S.H.)

This course focuses on the responses of professionals to allegations of child maltreatment. The purpose is to expand the student's knowledge and skills in identifying, investigating, and prosecuting child maltreatment. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, and other areas in which knowledge of child maltreatment investigation and advocacy are necessary. Students will receive competency-based skills training such as forensic interviewing, documentation, and so on. Recommended prerequisites: Developmental psychology and communication courses.

402 - Responding to the Survivor of Child Abuse and Survivor Responses (4 S.H.)

The purpose of this course is to prepare students to recognize the effects of child maltreatment and to apply intervention strategies for children and their families. Multidisciplinary approaches to prevention, advocacy, and treatment of child maltreatment survivors will be presented and discussed. The course is designed for students majoring in criminal justice, education, social work, sociology, psychology, nursing, paralegal, or other areas in which knowledge of child maltreatment and advocating for children will be necessary. The experiential lab for this course involves courtroom observation and interaction with children. Prerequisites: CAST 301, CAST 401, or instructor's permission.

403 - Child Exploitation, Pornography & the Internet (3 S.H.)

The overall goal of this course is the study and analysis of child sexual abuse and the manner in which human and social services respond to this problem. Specifically, this course will examine the predatory actions of offenders who engage in child sexual abuse and exploitation. Included in this assessment is an understanding of how perpetrators use computers, the Internet, and emerging technologies to exploit children. Students will also learn how social services and the criminal justice system respond to this phenomenon. Thus, the student will understand and appreciate the roles of law enforcement, forensics, courts, social workers, and health service providers in the detection, investigation, and prosecution of this form of child exploitation.

404 - Sociology of Child Poverty (3 S.H.)

Students will analyze poverty and child poverty in the U.S. while placing both in an international and historical context. They will understand the demographics of poverty and the effects of poverty on children. They will critically evaluate sociological research and theories for poverty and child poverty, particularly as they relate to child maltreatment. This course is useful for students in fields such as nursing, criminal justice, education, social work, sociology, pre-medicine, and pre-law.

405 - Gender, Violence and Society (4 S.H.)

This course introduces students to the roots of gender-based violence, the political and the cultural structures that perpetuate it; the course also explores how this violence might be brought to an end. Students will investigate the local and global impact of violence; how gendered violence intersects with race, class, sexuality, age, physical ability and the oppressions that are linked to these identities; and strategies for addressing gender-based violence. The overlap between gender-based violence and child abuse and neglect will be addressed under each topic. As part of the class, students will complete a 45-hour advocacy training requirement and 15 hours of volunteer advocacy work offered in partnership with the Women's Resource Center of Winona. Course time will be divided between 2 credits of lab and 2 credits of theory. Prerequisite: CAST 301 or instructor's permission.

406 - Child Advocacy Research Studies (3 S.H.)

Students will read, interpret, and evaluate the significance of research findings to child advocacy study. The course helps students understand the role of research and information technology in providing evidence-based practice for child advocacy study within their respective disciplines. Students work in small groups to critique research studies and synthesize their knowledge of the research process in the analysis of several studies. These studies focus on concepts relevant to child advocacy such as the effects of maltreatment, prevention and education; cultural elements of practice; as well as other factors that influence practice with families affected by maltreatment. This course also examines research design, ethical issues in research, the professional's role in research, and the application of technology. Students will explore the use of computers and technology for processing and managing data. Prerequisites: CAST 301, 401, and 402, or instructor's permission.

407 - CAST Capstone Experience (4 S.H.)

This course is an intense site-based experience of the student's choice designed to encapsulate the essence of baccalaureate professional role development in an internship experience. This synthesis course allows students to expand their understanding of major concepts of child advocacy, experiential learning, and evidence-based practice in a setting of their choice. A multidisciplinary approach will be emphasized as students focus on ethical decision-making and cultural sensitivity with clients in a community location. Students work with preceptors in agencies and develop a project addressing a need within that agency. Prerequisites: CAST 301, 401, and 402 or instructor's permission.

CLINICAL LABORATORY SCIENCE

Pasteur Hall, Room 220 (507-457-5270)

Program Director: *Dr. Judith A. Loewen* (507-457-2993)

PROGRAM OVERVIEW

The Clinical Laboratory Science (CLS) Program is a four-year course of instruction administered by the Biology Department and the College of Science and Engineering. CLS includes both coursework at the WSU campus and clinical training at an approved and affiliated clinical site. Upon satisfactory completion of the program, the student is eligible to apply for examination by two certifying agencies, the National Accrediting Agency for Clinical Laboratory Science (NAACLS) and the Committee on Allied Health Education and Accreditation (CAHEA). Successful completion of these exams leads to certification as a Clinical Laboratory Scientist/Medical Technologist.

First-year students entering this program should consult with the Program Director soon after arriving on campus. Other students wishing to enter this program must consult with the Program Director prior to declaring this major.

CAREER OPPORTUNITIES

Individuals with a Bachelor of Science in Clinical Laboratory Science and certification are employed in hospital and clinical settings, where they are responsible for a variety of analyses of fluids and other types of specimens. They may also specialize in one area, such as blood banking or clinical microbiology. This degree also provides the appropriate preparation for students interested in continuing their education toward a graduate degree or a certificate field such as physiology, microbiology, or cytogenetics.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Biology Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

- BIOL 307 Cell Biology Laboratory (1)
- BIOL 309 Developmental Biology (3)
- BIOL 315 Environmental Biology (3)
- BIOL 409 General Microbiology (4)
- BIOL 423 Ecosystem Ecology (3)
- BIOL 460 General Parasitology (3)
- BIOL 462 Parasitology (4)

Math/Critical Analysis O

- BIOL 310 Genetics (3)

Writing P

- BIOL 308 Cell Biology (3)
- BIOL 323 General Physiology (5)
- BIOL 415 Ecology of Large Rivers (4)
- BIOL 431 Molecular Biology Lab (4)
- BIOL 445 Immunology (3)
- BIOL 499 Capstone Project (1-3)

Flag courses that can be used to satisfy requirements for the Clinical Laboratory Science major are identified in the lists of required courses and electives in this section.

B.S. MAJOR – CLINICAL LABORATORY SCIENCE (CLS)

(82 S.H.) No Minor Required

REQUIRED MAJOR COURSES – BIOL (43 S.H.)

- 201 Human Anatomy (4)
- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- I 307 Cell Biology Lab (1) OR
BIOL 311, Genetic Laboratory (1)
- P 308 Cell Biology (3)
- O 310 Genetics (3)
- P 323 General Physiology (4)
- 324 General Physiology Lab (2)
- 333 Clinical Laboratory Techniques (3)
- I 409 General Microbiology (4)
- 440 Clinical Physiology (3)
- 442 Clinical Laboratory Management (1)
- 443 Urinalysis (1)
- 444 Immunochemistry and Hematology (2)
- P 445 Immunology (3)
- 446 Immunology Laboratory (1)

Notes:

1. BIOL 241 and 242 should be taken prior to BIOL 201, 307, 308 and 310.
2. BIOL 308 and 310 should be taken prior to or concurrently with BIOL 307 or 311.

3. BIOL 323 should be taken after BIOL 201 and should be taken prior to or concurrently with BIOL 324.
4. BIOL 409, 440, 442, 443, 444, 445, and 446 should be taken after BIOL 308 and 310.

ADDITIONAL REQUIREMENTS (23 S.H.)

- * CHEM 212 Principles of Chemistry I (4)
- * CHEM 213 Principles of Chemistry II (4)
- CHEM 340 Organic Chemistry Survey (4)
- CHEM 400 Biochemistry I (4) OR CHEM 425 Analytical Chemistry I (4)
- MATH 120 Precalculus (4)
- O STAT 305 Biometry (3)

Notes:

1. MATH 150 and MATH 155 (6 S.H.) may be substituted for MATH 120.
2. CHEM 350 and 351 (9 S.H.) may be substituted for CHEM 340.

CLINICAL EDUCATION (16 S.H.)

- BIOL 450 Medical Technology I (12)
- BIOL 453 Medical Technology IV (4)

Note: The clinical training will be completed at an affiliated clinical training site.

OTHER ELECTIVES

Some clinical schools require a course in statistics; therefore, it is recommended that students select STAT 305 as an elective in the "Additional Requirements" above.

COMMUNICATION STUDIES

Performing Arts Center, Room 215 (507-457-5230)

www.winona.edu/communicationstudies

Edward Reilly (Chairperson)

FACULTY

Emilie Falc, Assistant Professor; B.A., University of Illinois; M.A., Ph.D., Ohio University; 2001 –

Lisa Glueck, Associate Professor; B.A., M.A., Washington State University, Pullman; Ph.D., University of Wisconsin; 1993 –

Susan Hatfield, Professor; B.S., M.A., Miami University (OH); Ph.D., University of Minnesota-Twin Cities; 1981 –

Amy Hermodson, Associate Professor; B.A., Concordia College; M.A., Michigan State University; Ph.D., University of Denver; 2000 –

Kelly Herold, Associate Professor; B.C.S., Dickinson State University (ND); M.A., University of Northern Colorado, Greeley; Ph.D., University of Southern Mississippi, Hattiesburg; 1996 –

Daniel Lintin, Associate Professor; B.A., Buena Vista College; M.A., Ph.D., University of Minnesota-Twin Cities; 1994 –

Rita Raboi-Gilcbrest, Associate Professor; B.A., University of Wisconsin; M.A., Ph.D., Ohio University; 2000 –

Edward Reilly, Associate Professor; B.A., Northern Illinois University; M.A., University of Maine; Ph.D., Louisiana State University; 1997 –

Tammy Swenson Lepper, Associate Professor; B.A., Concordia College; M.A., Ph.D., University of Minnesota-Twin Cities; 2004 –

Jin Xu, Assistant Professor; B.A., Changsha Tiedao University, China; M.A., Southwest China Normal University, China; M.S., Ph.D., Bowling Green State University; 2004 –

PURPOSE

The Department of Communication Studies (CMST) provides academic experiences conducive to intellectual, professional, and personal growth. Communication competence is increasingly recognized as necessary for personal and professional success. The department offers a major and minor in communication studies, as well as a minor in intercultural communication. CMST also offers a teaching major with the English Department; those requirements are listed in the English Department's section of the catalog.

Graduates in communication studies are well prepared for employment in a service-oriented economy. Recent graduates enjoy careers in a variety of fields including training and development, consulting, personnel, human resource development, sales, and teaching. A significant number of graduates also attend graduate school in areas of communication, counseling, student personnel, and law.

The department offers minors designed especially for those students who recognize the importance of effective communication skills in their chosen careers. These minors should be of special interest to students majoring in business, education, history, mass communication, nursing, political science, psychology, and social work, and sociology; however, students from all majors will find the course sequence for the minor beneficial. Students with a minor in communication studies are required to meet with their academic advisor every semester. Students majoring in communication studies may not minor in the department.

Communication studies majors and minors are encouraged to join the Communication Club, a co-curricular group of students and faculty who meet regularly for academic discussions and social activities.

SCHOLARSHIPS AND HONORS PROGRAM

Scholarships for juniors and first-semester seniors are available through a fund established in the name of Gary Evans. Applications are taken early in the spring semester.

The department offers an Honors Program. Students with a minimum overall GPA of 3.20 and a minimum major GPA of 3.60 are encouraged to see the department chairperson for details. In addition, the department sponsors a chapter of Lambda Pi Eta, the honorary society of the National Communication Association.

PASS/NO CREDIT (P/NC) COURSES

Except for CMST 399 (Internship), CMST majors and minors must take all courses in their major, minor, options, concentrations, and licensures on a grade-only basis. The P/NC option is available to non-majors except for CMST 191 and CMST 499. Courses offered on a pass/no credit only or grade only basis are so designated in the course descriptions.

GRADUATION REQUIREMENTS

Students declaring a major or minor in CMST should anticipate a minimum of four academic semesters (not including summer sessions) to complete CMST courses in sequence. Students majoring in communication studies must earn a minimum GPA of 2.50 in their major; no grade below a "C" is accepted. These standards apply to both CMST courses and courses taken through other departments to fulfill CMST major requirements.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Communication Studies offers the following flag courses in the University Studies Program:

FLAG

Oral I

CMST 451 Topics in Communication Studies (3)

CMST 452 Topics in Public Communication (3)

Math/Critical Analysis O

CMST 380 Communication Research Methods (3)

Writing P

CMST 371 Discussion and Small Group Dynamics (3)

CMST 485 Senior Seminar in Communication Theory (3)

Flag courses that can be used to satisfy Communication Studies major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - COMMUNICATION STUDIES (CS)

42 S.H. (Minor Required)

REQUIRED COURSES (33 S.H.)**Foundations (9 S.H.)**

- CMST 281 Intercultural Communication (3)
- CMST 282 Introduction to Communication Studies (3)
- CMST 283 Introduction to Rhetorical Studies (3)

Tools (9 S.H.)

- O CMST 380 Communication Research Methods (3)

Choose one of the following:

- O BUSA 220 Business Statistics (3)
- I PSY 231 Statistics (3)
- STAT 110 Fundamentals of Statistics (3) (Recommended)
- STAT 210 Statistics (3)

Choose one of the following:

- ENG 210 Advanced Expository Writing (3)
- ENG 211 Writing in Communities (3)
- P ENG 439 Technical Writing (3)

Theories (9 S.H.)**Choose three of the following:**

- CMST 366 Organizational Communication (3)
- P CMST 371 Discussion and Small Group Dynamics (3)
- CMST 375 Argumentation and Advocacy (3)
- CMST 387 Interpersonal Communication (3)
- CMST 389 Persuasive Communication (3)

Topics (3 S.H.)

- I CMST 451 Topics in Communication Studies (3) OR
- I CMST 452 Topics in Public Communication (3)

Capstone (3 S.H.)

- P CMST 485 Senior Seminar in Communication Theory (3)

ELECTIVES (9 S.H.)

Choose three additional CMST courses, excluding CMST 191. At least two courses must be at the 300- or 400-level. CMST 451 and/or 452 may be used more than once provided they cover different topics. Only three credits of CMST 399 can be used toward this requirement. Theory courses not used for the theory requirement may be used to meet this requirement.

B.A. MINOR - COMMUNICATION STUDIES (CS)

21 S.H.

REQUIRED COURSES (12 S.H.)**Foundations (6 S.H.)**

- CMST 282 Introduction to Communication Studies (3)
- CMST 283 Introduction to Rhetorical Studies (3)

Foundations/Theories (6 S.H.)**Choose two of the following:**

- CMST 281 Intercultural Communication (3)
- CMST 366 Organizational Communication (3)
- P CMST 371 Discussion and Small Group Dynamics (3)
- CMST 375 Argumentation and Advocacy (3)
- CMST 387 Interpersonal Communication (3)
- CMST 389 Persuasive Communication (3)

ELECTIVES (9 S.H.)

Choose three additional CMST courses, excluding CMST 191 and 399. At least two courses must be at the 300- or 400-level. CMST 451 and/or 452 can be used more than once provided they cover different topics. Foundation/theory courses not used for the foundation and/or theory requirement as listed above may be used to meet the elective requirement.

B.A. MINOR - INTERCULTURAL COMMUNICATION (ITCO)

21 S.H.

Note: CMST 381 is offered every third semester, not including summer sessions. Students should check with the department to see what semester it will be offered. CMST 381 will not be offered as an arranged course or as an independent study. Students who plan to graduate before it will be offered should choose a different minor. CMST 281 is a prerequisite for CMST 381.

REQUIRED COURSES (15 S.H.)

- CMST 281 Intercultural Communication (3)
- CMST 381 Advanced Intercultural and International Communication (3)

Choose one of the following:

- CMST 282 Introduction to Communication Studies (3) OR

CMST 283 Introduction to Rhetorical Studies (3)

Take either two different topics in CMST 291 (total of 6 S.H.), or take CMST 290 and CMST 291:

- CMST 290 Disability Communication Culture (3)
- CMST 291 Topics in Multicultural Communication (3)

ELECTIVES (6 S.H.)

Choose one 300- or 400-level CMST course, not including CMST 381 or CMST 399.

Choose one of the following:**Geography – GEOG**

- 211 Economic Geography (3)
- 213 Cultural Geography (3)
- 223 Geography of the Orient (3)
- 224 Geography of Africa (3)
- 225 Geography of Latin America (3)
- 233 Geography of the Middle East (3)

Global Studies – GS

- 200 Introduction to Global Studies

History – HIST

- 123 East Asian Civilization (3)
- 165 Latin American History (3)
- 170 African Civilization (3)
- 233 History of Mexico (3)
- 235 History of the American Indian (3)
- 320 North American Indian Civilization (3)
- 341 Modern Japan (3)
- 461 Latin American Social Revolution (3)
- 469 History of Brazil

Music – MUS

- 115 Music of East and Southeast Asia (3)
- 116 Music of the Americas (3)

Political Science – POLS

- 224 Politics and Society in Latin America (3)
- 226 Politics and Society in Africa (3)
- 270 Politics and Society in the Middle East (3)
- 332 European Political Systems (3)
- 335 Latin American Political Systems (3)
- 336 Post-Communist Political Systems (3)
- 337 Asian Political Systems (3)
- 390 Comparative Politics – Third World (3)

Sociology – SOC

- 201 Scandinavian Culture (3)
- 340 Social-Cultural Anthropology (3)
- 423 Race Relations and Minority Groups (3)

B.S. MAJOR - COMMUNICATION ARTS AND LITERATURE (Teaching) (CALT)

Requirements for this major are listed in English Department program description (page 104).

COURSE DESCRIPTIONS (CMST)**190 - Speech Activities (1-2 S.H.)**

A concentrated laboratory course in a specific area of speech, closely coordinated with an instructor's current project. May be taken for a total of 3 S.H. Offered yearly.

191 - Introduction to Public Speaking (3 S.H.)

Includes selection and organization of materials, delivery of common types of speeches, listening skills, and analysis and evaluation of presentations. Grade only. Offered each semester.

266 - Professional Communication Skills (3 S.H.)

Exploration of the theory and skills necessary for effective communication in professional situations. Emphasis on interviewing, group meetings, and oral communication including presentational speaking and use of presentational technology. Prerequisite: CMST 191. Offered yearly.

281 - Intercultural Communication (3 S.H.)

Investigates cultural processes influencing communication. Principles of communication theory and practice applied to intercultural communication situations including co-cultures within the U.S. as well as other cultures of the world. Offered each semester.

282 - Introduction to Communication Studies (3 S.H.)

Provides an overview of the basic communication theories applicable to a number of communication contexts (including small groups, interpersonal, and organizational). This course moves beyond CMST 191 by emphasizing theories instead of skills. Offered each semester.

283 - Introduction to Rhetorical Studies (3 S.H.)

Provides an introduction to the study of rhetoric and public address. The primary focus is on the manner in which people use communication to influence the behavior of others. It includes a broad survey of rhetorical theorists from Plato to the post-modernists. Prerequisite: CMST 191 or sophomore standing. Offered each semester.

287 - Conflict and Communication (3 S.H.)

This course examines the impact of communication behaviors on conflict escalation and resolution. Principles of negotiation and conflict management are examined within the context of interpersonal, inter-cultural, and international relationships. Offered yearly.

289 - Gender and Communication (3 S.H.)

A cultural approach to the study of males' and females' communication styles including language choice, creation of meaning, interpretation of reality, interaction patterns, nonverbal messages, and metaphors. Explores the similarities and differences between the male and the female communication culture in a variety of interpersonal and situational contexts including families, organizations, peer groups, friendships, and romantic relationships. Offered yearly.

290 - Disability Communication and Culture (3 S.H.)

Provides a comprehensive review of communication-based research examining disability in the contexts of interpersonal, organizational, and media with an emphasis in cultural communication differences. Offered alternate years.

291 - Topics in Multicultural Communication (3 S.H.)

A study of the communication and culture of groups from outside of the United States or of co-cultural groups within the United States. Each class will have a specific cultural focus. May be repeated with different topics. Offered two out of three semesters.

296 - Fundamentals of Interviewing (3 S.H.)

The interview as a specialized form of communication. Emphasis on skills and strategies of interviewer and interviewee in a variety of situations (survey, journalistic, helping, employment, etc.). Course tailored to meet specific needs of students. Prerequisite: CMST 191. Offered yearly.

366 - Organizational Communication (3 S.H.)

Facilitates understanding and promotes better communication in organizations. Emphasizes role of internal and external messages in the process of organizing, change, climate formation, culture and action. Prerequisites: CMST 191 and 282 or instructor's permission for non-majors. Offered each semester.

371 - Discussion and Small Group Dynamics (3 S.H.)

The study of interaction patterns and networks to gain practical and theoretical perspectives upon small-group theory. Prerequisites: CMST 191 and CMST 282 or instructor's permission for non-majors. Offered each semester.

375 - Argumentation and Advocacy (3 S.H.)

The study of "reason-giving" as a process for decision-making and the creation of social knowledge. Participants in the class use research, discussion, and practice in argumentative speaking and writing to develop critical thinking skills. Prerequisites: CMST 191 and CMST 282 or CMST 283 or instructor's permission for non-majors. Offered yearly.

380 - Communication Research Methods (3 S.H.)

This course surveys the various qualitative and quantitative approaches

used in communication research, providing a foundation for application in a research project of the student's choosing. Prerequisites: One 300-level theory course. (See list of theory courses under major.) Offered each semester.

381 - Advanced Intercultural and International Communication (3 S.H.)

Continuation of CMST 281, but emphasizes how to handle communication breakdowns that occur because of different cultural norms, customs, attitudes, and values. Valuable to those who plan to study, travel, or work abroad. Prerequisite: CMST 281 or instructor's permission. Offered every third semester.

387 - Interpersonal Communication (3 S.H.)

Designed to promote effective interpersonal communication through the study of theories such as self-perception, relationship development, and relationship deterioration. Topics may include conflict management, gender issues in communication, individual communication styles, and maintaining relationships. Prerequisites: CMST 191, CMST 282 or instructor's permission for non-majors. Offered each semester.

389 - Persuasive Communication (3 S.H.)

Introduces students to the theories of persuasion and social influence. Source, message, receiver and environmental factors are studied, and their effects upon the persuasive process analyzed. Prerequisites: CMST 191, CMST 282 and CMST 283 or instructor's permission for non-majors. Offered each semester.

399 - Internship (1-12 S.H.)

Supervised work experience designed by advisor, student, and employer. Prerequisite: Instructor's permission and a minimum major GPA of 2.50. CMST majors only. P/NC only. Offered on demand.

451 - Topics in Communication Studies (3 S.H.)

An in-depth specific course. Topics vary. Prerequisite: CMST 191 and 282 or instructor's permission for non-majors. May be repeated with different topics. Offered yearly.

452 - Topics in Public Communication (3 S.H.)

An in-depth study of topics of concern in rhetoric and public address. Topics vary. Prerequisite: CMST 191 and 283 or instructor's permission for non-majors. May be repeated with different topics. Offered yearly.

485 - Senior Seminar in Communication Theory (3 S.H.)

In-depth study and research on individually selected topics. Prerequisite: CMST 380, ENG 111, an additional 300-level theory course (see list of theory courses under major), and instructor's permission. Offered each semester.

493 - Teaching and Coaching Oral Communication (3 S.H.)

Assists prospective teachers in exploring techniques common to classroom instruction in oral communication. Emphasis on enhancing students' skills and knowledge and assessing students' work. Involvement in coaching co-curricular speech, including organization and management of festivals and tournaments. Prerequisites: CMST 191, CMST 282, and EDUC 312. Offered yearly.

499 - Independent Studies in CMST (1-6 S.H.)

Offers advanced students an opportunity to study independently in an area of special interest to them. May be repeated for a total of 6 semester hours. A maximum of 3 semester hours may be applied toward electives in the major or minor. Prerequisite: Instructor's permission. Grade only. Offered on demand.

COMPUTER SCIENCE

Watkins Hall, Room 103 (507-457-5385)

<http://cs.winona.edu>

Tim Gegg-Harrison (Chairperson)

FACULTY

Nicole Anderson, Assistant Professor; B.S., M.S., University of Iowa; Ph.D., University of Utah; 2008 –

Gary Bunce, Professor; B.S., North Dakota State University; M.A., Ph.D., University of New Mexico; 1971 –

Gerald W. Cichanowski, Professor; B.A., Winona State University; M.S., University of Minnesota; Ph.D., Michigan State University; 1983 –

Narayan Debnath, Professor; B.S., M.Phil., Calcutta University; M.S., Visva Bharati University; M.S., East Carolina University; M.S., Ohio State University; Ph.D., D.Sc., Jadavpur University; 1989 –

Joan Francioni, Professor; B.S., University of New Orleans; M.S., Ph.D., Florida State University; 1998 –

Tim Gegg-Harrison, Professor; B.A., University of Missouri-Columbia; M.S., Ohio State University; Ph.D., Duke University; 1992 –

Sudharsan Iyengar, Professor; B.E., Burdwan University; M.S., Ph.D., Louisiana State University and A & M College; 1989 –

Chi-Cheng Lin, Professor; B.S., National Chiao-Tung University; M.S., University of Minnesota-Duluth; Ph.D., University of Pittsburgh; 1997 –

Eugene Lundak, Associate Professor; B.S., M.S., Winona State University; M.S., University of Evansville (Indiana); 1985 –

Hugh F. Ouellette, Professor; B.S., Western Montana College; M.A., University of Illinois; M.A., Ball State University; Ed.D., University of Northern Colorado; 1972 –

Paul Schumacher, Associate Professor; B.A., M.Ed., St. Mary's College of Minnesota; M.A.T., Stanford University; 1988 –

Mingrui Zhang, Associate Professor, B.S.E.E., Beijing University; M.S.C.S., Ph.D., University of South Florida; 1999 –

PURPOSE

The rapid spread of computers and information technology continues to generate a need for highly trained workers to design and develop new hardware and software systems and to incorporate new technologies into existing systems. According to the U.S. Bureau of Labor Statistics, "Computer systems analysts, database administrators, and computer scientists are expected to be among the fastest growing occupations through 2012. Employment of these computer specialists is expected to grow much faster than the average for all occupations as organizations continue to adopt and integrate increasingly sophisticated technologies." The Bureau also points out that rapidly changing technology requires an increasing level of skill and education on the part of employees. In addition to technical knowledge, companies want professionals who have communication and other interpersonal skills and can adapt their problem-solving skills to different situations.

The Computer Science program at WSU is designed to prepare students in exactly these ways. As such, our majors take courses to develop not only their programming skills and technical knowledge, but also their communication and critical thinking skills. Students are also given opportunities, both inside and outside the classroom, to apply their knowledge to real-world problems. Students take applied computer science courses/tracks relative to areas such as bioinformatics, business, psychology, and geology. Through service-learning, independent research projects, and internships, they also have the opportunity to work one-on-one with faculty in specialized areas, such as digital image processing, computer assistive technology, game technology, embedded systems, database design, web programming, software engineering, and networking. By combining these opportunities, the department is able to prepare students for long-term success in the computer science field.

COMPUTER SCIENCE MAJOR

Computer science majors choose between two options: Computer Science and Applied Computer Science. Both options require a common core set of courses designed to give students a fundamental understanding of both theoretical and applied computer science. Upper-level courses within each option build on these concepts to provide depth in particular areas. As such, all computer science majors are prepared for computer science careers and, if they desire, further graduate study in computer-related fields.

The Computer Science option allows students to study the technical and theoretical aspects of computer science and software development in depth. Students in this option take two semesters of calculus, one course in physics, and nine upper-level computer science (CS) courses beyond the core. Required CS courses include Operating Systems, Programming Languages, and Theory of Computation.

The Applied Computer Science option allows students to study computer science concepts in the context of an applied area. Students choose a specific track in this option and, in addition to the core, take courses in an applied area, CS courses tied directly to the applied area, and CS electives. Currently, the department offers four tracks: Bioinformatics, Computer Information Systems, Geographic Information Technology, and Human Computer Interaction.

- **Bioinformatics** is the study of using computational tools and computer technologies to model, analyze, store, retrieve, manage, present, and visualize biological data. Primarily, the data to be processed are huge amounts of molecular biology data such as DNA sequences and proteins.
- **Computer Information Systems** involves the study of business-related processes and software. An integral component of this track is web programming—both client-side and server-side technologies, and also component-based reusable software architectures. These topics are important in the development of software to support E-business applications.
- **Geographic Information Technology (GIT)** involves the development of software to support the rapidly growing field of Geographic Information Systems (GIS). GIS uses digital technology to combine maps and images with computer databases. As such, GIS has a broad range of applications that allow businesses, engineers, and governments to make quicker and more informed decisions.
- **Human Computer Interaction (HCI)** is an interdisciplinary field that attempts to understand the tendencies and limitations of humans in order to design and develop effective software that is user-friendly. As such, a successful HCI computer scientist must be well-versed in both computer science and psychology.

SCHEDULING RECOMMENDATIONS

A student who is interested in becoming a computer science major should ask to be assigned an advisor as soon as possible. All prospective and current computer science majors, including incoming first-year and transfer students, should consult a computer science advisor before registering.

GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for Computer Science majors/minors are as follows:

1. Students must have an overall GPA of at least 2.50. The cumulative GPA for all computer science major and minor requirements and electives must be at least 2.50, and each course (except CS 491) must be completed with a grade of "C" or better.
2. At least 18 credit hours of 300- and 400-level CS courses, with at least 12 credit hours beyond the computer science core requirements, must be earned from WSU. Courses taken through the Minnesota State University Common Market Program do not satisfy this requirement.

GRADUATION WITH HONORS

For graduation with honors in computer science, a student must:

1. Complete one of the following majors: Computer Science Option or Applied Computer Science Option
2. Have an overall GPA of 3.0
3. Have a WSU computer science GPA of 3.25
4. Complete an honors project or thesis

The student may either take CS 495 to develop an honors thesis or work independently with an advisor. In the latter case, the student must find a second reader for the project/thesis. Advisors and readers must be regular WSU faculty members unless a waiver is obtained from the department. With the advisor or as part of CS 495, the student prepares and submits a proposal; upon approval, the completed project/thesis is presented to the department. A copy of the project/thesis must be submitted to the department library.

REPEATED COURSE POLICY

Students are allowed to attempt a particular computer science course no more than three times. For the purpose of this policy, an “attempt” occurs each time a student’s name appears on the final grade roster for a course.

PREREQUISITES

The prerequisites for computer science courses must be met with a “C” grade or better. Students who register for a course, but who have not met the prerequisites with a grade of “C” or better before the course begins, must drop the course.

PASS/NO CREDIT (P/NC) COURSES

Except for CS 491 (Practicum in Computer Science), students must take all courses for the major/minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

WSU-ROCHESTER

Some of the department’s majors and the minor are available through the 2+2 Program at WSU-Rochester. Program articulations appear in the “WSU-Rochester” section:

- 2+2 Computer Information Systems (page 38)
- 2+2 Computer Science (page 39)
- 2+2 Computer Science - Bioinformatics (page 39)

COMPUTER SCIENCE PRACTICUM

WSU’s computer science practicum provides computer science majors with experience in a non-academic setting. It is intended to serve as an introduction to an application environment as well as to solidify many of the concepts learned in the classroom. For these reasons, it is to be taken only by students who are nearing the end of their program of study and who have little or no previous work experience. For those students who are currently employed, the practicum must provide them with work experience that is substantially different from any previous or current work experience. Students must apply for the practicum and be approved before beginning the work experience in order to receive credit for the practicum.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student’s major or minor program. The Department of Computer Science offers the following flag courses in the University Studies Program:

FLAG

Oral I

- CS 411 Software Testing (3)
- CS 471 Object Oriented Design and Development (3)

Math/Critical Analysis O

- CS 341 Data Structures (4)

Writing P

- CS 385 Applied Database Management Systems (3)
- CS 410 Software Engineering (3)
- CS 495 Computer Science Research Seminar (3)

Flag courses that can be used to satisfy computer science major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - COMPUTER SCIENCE

68-69 S.H. (No Minor Required)

COMPUTER SCIENCE CORE – Required for All Options (32 S.H.)

Computer Science – CS

- 234 Algorithms and Problem Solving I (4)
- 250 Algorithms and Problem Solving II (4)
- 275 Mathematical Foundations of Algorithms (4)
- 310 Social Implications of Computing (3)
- O 341 Data Structures (4)
- 375 Computer Systems (4)
- P 385 Applied Database Management Systems (3)
- P 410 Software Engineering (3)
- I 471 Object Oriented Design and Development (3)

COMPUTER SCIENCE ELECTIVES – Available to All Options

Computer Science – CS

- 313 Networking and Telecommunications (3)
- 344 Introduction to Web Programming (3)
- Choose either of the following:*
- 368 Introduction to Bioinformatics (3) OR
- 369 Spatial Information Processing (3)
- 405 Operating Systems (3)
- I 411 Software Testing (3)
- 413 Advanced Networking and Telecommunications (3)
- 415 Principles of Programming Languages (3)
- 420 Computer Architecture (3)
- 425 Numerical Analysis (4)

- 430 Computer Graphics (3)
- 433 Digital Image Processing (3)
- 435 Theory of Computation (3)
- 440 Theory of Algorithms (3)
- 444 Human Computer Interaction (3)
- 445 Artificial Intelligence (3)
- 450 Compilers (3)
- 465 Topics: Computing Theory (1-3)
- 466 Topics: General Computing Applications (1-3)
- 467 Topics: Information Systems Applications (1-3)
- 468 Algorithms in Bioinformatics (3)
- 469 Algorithms in Geographic Information Technology (3)
- 472 Reusable Software Architectures (3)
- 476 Distributed System: Concepts and Design (3)
- 482 Internet/Web Architecture and Development (3)
- 485 Database Systems Design (3)
- 491 Practicum in Computer Science (6) ‡
- P 495 Computer Science Research Seminar (3)

Physics – PHYS

- 333 Microprocessor Electronics (4)

‡ Only 3 credits may be applied to the major or minor.

COMPUTER SCIENCE OPTION (CSCS)

37 S.H. in addition to core requirements above (No Minor Required)

REQUIREMENTS (19 S.H.)

Computer Science – CS (9 S.H.)

- 405 Operating Systems (3)
- 415 Principles of Programming Languages (3)
- 435 Theory of Computation (3)

Mathematics – MATH (8 S.H.)

- 160 Calculus I (4)
165 Calculus II (4)

Physics – PHYS (2 S.H.)

- 332 Computer Organization (2)

ELECTIVES (18 S.H.)

- Choose from list of “Computer Science Electives” (page 80) except for CS 405, CS 415, and CS 435
- At least 4 of the 6 courses must be 400-level CS courses.

GRADUATE SCHOOL RECOMMENDATIONS:

Students who wish to attend graduate school in computer science should complete both of the following:

- CS 495 at least one semester before graduation
- Additional mathematics and/or statistics courses

APPLIED COMPUTER SCIENCE OPTION

36-37 S.H. in addition to core requirements above
(No Minor Required)

REQUIREMENTS (36-37 S. H.)

Course requirements in the Applied Computer Science Option are track-specific:

- Track 1: Bioinformatics (CSAB)
Track 2: Computer Information Systems (CSAC)
Track 3: Geographic Information Technology (CSAG)
Track 4: Human Computer Interaction (CSAH)

TRACK 1: BIOINFORMATICS (CSAB) 37 S.H.**Mathematics – MATH (4 S.H.)**

- 160 Calculus I (4)

Statistics – STAT (3 S.H.)**Choose one of the following courses:**

- 210 Statistics (3)
303 Introduction to Engineering Statistics (3)
305 Biometry (3)

Computer Science – CS (15 S.H.)

- 368 Introduction to Bioinformatics (3)
468 Algorithms in Bioinformatics (3)
485 Database Systems Design (3)
CS electives 6 S.H. other than CS 440 and CS 469; at least 3 S.H. at the 400-level

Biology – BIOL (11 S.H.)

- * 241 Basics of Life (4)
* 242 Organismal Diversity (4)
O 310 Genetics (3)

Track Electives (3 S.H.)**Choose one of the following courses – CHEM:**

- 340 Survey of Organic Chemistry (4)
350 Principles of Organic Chemistry I (4)
Any 400-level CS electives course, other than CS 440 and CS 469

University Studies Program Required Courses – CHEM (1† S.H.)

- 212 Principles of Chemistry I (4) [USP: Natural Sciences]
213 Principles of Chemistry II (4) [USP: Natural Sciences]

† 7 S.H. count as USP requirements and are not counted as part of the major.

MINOR IN BIOLOGY

Students can receive a minor in biology by taking CHEM 340 as the track elective, and an additional 12 S.H. of courses listed with the biology major in any of the four options.

GRADUATE SCHOOL RECOMMENDATIONS:

1. Students who intend to go to graduate school in computer science will need to complete both of the following:
 - MATH 165 in addition to MATH 160
 - CS 405, CS 415, and CS 435 (These may count as the electives for this track.)
2. It is also recommended that students who intend to study in a bioinformatics graduate program take more biology and chemistry courses, such as BIOL 308, BIOL 430, and CHEM 351 in their open electives.

TRACK 2: COMPUTER INFORMATION SYSTEMS (CSAC) 36 S.H.**Mathematics – MATH (3 S.H.)**

- 140 Applied Calculus (3)

Statistics (3 S.H.)**Choose one of the following courses:**

- STAT 210 Statistics (3)
BUSA 220 Business Statistics (3)

Computer Science – CS (15 S.H.)

Choose two of the following courses:

- 344 Introduction to Web Programming (3)
472 Reusable Software Architectures (3)
482 Internet/Web Architecture and Development (3)
485 Database System Design (3)

Electives 6 S.H.; at least 3 S.H. at the 400-level**Accounting – ACCT (3 S.H.)**

- 212 Managerial Accounting Principles (3)

Management Information Systems – MIS (3 S.H.)

- 362 Management Information Systems (3)

Track Electives (9 S.H.)**Choose three of the following courses:**

- BUSA 291 Legal Environment of Business (3)
* ECON 201 Principles of Microeconomics (3)
[USP: Social Science]
* ECON 202 Principles of Macroeconomics (3)
[USP: Social Science]
FIN 360 Corporate Finance (3)
MKTG 300 Principles of Marketing (3)
OM 334 Operations Management (3)
P MGMT 325 Organizational Dynamics (3)

University Studies Program Required Courses (0† S.H.)

- ACCT 211 Financial Accounting Principles (3)
[USP: Contemporary Citizenship]

Choose one of the following courses:

- ECON 201 Principles of Microeconomics (3)
[USP: Social Science]
ECON 202 Principles of Macroeconomics (3)
[USP: Social Science]

† 6 S.H. count as USP requirements and are not counted as part of the major.

MINOR IN BUSINESS ADMINISTRATION:

Students can receive a minor in business administration by taking all the business electives courses. Note that students will have either ECON 201 or ECON 202 as a required University Studies course. Since the remaining economics course (ECON 201 or ECON 202) can also be used as a University Studies requirement, students will need two additional business courses (6 S.H.) beyond the CS major.

GRADUATE SCHOOL RECOMMENDATIONS:

Students who wish to attend graduate school in computer science will need to complete both of the following:

- MATH 160-165 in place of (or in addition to) MATH 140
- CS 405, CS 415, and CS 435 (Two of these may count as the CS electives for this track.)

TRACK 3: GEOGRAPHIC INFORMATION TECHNOLOGY (CSAG) 37 S.H.**Mathematics – MATH (4 S.H.)**

- 160 Calculus I (4)

Statistics – STAT (3 S.H.)**Choose one of the following two courses:**

- 210 Statistics (3)
303 Introduction to Engineering Statistics (3)

Computer Science – CS (15 S.H.)

- 369 Spatial Information Processing (3)
433 Digital Image Processing (3)
469 Algorithms in Geographic Information Technology (3)
CS electives 6 S.H. other than CS 440 and CS 468; at least 3 S.H. at the 400-level

Geosciences/Geography (14 S.H.)

- GEOS 240 Watershed Science (4)
P GEOS 280 Field & Analytical Methods I (2)

Choose 2-3 of the following courses:

- GEOS 315 Surficial Processes & Soils (4)
GEOS 325 Environmental Science (3)
I GEOS 370 GIS and Imaging Techniques (3)
O GEOS 405 Current Topics (1-3)
O GEOS 415 Advanced Geomorphology (4)
GEOS 420 Applied Hydrogeology (4)
GEOS 425 Global Climate Change (3)
GEOG 450 Cartography (3)

University Studies Program Required Courses (1† S.H.)

GEOS 120 Dynamic Earth (4) [USP: Natural Sciences]

GEOS 130 Earth and Life through Time (4) [USP: Natural Sciences]

† 7 S.H. count as USP requirements and are not counted as part of the major.

MINOR IN GEOSCIENCE:

Students can receive a minor in geoscience by taking one additional 3-4 credit geoscience course.

GRADUATE SCHOOL RECOMMENDATION:

Students who intend to go to graduate school in computer science will need to complete both of the following:

- MATH 165 in addition to MATH 160
- CS 405, CS 415, and CS 435 (Two of these may count as the CS electives for this track.)

TRACK 4: HUMAN COMPUTER INTERACTION (CSAH) 37 S.H.

Mathematics – MATH (4 S.H.)

160 Calculus I (4)

Statistics (3 S.H.)

Choose one of the following three courses:

STAT 210 Statistics (3)

STAT 303 Introduction to Engineering Statistics (3)

O PSY 231 Statistics (3)

Computer Science – CS (15 S.H.)

344 Introduction to Web Programming (3)

444 Human-Computer Interaction (3)

CS electives 9 S.H.; at least 6 S.H. at the 400-level

Psychology – PSY (9 S.H.)

335 Human Factors Psychology (3)

369 Cognitive Psychology (3)

410 Sensation and Perception (3)

Track Electives (6 S.H.)

Choose any two CS or PSY courses at the 300- or 400-level or ART

260 (Graphic Design I) or ART 265 (Graphic Design II)

University Studies Program Required Courses (0† S.H.)

PSY 210 Introduction to Psychological Science (3) [USP: Social Science]

SOC 150 Introduction to Sociology (3) [USP: Social Science]

STAT 350 Design of Samples and Surveys (3) [USP: Contemporary Citizenship]

†9 S.H. count as USP requirements and are not counted as part of the major.

MINOR IN PSYCHOLOGY

Students can receive a minor in psychology by taking two psychology courses as their track electives (and taking PSY 231 to meet their statistics requirement).

GRADUATE SCHOOL RECOMMENDATIONS:

Students who intend to go to graduate school in computer science will need to complete both of the following:

- MATH 165 in addition to MATH 160
- CS 405, CS 415, and CS 435 (These may count as the CS electives for this track.)

B.S. MINOR - COMPUTER SCIENCE (COMS)

26 S.H.

The Computer Science minor is designed to provide students with a solid understanding of computer science. Students will gain the knowledge and skills to apply computer programming techniques to their major field of study. The courses included in the Computer Science minor are the introductory programming sequence for CS majors along with mathematics and upper-level computer science major elective courses.

REQUIREMENTS (11 S.H.)

**Choose one of the following courses:

CS 130 Introduction to BASIC Programming (3)

CS 150 An Overview of Computer Science (3)

CS 234 Algorithms and Problem Solving I (4)

CS 250 Algorithms and Problem Solving II (4)

** Students who are prepared for calculus and take CS 234 as their first computer science class may choose to take a 300- or 400-level CS course in place of the CS 130/150 course requirement.

ELECTIVES (15 S.H.)

Choose 15 S.H. from any of the following:

CS/MATH 275 Mathematical Foundations of Algorithms (4)‡

Computer Science courses numbered 300 or above

Any one of the following courses:

MATH 140 Applied Calculus (3)

MATH 155 Calculus Based Modeling (3)

MATH 160 Calculus I (4)

‡ Math majors may substitute MATH 210 for the CS/MATH 275 course requirement.

B.S. MINOR - COMPUTER TECHNOLOGY (COMT)

18 S.H.

The Computer Technology minor is designed to provide students with a solid understanding of computer technology. Students will gain both the skills and confidence necessary to use computer technology appropriately and effectively for problems in their disciplines. The courses included in this minor are all non-major computer science courses and, for the most part, are University Studies courses.

REQUIREMENTS (15 S.H.)

CS 110 Computers in a Global Society (3)

[USP: Science and Policy]

CS 115 Computer Systems and Internet Technology (3)

CS 116 Web Technology (3) [USP: Contemporary Citizenship]

Choose one of the following courses:

CS 130 Introduction to BASIC Programming (3)

[USP: Critical Thinking]

CS 150 An Overview of Computer Science (3)

[USP: Critical Thinking]

Choose one of the following courses:

CS 295 Computer Technology Project (3)

CS 395 Community-Based Computer Technology Project (3)

ELECTIVES (3 S.H.)

Approved 300- or 400-level course in the student's major. Course must meet the following requirements:

- Course material must be relevant to the CS 295/395 project.
- Course must be taken at least one semester prior to CS 295/395.
- A faculty member in the student's major department must approve the course as relevant to the proposed CS 295/395 project.

COURSE DESCRIPTIONS

COMPUTER SCIENCE (CS)

110 - Computers in a Global Society (3 S.H.)

This course exposes students to some of the basic scientific foundations of computer technology to help them understand the societal implications of computer technology. This course addresses such questions as: What happens when you hit a "submit" button on a Web form? What is going on when you "download" a file? How does a Web-search happen? Based on this technical perspective, the course looks at the role technology plays in the United States, as well as its effect on nations and cultures all over the world. The impact and significance of the information age is explored in several different contexts including economic, political, cultural, legal, environmental, historical, ergonomic, and psychological.

115 - Computer Systems and Internet Technology (3 S.H.)

This course provides students with a broad overview of the principles of, and effective strategies for, navigating computer systems, servers and the Internet. Topics include file maintenance; operating systems; general applications (word processors, spread sheets, electronic presentations, databases); web-based applications; security; and multimedia. Emphasis will be placed on navigating systems in safe and effective ways as well as maintaining personal systems (desktops or laptops). Course does not count for major elective credit.

116 - Web Technology (3 S.H.)

An introductory, hands-on course on Internet website development. The emphasis is for students to develop competence using web authoring tools and tools for incorporating multimedia into a web page in order to build a complex website focused on some area of academic interest. Students will learn how to plan and publish websites and develop electronic portfolios that are exciting, efficient, accessible, and well-designed. Students will gain insight into the technology behind the World Wide Web by working with CSS (cascading style sheets) and HTML (hypertext) markup language. No prior programming experience is necessary for this course.

130 - Introduction to BASIC Programming (3 S.H.)

An introductory course in computer programming utilizing the VISUAL BASIC language. Intended for students in the life and social sciences, business, psychology, and other disciplines.

150 - An Overview of Computer Science (3 S.H.)

Course is designed for CS majors and non-majors who desire a survey of the field of computer science. After a brief history of the development of

computers, students are introduced to such fundamental issues as problem-solving, algorithm design, representation and analysis, hardware design, computer organization, machine and assembly language, system software, software design and analysis, language models, and models of computation. Prerequisite: Qualifying score on the mathematics placement exam or MATH 1050.

234 - Algorithms and Problem Solving I (4 S.H.)

An introduction to the major concepts of algorithm design and problem solving. Emphasis is on algorithm development, analysis, and refinement. Programming strategies and elements of programming also are covered. Various practical applications of problem-solving are demonstrated. Includes formal labs. Prerequisite: Qualifying score on the math placement test or MATH 120 or MATH 150.

235 - Algorithms I Companion (1 S.H.)

Course reinforces students' algorithm design and programming skills in the context of CS 234, Algorithms and Problem Solving I. Intended to be taken concurrently with CS 234; students work on problems directly related to topics introduced in that course. Prerequisite: Concurrent enrollment in CS 234 or instructor's permission. Pass/No Credit only.

250 - Algorithms and Problem Solving II (4 S.H.)

A continuation of the problem solving and programming concepts introduced in CS 234. Applies the basic principles of software engineering to more complex problems. Topics include recursive problem solving, searching, sorting, and dynamic structures. Prerequisite: CS 234.

251 - Algorithms II Companion (1 S.H.)

Course reinforces students' algorithm design and programming skills in the context of CS 250, Algorithms and Problem Solving II. Intended to be taken concurrently with CS 250; students work on problems directly related to topics introduced in that course. Prerequisite: Concurrent enrollment in CS 250 or instructor's permission. Pass/No Credit only.

275 - Mathematical Foundations of Algorithms (4 S.H.)

The formal study of the mathematical foundations of algorithms. This course provides students with an algorithm-based introduction to discrete mathematical structures and their application to computer science. Topics include sets, relations, graphs, proof techniques, induction, recursive definitions, and recurrence relations. Applications include the correctness and complexity of algorithms. This course is equivalent to MATH 275. Students may receive credit for either CS 275 or MATH 275, not both. Prerequisites: CS 234 and MATH 140 or MATH 155 or MATH 160, or instructor's permission.

295 - Computer Technology Project (3 S.H.)

This course gives students an opportunity to apply their computer technology knowledge to a project directly related to their major. Students will design and implement their own projects; however, the projects must be relevant to specific course content in the student's major. Students will learn how to develop functional requirements, solution designs, implementation timelines, and maintenance plans for their project. Projects must be pre-approved by both the course instructor and a faculty member in the student's major department. Final presentations of all projects will be part of the course. Prerequisites: CS 110, CS 115, CS 116, and either CS 130 or 150, and approved 300- or 400-level course in student's major.

299 - Special Topics-1 (3 S.H.)

This course is intended to treat "special" topics at the sophomore level. This course will be offered in response to requests from local groups or industry. This course may not be used to meet major or minor requirements. May be repeated for credit. Prerequisite: Instructor's permission.

310 - Social Implications of Computing (3 S.H.)

Course provides an overview of the societal and ethical issues surrounding computer technology and involves students in discussions about the social implications of this technology. Primary topics include professional ethics; privacy; intellectual property; computer and network security; computer reliability; work and wealth; and the societal impacts of computing, networking, and information storage and retrieval. Although the course is not a programming course, topics will be covered at a level that requires understanding of computer programming. The course will involve extensive reading, writing, and discussion. Prerequisites: CS 250 and ENG 111.

313 - Networking and Telecommunications (3 S.H.)

This course studies telecommunications and computer networks. It begins by discussing data communications, computer interfaces, transmission media, and error detection and correction. Wide area, metropolitan, and local area networks are studied in the context of the International Standards Organization/OSI Model. Emphasis is placed on the physical, data link, network, transport, and session layers. Prerequisites: CS 250 and one 300-level CS course.

341 - Data Structures (4 S.H.)

A detailed study of more advanced data structures and algorithms, including concepts and techniques of design efficiency and complexity of algorithms and their lower bounds. Topics include search trees, hash functions, string

searching, disjoint sets, internal and external sorting, graphs and graph algorithms, and different algorithm design technique. Prerequisites: CS 250 and CS 275.

344 - Introduction to Web Programming (3 S.H.)

Focus is on the fundamentals of the Web as a computer system, and the components used in developing client-side web-based applications. Topics include markup languages (HTML and its variants), scripting languages (e.g., JavaScript, Perl, PHP), and applets including security and digital signatures, multimedia content, animation, and usability issues. In addition, the course will provide an overview of web history, web architecture, search engines, and web security. Students will develop a number of web pages and programs throughout the course and work with a team to develop an integrated, interactive website. Prerequisite: CS 250 or instructor's permission.

368 - Introduction to Bioinformatics (3 S.H.)

This course introduces students to the fundamental concepts of bioinformatics. Topics include introduction to DNA machinery and informatics, pairwise sequence alignments, bioinformatics programming, bioinformatics tools and database searches, genomics and proteomics, and introduction to DNA microarray analysis. Prerequisites: CS 250 and BIOL 241.

369 - Spatial Information Processing (3 S.H.)

An introductory course on spatial data processing. The emphasis is for students to understand the major phases of the spatial information processing cycle, including selecting an appropriate algorithm, collecting and analyzing data, and presenting the results. Applications of information technology in the fields of geographic information processing and/or bioengineering will be examined. Prerequisites: CS 250 and MATH 160 or instructor's permission.

375 - Computer Systems (4 S.H.)

This course is an overview of the hardware and software of computer systems. Topics include computer organization and computer architecture, data representation, assembly language, memory systems, operating systems, networking and security, run-time environments, and advanced topics such as RISC vs. CISC, non von Neumann architectures, and Java virtual machine. Prerequisite: CS 250.

385 - Applied Database Management Systems (3 S.H.)

A study of basic Database Management Systems (DBMS) concepts. Topics include DBMS Models-Relational and object-oriented; study of query languages; study of existing DBMS; and data integrity, recovery, and concurrency control. Prerequisites: CS 250 and ENG 111.

399 - Special Topics (1-3 S.H.)

This course is intended to treat "special" topics at the junior level. It is anticipated that this course will be offered in response to requests from local groups or industry. This course may not be used to meet major or minor requirements. May be repeated for credit. Prerequisite: Instructor's permission.

405 - Operating Systems (3 S.H.)

Study of the principles and design techniques of operating systems. Topics include concurrent processes, scheduling, deadlocks, memory management, file and directory organizations and protection/security. Prerequisites: CS 341 and CS 375.

410 - Software Engineering (3 S.H.)

The course deals with the current trends of software engineering principles and techniques for methodical construction of large, complex software-intensive systems. It follows the software life cycle from the requirement, specification, design, and testing phases. Topics include software process, project management, quality assurance, configuration management, formal specification techniques, design methodologies, testing and validation techniques, and object-oriented methodologies. Students are involved in a team project utilizing software engineering principles. Prerequisites: CS 341 and ENG 111.

411 - Software Testing (3 S.H.)

An introduction to various software testing techniques and analysis that have sound theoretical basis. Class discussion will include software testing fundamentals and techniques for software test case design. Software testing methods such as functional testing, structural testing, mutation testing, and integration and system testing, including object-oriented software testing will be presented. Prerequisite: CS 410 and CMST 191.

413 - Advanced Networking and Telecommunications (3 S.H.)

Advanced topics in computer networking are studied. Emphasis is on the TCP/IP protocol and topics such as security, common network applications, and network management. The course emphasizes an advanced lab where students build a network, learn how to use network management tools, and write network applications. Prerequisites: CS 313 and CS 375.

415 - Principles of Programming Languages (3 S.H.)

A study of the principles of the design and implementation of higher-level programming languages. Topics include syntax, semantics, implementation issues, and specific features and strengths of languages. Alternative paradigms for describing computation are also covered. Students are introduced to the theoretical foundations of these paradigms and are given an opportunity to write programs in each of the paradigms. Prerequisite: CS 341.

420 - Computer Architecture (3 S.H.)

Models of computing systems are studied. These include the Von Neumann model, multiprocessors, vector processors, and others. Additionally, the components of these models are examined. Topics include the memory hierarchy, input/output systems, and pipelining. Prerequisite: CS 375.

425 - Numerical Analysis (4 S.H.)

Numerical solution of equations, numerical interpolation, differentiation and integration, numerical linear algebra, and numerical solution of differential equations with analysis and use of algorithms and related software. Prerequisites: CS 234 and MATH 260.

430 - Computer Graphics (3 S.H.)

A study of computer graphics theories, algorithms, and techniques. Topics include display techniques, primitives and attributes, interactive graphics, transformations, 3-D modeling and viewing, graphics package design, picture structure, lighting and shading, and color theory. Prerequisite: CS 341.

433 - Digital Image Processing (3 S.H.)

A study of digital images and their properties as well as algorithms and techniques for digital image processing. Topics include image acquisition, enhancement in both spatial and frequency domains, segmentation, and compression. Offers an introduction to object recognition approaches. Prerequisites: CS 341 and MATH 165.

435 - Theory of Computation (3 S.H.)

This course explores the theoretical foundations of computer science. Topics include finite state automata and regular languages, context-free grammars, pushdown automata and context-free languages. Turing Machines and recursively enumerable sets, computability and the halting problems, Chomsky hierarchy and undecidable problems. Prerequisites: CS 250 and CS 275.

440 - Theory of Algorithms (3 S.H.)

Concepts and techniques of design efficiency and complexity of algorithms. Topics include principles of algorithm design (divide and conquer, backtracking, dynamic programming, greedy and local search); graph, numerical, pattern matching, and parallel algorithms; P, NP, and NP-complete problems. CS credit will be given for only one of these courses: CS 440, CS 468, or CS 469. Prerequisite: CS 341.

444 - Human Computer Interaction (3 S.H.)

This course examines fundamental principles of human factors issues related to the development of software and the design of interactive systems. Topics include user-centered design, usability tests, tradeoffs between interaction devices, alternative input-output methods, design of interfaces for special audiences, and construction of appropriate error messages. Projects will involve implementation and evaluation of graphical user interfaces (GUIs) and web pages. Prerequisites: CS 341, CS 344, and PSY 210.

445 - Artificial Intelligence (3 S.H.)

A survey of the tools and theoretical constructs of artificial intelligence as implemented on computers. Emphasis is on the importance of good representations to model various kinds of intelligence. Topics include resolution theorem proving, heuristic and algorithmic search, game playing, natural language processing, expert systems, and neural networks. Prerequisite: CS 341.

450 - Compilers (3 S.H.)

The course studies the principles, techniques and tools for compiler design and construction. Topics include lexical analysis, syntax analysis, parsing techniques, error recovery, semantic analysis, intermediate language, code generation, and optimization techniques. Students design and implement the phases of a compiler. Prerequisite: CS 415 or CS 435.

465 - Topics: Computing Theory (1-3 S.H.)

Topics are selected from automata theory, the Turing Machine, combinatorics, etc. An in-depth view of a specific concept of computing is covered. Prerequisites: Junior or senior standing and instructor's permission. May be repeated for credit. Offered according to demand.

466 - Topics: General Computing Applications (1-3 S.H.)

Topics are selected from general computing application areas. An in-depth view of a specific problem or technique is given. Topics may include statistical problems, the Simplex model, 0/1 knapsack, Divide and Conquer, etc. Prerequisites: Junior or senior standing and instructor's permission. May be repeated for credit. Offered according to demand.

467 - Topics: Information Systems Applications (1-3 S.H.)

Topics are selected from specific information systems or management

information systems applications and are oriented toward the user. Topics include linear programming, statistical packages, inventory systems, decision support, the transportation problem, project scheduling, queuing models, forecasting, and discrete simulation. Prerequisites: Junior or senior standing and instructor's permission. May be repeated for credit. Offered according to demand.

468 - Algorithms in Bioinformatics (3 S.H.)

Theory-oriented approach to the design and analysis of contemporary algorithms, and their applications to bioinformatics. This course offers an exposition of the algorithmic principles driving advances in the field of bioinformatics. Data modeling, algorithm design techniques such as dynamic programming and divide-and-conquer, and machine learning algorithms are discussed in the contexts of genomics and proteomics. CS credit will be given for only one of these courses: CS 440, CS 468, or CS 469. Prerequisites: CS 341, CS 368, and BIOL 310.

469 - Algorithms in Geographic Information Technology (3 S.H.)

The design and analysis of contemporary algorithms and their applications to geographic information technology. This course offers an exposition of the algorithmic principles driving advances in this application field. Data modeling, algorithm design techniques such as backtracking and divide-and-conquer, and machine learning algorithms are discussed in the context of the application field. CS credit will be given for only one of these courses: CS 440, CS 468, or CS 469. Prerequisites: CS 341, CS 369, and GEOS 280.

471 - Object Oriented Design and Development (3 S.H.)

This course will cover fundamental topics in object-oriented analysis, design, and development. An object-oriented design methodology and tool will be introduced and used. The course will use an object oriented development environment/language. Advanced features of object-oriented languages will be covered. Students will be required to investigate issues in object-oriented systems and their implementation. Prerequisites: CS 341 and CMST 191.

472 - Reusable Software Architectures (3 S.H.)

This course investigates the software concepts that promote reuse of software architectures. In particular, the influence of object technology on software design and reuse is studied. Domain modeling methods, which model the application domain as a software product family from which target systems can be configured, are investigated. The course also covers reusable software patterns including architecture patterns and design patterns, software components, and object-oriented frameworks. State-of-the-art component technologies will be used to experiment with the concepts of this course. Prerequisite: CS 471 or instructor's permission.

476 - Distributed Systems: Concepts and Design (3 S.H.)

Introduction to the theory and design principles used in the construction of distributed computer systems. Study of architectural foundations of networked systems, file servers and transportation handling, and security issues. Case studies of specific distributed systems. Prerequisite: CS 405.

481 - Computer Applications (1-3 S.H.)

This is intended to be an off-campus course. The computer applications to be covered are determined by the requesting group or company in conjunction with the computer science faculty. (Not open to computer science majors/minors.) May be repeated for credit. Offered according to demand.

482 - Internet/Web Architecture and Development (3 S.H.)

This course will emphasize the distributed software architecture for web-based software and web services design and development. J2EE architecture will be used to provide a basis for developing software that will run on the client-side, the server-side, in a distributed system, or in a standalone environment. Topics include server components, servlets, Java server pages, Javabeans, session control and security, EJBs, transaction processing, database connections, and connection pools. A major application development environment will be used to design, develop, test, and deploy applications. Students will develop a distributed web application. Prerequisites: CS 471 and either CS 344 or CS 472, or instructor's permission.

485 - Database Systems Design (3 S.H.)

The design and development of database management systems. Topics include relational object-oriented database operations and implementation, query language development, normalization, database file management, deadlock handling, security and integrity problems, and distributed DBMS. Prerequisite: CS 341 and CS 385.

490 - Independent Problems in Computer Science (1-3 S.H.)

An opportunity to continue the study of selected topics. Prerequisite: instructor's permission. Offered according to demand.

491 - Practicum in Computer Science (6 S.H.)

Students work a minimum of 300 hours in an application environment under the supervision of a computer science professional. Open only to junior or senior declared CS majors who have satisfied specific requirements. Contact the Computer Science Practicum Coordinator, or visit the department website, for more information on these requirements. Permission of coordinator is required. Pass/No Credit only. Only 3 S.H. apply to CS majors.

495 - Computer Science Research Seminar (3 S.H.)

This course is an undergraduate research seminar designed for upper-level computer science students. Students choose, with the help of faculty, an undergraduate research thesis topic. Computer science research methods are introduced, and the various forms of technical writing common to computer science are studied. Students conduct their research, write a technical paper as a result, and present their findings during the year-end senior technical conference. Students also read and critically review several computer science conference and journal articles. Prerequisites: ENG 111, CS 341, and at least two 400-level CS courses.

COMPUTER SCIENCE EDUCATION (CSED)**321 - Computers in the Mathematics Curriculum (3 S.H.)**

This course is designed to provide future mathematics teachers with a broad overview of the uses of computers in the mathematics curriculum. The primary emphasis is on selecting and evaluating courseware; using teacher utilities; and the role of programming and computer literacy in the mathematics curriculum. Prerequisites: MATH 165 and Junior or senior standing. A computer programming course is advised. Offered according to demand.

452 - Computer Applications in Elementary Education (3 S.H.)

This course is specifically designed for pre-service and in-service elementary classroom teachers for the purpose of exploring selected areas of microcomputer applications in elementary education. The primary goal of the course for each student is the acquisition of a positive attitude

in the use of the microcomputer as a tool. To accomplish this goal, the student has direct experiences with computer-assisted instruction (CAI), computer-managed instruction (CMI), information retrieval, programming languages, software evaluations, and elementary computer literacy curriculums. Prerequisite: Instructor's permission. Offered according to demand.

480 - Computer Workshop (3 S.H.)

Emphasis is on using microcomputers in education. Topics are selected from multimedia, authoring languages, LOGO (including turtle graphics), computer-assisted instruction (CAI), computer-managed instruction (CMI), information retrieval, text editing, educational software/courseware packages, software evaluation, computer curriculums, classroom organization, and computer literacy. Prerequisite: instructor's permission. May be repeated for credit. Offered according to demand.

481 - Computer Applications (3 S.H.)

This is intended to be an off-campus course. The computer applications to be covered are determined by the requesting group or school district with the computer science faculty. Not open to computer science majors/minors. May be repeated for credit. Offered according to demand.

489 - Special Topics (3 S.H.)

Experiences in computer science and computer science education for teachers of grades K-12. Prerequisite: instructor's permission. Offered according to demand.

COUNSELOR EDUCATION

Gildemeister Hall, Room 132 (507-457-5335; Fax: 507-457-5882)
WSU-Rochester, Room EA 201 (507-285-7488; Fax: 507-285-7170)
www.winona.edu/counseloreducation
Tim Hatfield (Chairperson)

FACULTY

Gaylia Borrer, Professor; B.S., Davis & Elkins College; M.S., West Virginia University; Ph.D., University of Iowa; 1989 –
Cynthia Briggs, Assistant Professor; B.S., Guilford College; M.A., Wake Forest University; Ph.D., Oregon State University; 2006 –
Mary Farwett, Associate Professor; B.A., University of North Carolina; M.A., Appalachian State University; Ph.D., University of South Carolina; 1999 –
Tim Hatfield, Professor; B.A., Harvard University; M.Ed., Harvard Graduate School of Education; Ph.D., University of Minnesota; 1980 –
Nicholas Ruiz, Professor; B.A., Ph.D., University of Minnesota; 1989 –
Carol Smith, Assistant Professor; B.S., North Dakota State University; M.S., Western Illinois University; Ph.D., University of Iowa; 2007 –

PURPOSE

The department's major purpose is to provide quality education to persons seeking advanced study in counseling and related professions and to provide selected undergraduate and community service courses. The department offers elective courses for undergraduates; however, departmental concentrations lead only to the Master of Science degree. (See the *Graduate Catalog* for program descriptions.)

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, undergraduate students must take all courses in their major, minor, options, concentrations and licensures on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

COURSE DESCRIPTIONS

200 - Career/Life Decision Making (3 S.H.)

This course is designed to give students an opportunity to explore the skills, processes, and information necessary to become actively and responsibly involved in their own college program planning as well as their longer-term career and life planning. P/NC only.

220 - Emotions and Behavior (3 S.H.)

This course focuses on promoting students' self-awareness and personal growth, with significant learning opportunities structured through in-class and out of class individual projects, small group work, and large group experiential activities.

432 - Stress Management (3 S.H.)

This course provides an introduction to important concepts, issues, skills, and interventions related to the identification and management of personal stress.

495 - Workshop: Counseling Specialties (.5-4 S.H.)

The topics of these workshops vary. Announcements of the topics and any special enrollment issues are made in advance of the workshop offering.

CYTOTECHNOLOGY

Pasteur Hall, Room 220 (507-457-5271)
http://bio.winona.edu/biohp/acad_deg.htm

WSU DIRECTOR, CYTOTECHNOLOGY

Edward Thompson, Professor; B.A., Macalester College, St. Paul; Ph.D., Medical College of Wisconsin, Milwaukee; 1992 –

ADJUNCT FACULTY

Mayo School of Health-Related Science, Rochester, MN

Jill Caudill, M.Ed., CT, (ASCP), Education Coordinator

John Goellner, M.S., Medical Director

Marshfield Medical Center, Marshfield, WI

Virginia R. Narlock, Ph.D., C.L.S. (ASCP) Program Director, Laboratory

George Rupp, M.D., Medical Director, Laboratory Education Programs

Donald Schnitzler, Education Coordinator, Cytotechnology

PURPOSE

WSU's Cytotechnology Program is administered by the Biology Department and the College of Science and Engineering. It is a four-year course of study leading to the Bachelor of Science degree in Cytotechnology. The first three years are spent at WSU, where the student completes courses in the basic sciences of biology and chemistry as well as the WSU University Studies requirements. The fourth year is spent in a clinical setting at one of the cytotechnology programs affiliated with WSU, where the student receives intensive training in the sub-disciplines and techniques of cytotechnology.

Before they can apply for the year of clinical training, students must complete three years (96 semester hours) at WSU with a minimum grade point average of 3.00. Students should note that acceptance into the fourth year of clinical training is not automatic upon completion of the third year at WSU. The number of spaces each year in clinical training programs is limited, and there is significant competition for these spaces. Students are accepted by the clinical institutions based upon their academic achievement and their potential for a successful career as a cytotechnologist. The latter is determined through letters of recommendation from University faculty and a personal interview with faculty of the clinical institution.

During the clinical year, each student registers for the appropriate number of credits at WSU, and his or her progress is evaluated each semester. Upon successful completion of the clinical program, the student receives a certificate in cytotechnology and then is eligible to write the National Registry Examination given by the American Society of Clinical Pathologists (ASCP). If all WSU requirements have been completed, the student also is granted the degree of Bachelor of Science in Cytotechnology.

First-year students entering this program should consult with Dr. Thompson soon after their arrival on campus, and all cytotechnology students must meet with him for academic review and advising prior to registration for each semester. Dr. Thompson must approve all student schedules each semester.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Biology Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

BIOL 307 Cell Biology Laboratory (1)

BIOL 309 Developmental Biology (3)

BIOL 409 General Microbiology (4)

BIOL 315 Environmental Biology (3)

BIOL 423 Ecosystem Ecology (3)

BIOL 460 General Parasitology (3)

BIOL 462 Parasitology (4)

Math/Critical Analysis O

BIOL 310 Genetics (3)

Writing P

BIOL 308 Cell Biology (3)

BIOL 323 General Physiology (5)

BIOL 415 Ecology of Large Rivers (4)

BIOL 431 Molecular Biology Laboratory (4)

BIOL 445 Immunology (3)

BIOL 499 Capstone Project (1-3)

Flag courses that can be used to satisfy cytotechnology major requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - CYTOTECHNOLOGY (CYTO)

82 S.H. (No Minor Required)

REQUIRED MAJOR AREA COURSES (31 S.H.)

BIOL 241 Basics of Life (4)

BIOL 242 Organismal Diversity (4)

PBIOL 308 Cell Biology (3)

O BIOL 310 Genetics (3)

I BIOL 307 Cell Biology Laboratory (1) OR

BIOL 311 Genetics Laboratory (1)

BIOL 201 Human Anatomy (4)

PBIOL 323 General Physiology (4)

I BIOL 409 General Microbiology (4)

BIOL 470 Histology (4)

Note: BIOL 241 and 242 should be taken prior to BIOL 201, 307, 308, and 310. BIOL 308 should be taken prior to or concurrently with BIOL 307. BIOL 323 should be taken after BIOL 201. BIOL 409 and 470 should be taken after BIOL 308, 310 and 307.

MAJOR ELECTIVES (7 S.H.)

Choose at least 7 S.H. from the following courses:

I BIOL 309 Developmental Biology (3)

PBIOL 445 Immunology (3)

I BIOL 460 Parasitology (3)

CHEM 340 Organic Survey (4)

ADDITIONAL REQUIREMENTS (12 S.H.)

Chemistry (8 S.H.)

* CHEM 212 Principles of Chemistry I (4)

* CHEM 213 Principles of Chemistry II (4)

Mathematics (4 S.H.)

MATH 120 Precalculus (4)

Note: MATH 150 and MATH 155 may be substituted for MATH 120.

CLINICAL EDUCATION (32 S.H.)

BIOL 481 Cytotechnology I (12)

BIOL 482 Cytotechnology II (12)

BIOL 483 Cytotechnology III (4)

BIOL 484 Cytotechnology IV (4)

Note: The clinical training can be completed at any approved clinical training site.

COURSE DESCRIPTIONS

See specific program areas (i.e., biology, chemistry, and mathematics) in this catalog for descriptions of the courses cited for this major.

ECONOMICS AND FINANCE

Somsen Hall, Room 309 (507-457-5014)

Daniel Kauffman (Chairperson)

Economics: Gallegos, Hyle, Kauffman, Manrique, Pevas, Salyards, Wenz, Yu

Finance: Kesler, Kim, Murray, Wrolstad

FACULTY

Alejandro Gallegos, Professor; B.A., Instituto Tecnológico y de Estudios Superiores de Monterrey; M.A., Ph.D., University of Wisconsin-Milwaukee; 1988 –
Matthew Hyle, Professor; B.A., Indiana University; Ph.D., University of Maryland; 1988 –

Daniel E. Kauffman, Professor; B.A., St. Cloud State University; M.A., Ph.D., University of Nebraska-Lincoln; 1983 –

David W. Kesler, Professor; B.S., Pacific Lutheran University; M.A., M.B.A., University of Kansas; Ph.D., University of Wisconsin-Milwaukee; 1984 –

Chan-Wung Kim, Professor; B.A., SungKyunKwan University; M.B.A., Seoul National University; Ph.D., University of Iowa; 2002 –

Gabriel Manrique, Professor; B.A., Ateneo De Manila University; M.A., Ohio University; Ph.D., University of Notre Dame; 1989 –

Michael Murray, Professor; B.A., University of South Florida; M.A., Ph.D., University of Notre Dame; 1986 –

Mary Ann Pevas, Professor; B.A., Dominican College; M.A., Manhattan College; Ph.D., University of Notre Dame; 1990 –

Donald M. Salyards, Professor; B.A., Graceland College; M.A., Ph.D., Kansas State University; 1975 –

Michael Wenz, Assistant Professor; B.S., Miami University; M.A., Ph.D., University of Illinois at Chicago; 2006 –

Mark Wrolstad, Professor; B.A., Luther College; M.B.A., University of Florida; Ph.D., University of Colorado; 1989 –

Wei-Choun (William) Yu, Assistant Professor; B.A., National Taiwan University; M.A., Ph.D., University of Washington; 2006 –

PURPOSE

The purpose of the Economics and Finance programs is to develop highly employable professional business analysts and managers. Majors are provided with a firm understanding of the economy and its financial systems, the ability to conceptualize business issues, and the opportunity to develop quantitative and computer skills necessary to solve today's complex business problems. The department also seeks to provide graduates with the background necessary to pursue graduate degrees.

PASS/NO CREDIT (P/NC) COURSES

Except for internships, students must take all courses in their major, minor, and options on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for economics and finance majors are as follows.

FOR ECONOMICS MAJORS

1. Complete all coursework required for the major.
2. Achieve a grade of "C" or better in all courses counted toward the major.
3. Complete at least 18 semester credits in economics courses offered by the Economics Department at WSU, including ECON 499.

FOR FINANCE MAJORS

1. Complete all coursework required for the major.
2. Achieve a grade of "C" or better in all courses counted toward the major.
3. Sixty-four non-business credits are required for finance majors. Of the math, statistics, and economics courses required for the finance major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.
4. Complete a minimum of 50% of the business requirements for the finance major at WSU.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Economics and Finance Department offers the following flag courses in the University Studies Program:

ECONOMICS FLAGS

Oral I

ECON 499 Seminar in Economics (3)

Writing P

ECON 303 Intermediate Macroeconomics (3)

ECON 304 Money and Banking (3)

FINANCE FLAGS

Oral I

FIN 421 Institutional Investment & Financial Markets (3)

Math/Critical Analysis O

FIN 335 Forecasting Methods (3)

Flag courses that can be used to satisfy economics and finance major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - ECONOMICS (ECON)

45-46 S.H. (Minor Required)

REQUIRED COURSES (27-28 S.H.)

Economics – ECON (18 S.H.)

201 Principles of Microeconomics (3)

202 Principles of Macroeconomics (3)

302 Intermediate Microeconomics (3)

P 303 Intermediate Macroeconomics (3)

P 304 Money and Banking (3)

I 499 Seminar in Economics (3)

Statistics/Quantitative Tools (9-10 S.H.)

O FIN 335 Forecasting Methods (3)

Choose one of the following two courses:

MATH 140 Applied Calculus (3) OR

MATH 160 Calculus I (4)

Choose one of the following two courses:

O BUSA 220 Business Statistics (3) OR

STAT 210 Statistics (3)

ELECTIVES (18 S.H.)

Additional credits at the 300- or 400-level in economics.

B.A. MINOR - ECONOMICS (ECON)

24 S.H.

REQUIRED COURSES – ECON (15 S.H.)

201 Principles of Microeconomics (3)

202 Principles of Macroeconomics (3)

302 Intermediate Microeconomics (3)

P 303 Intermediate Macroeconomics (3)

P 304 Money and Banking (3)

ELECTIVES (9 S.H.)

Additional credits at the 300- or 400-level in economics.

B.S. MAJOR - FINANCE (FIA; FIB)

69-70 S.H. (No Minor Required)

BUSINESS CORE (39-40 S.H.)

Mathematics (3-4 S.H.)

MATH 140 Applied Calculus (3) OR

MATH 160 Calculus I (4)

*"Additional Requirements" course as defined in Item 3, page 18

Accounting (6 S.H.)

ACCT	211	Financial Accounting Principles (3)
ACCT	212	Managerial Accounting Principles (3)

Statistics (3 S.H.)

O BUSA	220	Business Statistics (3) OR
STAT	210	Statistics (3)

Business Administration (15 S.H.)

O BUSA	320	Intermediate Business Statistics (3) OR
STAT	310	Intermediate Statistics (3)
BUSA	291	Legal Environment of Business (3)
MIS	312	Business Computer Programming (3)
P MGMT	325	Organizational Dynamics (3)
OM	334	Operations Management (3)

Economics and Finance (9 S.H.)

* ECON	201	Principles of Microeconomics (3)
* ECON	202	Principles of Macroeconomics (3)
FIN	360	Corporate Finance (3)

Marketing (3 S.H.)

MKTG	300	Principles of Marketing (3)
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FINANCE MAJOR REQUIREMENTS (30 S.H.)**FINANCE CORE (15 S.H.)**

P ECON	303	Intermediate Macroeconomics (3)
O FIN	335	Forecasting Methods (3)
FIN	377	Investments (3)
FIN	440	International Finance (3)
FIN	463	Cases in Financial Management (3)

OPTION A (15 S.H.) (FIA)

Option A is applicable for students planning to seek a career immediately after graduation. Choose five 400-level courses in finance or economics. At least two of the courses must be in finance.

OPTION B (15 S.H.) (FIB)

Option B is applicable for students planning to do advanced study in finance.

REQUIRED (6 S.H.)

FIN	422	Portfolio Theory and Security Valuation (3)
FIN	423	Derivative Securities (3)

OPTIONAL COURSES (9 S.H.)

Select three courses from the following list:

BUSA	340	Management Science (3)
MIS	342	Advanced Business Computer Applications (3)
MIS	462	Decision Support Systems (3)
ECON	405	Monetary Theory and Policy (3)
ECON	425	Managerial Economics (3)
FIN	480	Independent Studies in Finance (1-3)
MATH	165	Calculus II (4)
MATH	210	Foundations of Mathematics (4)
MATH	430	Operations Research: Linear Programming (4)
STAT	360	Regression Analysis (3)

COURSE DESCRIPTIONS**ECONOMICS (ECON)****201 - Principles of Microeconomics (3 S.H.)**

The private enterprise system, demand-and-supply, and market interaction; business costs and prices, forms of competition, resource markets; the mixed economy. Recommended prerequisite: University Studies math requirement.

202 - Principles of Macroeconomics (3 S.H.)

National income analysis; aggregate demand-and-supply; money and banking; business cycles, monetary and fiscal policy. Recommended prerequisite: University Studies math requirement.

203 - Principles of Economics III (3 S.H.)

Economic growth; unions; poverty and insecurity; public spending and taxation; international trade and trade restrictions; gold and the balance of payments; comparative systems. Prerequisites: ECON 201 and ECON 202.

302 - Intermediate Microeconomics (3 S.H.)

The theoretical approach to consumer demand, decision-making in the pricing and employment of resources under the major market classification, and the distribution of resources and production. Prerequisite: ECON 201.

303 - Intermediate Macroeconomics (3 S.H.)

National income accounting and measurement, theory of the determination of national economic activity; economic growth; consumption; investment; government spending and net exports; design and effects of fiscal and monetary policies; inflation. Prerequisite: ECON 202.

304 - Money and Banking (3 S.H.)

The nature and functions of money. Current definitions of the money supply and the process of money creation. The financial system and the central bank. The demand for money, interest rate determination, introduction to monetary policy. Prerequisites: BUSA 220 or STAT 210 and ECON 201 and ECON 202.

315 - Environmental and Natural Resource Economics (3 S.H.)

An introduction to the economics of natural resource management and environmental quality. Theory and policy in the use of nonrenewable and renewable resources, and in the control of pollution. Current issues in those areas are featured. Prerequisite: ECON 201 or instructor's permission.

320 - Business-Government Relations (3 S.H.)

Government economic regulation of business including anti-trust legislation, natural monopoly regulation, and selected social regulation topics such as consumer product safety. Prerequisite: ECON 201.

390 - Economics of the Middle East (3 S.H.)

The Middle East possesses two-thirds of the world's oil reserves, which the rest of the world uses as a basic input for its economies. In this course, students study the economics of oil and other natural resources of the region, such as the rapidly growing population and its impact on the labor markets as well as the impact all these factors have on scarce basic necessities such as water and food. The course also examines a brief history of ongoing conflicts within the region and their pull on increasing military spending within the context of the current Middle East economies. Prerequisite: ECON 202 or instructor's permission.

398 - Internship (1-6 S.H.)

Credits will not be counted in economics major, but as general elective credit. Prerequisite: Concurrent enrollment in ECON 399. P/NC only.

399 - Internship Problem (3 S.H.)

Prerequisites: Junior status in economics major, 2.5 GPA, and instructor's permission. Grade only.

400 - Public Finance: Taxation (3 S.H.)

Structure and economic effects of U.S. tax revenue sources such as the personal income tax and corporate income tax; principles of economic incidence and optimal taxation; current issues in taxation. Prerequisite: ECON 201 or instructor's permission.

401 - Entrepreneurship and the American Economy (3 S.H.)

This course focuses on the role of entrepreneurs in the development of the U.S. economy and the methods used by successful entrepreneurs. The course includes sections on American economic history and on competing economic systems with an emphasis on the role of entrepreneurship in the free-market system. Prerequisite: ECON 201, ECON 202, ACCT 211, FIN 201 or FIN 360. Grade only.

404 - International Economics (3 S.H.)

Comparative advantage and modern trade theories. The impact of international trade on income distribution and growth, barriers to trade, economic integration, contemporary international marketing agreements, exchange rate determination, and balance of payments adjustments. Prerequisites: ECON 201 and ECON 202. Recommended prerequisites: BUSA 220 or STAT 210.

405 - Monetary Theory and Policy (3 S.H.)

The theory and practice of monetary policy in a modern open economy. This includes the microeconomic foundations of the demand for assets, including money; interrelationships between nonmonetary assets, money, and rates of return; the ability of central banks to manipulate the money supply and influence economic activity; and the roles of public and private debt in monetary policy. Prerequisite: ECON 303 or ECON 304 or instructor's permission.

415 - International Economic Development (3 S.H.)

A study of the past and current paths to economic growth and development of countries. The course will analyze the economic policies and performances of countries by using economic theory and economic and social data. Emphasis is on developing countries of the Third World, the newly industrialized countries and former socialist countries undergoing transition to a capitalist system. Prerequisites: ECON 201 and ECON 202.

420 - Labor Economics (3 S.H.)

Economic theory relating to labor markets. Wage theory, bargaining models, and contemporary labor issues are considered. Prerequisites: ECON 201 and ECON 202 or instructor's permission.

425 - Managerial Economics (3 S.H.)

Application of economic theory and related decision-making methods to problems faced by business firms. Prerequisites: ECON 201 and ECON 202 or instructor's permission.

430 - Asian Economies in Transition (3 S.H.)

This course focuses on the economic transitions that have occurred in Asia. It will include a study of the different economic development strategies and policies that have been used in various Asian countries and a study of which policies have been successful. It will use a comparative approach to examine

similarities and differences among countries. Asia's efforts at regional integration, globalization and development of its financial markets will also be included in the course. Prerequisites: ECON 201 and ECON 202 or instructor's permission. Grade only.

435 - The North American Economies (3 S.H.)

This course studies the economic evolution of Canada, Mexico, and the United States. It traces the main periods and events of their economies since they became independent nations. Their economic policies are described, analyzed, and compared. Special emphasis is given to the analysis of their economic interaction that has produced the United States-Canada Trade Area and the North American Free Trade Agreement (NAFTA). Prerequisites: ECON 201 and ECON 202 or instructor's permission. Grade only.

440 - Industrial Organization (3 S.H.)

A theoretical and empirical study of the economic structure, conduct and performance of industry. Topics include concentration, scale economies, entry barriers, and collusive oligopoly practices. Topics are used to judge industrial performance relative to societal goals. Prerequisite: ECON 201.

444 - Public Finance: Expenditures and the Deficit (3 S.H.)

A practical and theoretical approach to public expenditures. The theory of public goods; use of benefit-cost analysis; analysis of major spending programs; and the effect of the deficit on economic activity. Prerequisites: ECON 201 and ECON 202 or instructor's permission.

450 - Health Economics (3 S.H.)

In-depth analysis of the market for health care services including the demand of health services; the supply of such services; and alternative delivery modes financing by individuals, government, and third-party payers. Health care policy at the federal, state, and local level is evaluated. Prerequisites: ECON 201 and ECON 202.

480 - Independent Studies in Economics (1-3 S.H.)

Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: Instructor's permission. Total credits may not exceed 6.

499 - Seminar in Economics (3 S.H.)

Advanced analysis of economic methods and problems. Specific focus of course is arranged by the instructor. Prerequisites: ECON 302 and ECON 303. Student must be either a major or minor in economics.

FINANCE (FIN)

201 - Introduction to Finance (3 S.H.)

An introduction to the financial system in the U.S. including the role of the banking system in controlling the supply of money and interest rate determination, a primer on investments, and an introductory discussion of international finance. Not open to those having 15 or more credits in business. Grade only.

335 - Forecasting Methods (3 S.H.)

A study of the techniques and processes used in business forecasting. Primary emphasis is on univariate time series. Techniques studied include simple smoothing methods, decomposition methods, and Box-Jenkins ARIMA method and regression. Prerequisites: MATH 140 or MATH 160 and BUSA 220 or STAT 210, or instructor's permission. Students are strongly advised to take intermediate statistics before taking this course. Grade only.

340 - Computer Applications in Finance (1 S.H.)

A series of short courses in the effective use of the SAS System in a PC environment. Alternative course topics include basic data handling, regression analysis, forecasting techniques, and survey tabulation and analysis, etc. Requires completion of several project assignments. May be repeated as topics change. Prerequisite: BUSA 220 or STAT 210. Grade only.

360 - Corporate Finance (3 S.H.)

The theory and practice of corporate finance, using the approaches and quantitative methods required of today's financial managers and decision-makers. Special emphasis on a theory of value, the determinants of risk, return and the opportunity cost of capital, applied to both real and financial assets, the study of leverage issues, the exploitation of market inefficiencies, and the development of various tools and economic reasoning which provide

the basis for a wide range of corporate financial decisions. Prerequisites: ECON 201, ECON 202, ACCT 211, BUSA 220 or STAT 210, and one of the following courses—MATH 110, MATH 115, MATH 120, MATH 140, or MATH 160. Grade only.

377 - Investments (3 S.H.)

Investment policies affecting the individual and institutional investor. Includes the analysis and management of stocks, bonds, mutual funds and other investments, and the nature of security markets. Prerequisite: FIN 360. Grade only.

398 - Internship (1-6 S.H.)

Credits are not counted in finance major, but as general elective credit. Prerequisite: Concurrent enrollment in FIN 399. P/NC only.

399 - Internship Problem (3 S.H.)

Prerequisite: Completion of business core courses, 2.5 GPA and instructor's permission. Grade only.

404 - Commercial Bank Management (3 S.H.)

An analysis of financial management issues of commercial banks and other financial institutions including institution performance, investments, asset/liability strategies, management of liquidity, securities, loans and other assets, and capital, deposits, and other sources of funds. Prerequisite: FIN 360. Grade only.

421 - Institutional Investment and Financial Markets (3 S.H.)

A study of portfolio management decision-making in this age of innovative global financial markets, new financial instruments and instantaneous worldwide communications. Prerequisites: FIN 360 and ECON 303. Grade only.

422 - Portfolio Theory and Security Valuation (3 S.H.)

An in-depth study of modern portfolio theory and techniques for the valuation of securities including equity, debt, and derivative securities. Special emphasis is placed on the contingent claims model for security valuation. Prerequisites: FIN 377 and MIS 312, or instructor's permission. Grade only.

423 - Derivative Securities (3 S.H.)

The application and valuation of financial securities whose value is contingent on the value of other securities. The primary concentration is on option and futures contracts; however, application of the option valuation model to other areas of finance will also be introduced. Prerequisites: MATH 140 or MATH 160 and FIN 360. Grade only.

440 - International Finance (3 S.H.)

This course provides a comprehensive introduction to the world of financial management as it applies to multinational corporations and other firms that engage in international transactions. Topics include the nature of the international financial system, foreign exchange management, investment financing, and risk management issues of concern to international businesses. Prerequisite: FIN 360. Grade only.

463 - Cases in Financial Management (3 S.H.)

Case studies affecting the financial policies and position of the business unit. Analysis of financial problems, determination of alternatives, evaluation of alternatives and managerial decision-making. Prerequisites: FIN 360 and MIS 312. Grade only.

471 - Real Estate Finance (3 S.H.)

The structure and operation of the primary and secondary mortgage markets, instruments, techniques, and strategies in financing real property investments including developing projects. Prerequisite: FIN 360. Grade only.

473 - Real Estate Investment (3 S.H.)

Development of the feasibility process, the major tool used in analysis of investment opportunities, with a view to determining highest and best use. Topics include market analysis, cash flow analysis, tax considerations, investment performance, risk analysis, and passive investments in real estate. Prerequisite: FIN 360. Grade only.

480 - Independent Studies in Finance (1-3 S.H.)

Offers advanced students an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: Instructor's permission. Total credits may not exceed 6. Grade only.

EDUCATION

Gildemeister Hall, Room 152 (507-457-5360; Fax: 507-457-5354)

www.winona.edu/education/advising

Melanie Reap (Chairperson)

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the Education faculty listing may change after this catalog is printed. Please contact the department for current listings.

FACULTY

Dana Brigson, Assistant Professor; B.S., University of Wisconsin-Whitewater; M.S., University of Wisconsin-La Crosse; 2007 –
Nancy Ann Eckerson, Associate Professor; B.S., M.S., Minnesota State University-Mankato; Ph.D., Iowa State University; 2000 –
John Gustafson, Associate Professor; B.A. Bemidji State University; M.A., California State University-Los Angeles; Ed.D.; University of South Dakota 1998 –
Donna Helble, Professor; B.A., Simpson College, Iowa; M.S., Winona State University; Ed.D., University of Northern Colorado; 1984 –
Margaret Hoody, Assistant Professor; B.S., University of St. Thomas; M.S., Minnesota State University-Mankato; 2007 –
Jeanette Karjala, Professor; B.A., Western Washington University, Bellingham; Fifth Year and M.A., Western Washington University, Bellingham; Ph.D., University of North Dakota, Grand Forks; 1992 –
Celeste Miller, Professor; B.A., University of Arizona; M.Ed., University of Maryland; Ph.D., Pennsylvania State University; 1997 –
Melanie Reap, Associate Professor, B.S., M.S., Texas A & M University; Ph.D., University of Oklahoma; 1999 –
James Reineke, Associate Professor; B.A., B.S., University of Minnesota-Twin Cities; Ph.D., Michigan State University; 1996 –
J. Ann Rethefsen, Associate Professor; B.A., Colby College; M.S., University of Wisconsin-Milwaukee; Ed.D., Saint Mary's University of Minnesota; 2004 –
Stace Riererson, Assistant Professor; B.A., University of Wisconsin-Madison; M.S., University of Wisconsin-Milwaukee; Ph.D., The Ohio State University; 2006 –
Janice Sherman, Professor; B.S., State University of New York-Buffalo; M.S., Colorado State University; Ed. D., University of North Dakota; 1989–
Thomas Sherman, Professor; B.S., State University of New York-Buffalo; M.Ed., Colorado State University; Ed.D., University of Colorado; 1989 –
Arne Stippola, Associate Professor; B.A., Central Washington University; M.A., University of Alaska; M.Ed., Ph.D., University of Washington; 2007 –
Lloyd (Tom) Stevens; Assistant Professor; B.S., Minnesota State University-Mankato; M.A., University of Northern Iowa; 2007 –
Patricia Tolmie, Professor; B.S., M.S., Winona State University; Ph.D., University of Wisconsin-Madison; 1980 –
Rhea Walker, Associate Professor; B.S., M.A., University of Northern Iowa; Ph.D., Iowa State University; 2004 –
Penny Warner, Associate Professor; B.S., M.S., University of Wisconsin; Ph.D., University of Minnesota; 2000 –
Maudie Williams, Professor; B.S., Fort Valley State College; M.S., Tuskegee Institute; Ed.D., University of Florida; 1989 –
Rod Winters, Associate Professor, B.A., Central College; M.A., University of Northern Colorado; Ed.D., University of Northern Iowa; 1998 –
Shenglan Zhang, Assistant Professor; B.A., Hebei Normal University; M.A.; Beijing Normal University; M.A., University of Southern California; Ph.D., Michigan State University, 2007 –

TEACHER EDUCATION OVERVIEW

The Education Department delivers courses in the professional education sequence required of all teaching majors. In addition, the department delivers the Business Education major, the Training and Development certificate program, and the Training and Development minor.

As a department, we seek to integrate into pre-service teacher education the knowledge, skills, and professional dispositions necessary to be an effective educator. This includes (1) a philosophy of education; (2) knowledge of the individual learner; (3) understanding of the opportunities, objectives, and responsibilities of schooling in a democratic society; (4) practice toward teaching effectively; and (5) the professionalism to work with others as leaders in promoting continual improvement of schools.

Teacher education program requirements outlined under each major are subject to change as Minnesota Board of Teaching licensure rules change. Students should check with their program advisor and the advising website (www.winona.edu/education/advising) regularly for current program/licensure requirements.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in the major, minor, certificate, and licensures on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no-credit-only or grade-only basis are so designated in the course descriptions.

REPETITION OF COURSES

No Education Department course may be repeated more than once due to withdrawal or earning a grade less than "C."

INCOMPLETE GRADES

The grade of incomplete ("I") may be granted at the discretion of the course instructor in special cases in which, for reasons beyond the student's control, all course assignments were not finished though the student is passing all other aspects of the course. The incomplete must be resolved by the second week of the next semester in which the student enrolls for any course that serves as a prerequisite for other courses.

TEACHER EDUCATION PROGRAMS

Elementary Education, K-6 with:

Early Childhood Emphasis, Birth- 6

Communication Arts and Literature, 5-8

Mathematics, 5-8

Science, 5-8

Social Studies, 5-8

Business Education, 5-12

Keyboarding for Computer Applications Endorsement, K-8

Communication Arts and Literature, 5-8 and 5-12

Health Education, 5-12

Mathematics, 5-8 and 5-12

Music: Instrumental and Classroom, K-12

Music: Vocal and Classroom, K-12

Physical Education, K-12

DAPE endorsement, K-12

Science: Chemistry, 9-12 + General Science 5-8

Science: Chemistry, 9-12

Science: Earth, 9-12 + General Science 5-8

Science: Life, 9-12 + General Science 5-8

Science: Life, 9-12

Science: Physics, 9-12 + 5-8 General Science

Science: Physics, 9-12

Social Studies, 5-12

Special Education: Developmental Adapted Physical Education, Pre-K-12

Special Education: Developmental Disabilities, K-12

Special Education: Learning Disabilities, K-12

Teaching English as a Second Language, K-12

Visual Arts, K-12

World Languages French, K-12

World Languages German, K-12

World Languages Spanish, K-12

The following Education Department majors are available at WSU-Rochester:

- K-6 with Middle Level Communication Arts and Literature 5-8 Specialty
- K-6 with Middle Level Social Studies 5-8 Specialty

All other majors are available only on the Winona campus. See pages 40 and 41 for the articulation of the 2+2 programs available at the WSU-Rochester campus.

ADMISSION TO THE WSU TEACHER EDUCATION PROGRAM

- I. Attend the Admissions Meeting the semester before you wish to start taking classes. An Admissions Meeting is scheduled early each semester. At this mandatory meeting, students review the criteria for admission and complete an application form; students are given an Admissions Folder to begin documenting their attainment of the admission criteria. (If a student has been accepted previously but did not start the education sequence the following semester, the student must attend a new admissions meeting and be re-accepted under the criteria in effect for that semester.)
- II. Document attainment of minimum admission criteria by submitting a complete Admissions Folder to the Education Department no later than the designated due date. The Admissions Folder is complete only if it contains highlighted documents that demonstrate the admission criteria in effect during that semester.

Current minimum admission criteria, which must be documented, include:

1. 30 semester hours of completed credit of which no more than 2 semester hours may be pass/no credit hours. All transfer credits to be considered for admission must have been accepted by WSU and be designated on the credit evaluation prepared by the WSU Office of Admissions.
2. Cumulative GPA of 2.75 or better (highlight on transcript).
Note: Students who do not meet the 2.75 GPA may check a box (“Alternate Admission Requests”) on the application form, requesting the Admission Committee to consider an alternate GPA. The alternate GPA calculation is based upon the last 30 semester credits completed or quarter credit equivalent. The calculation must include all semester or quarter hour coursework in any given semester needed to meet the 30-semester hour credit requirement.
3. Grade of “B” or better in a 3-credit college-level writing course (ENG 111 if taken at WSU).
4. Grade of “B” or better in a 3-credit college-level speech course (CMST 191 if taken at WSU).
5. Grade of “C” or better in a 3-credit college-level math course (MATH 100 or higher at WSU).
6. Official score report on all three sections of the Pre-Professional Skills Test (PPST): Math, Reading, and Writing. It will take up to 8 weeks from the time a student completes the exam for results of the Writing section to be processed and reported to WSU. It is the student’s responsibility to take the test at least two months before the deadline for completing the Admissions Folder. (Competency in each of the sections is not required for admittance to the WSU program, but it is required to obtain licensure.) Register for these tests online at www.ets.org/praxis, or call the La Crosse test site at 608-785-8968 or the Rochester test site at 507-292-9713.
7. Evidence of having passed the Education Department Writing Proficiency exam. All applicants for admission to the education program are required to pass this exam, which is given during the Admissions Meeting. A \$20 fee is payable by check at the time of this exam. Currently enrolled WSU students may have this fee billed to their tuition account.
8. Copy of completed DARS (Degree Audit Reporting System) form prepared by the WSU Office of Admissions for students who have transferred from another institution.
9. Affirmation of a record of good citizenship on the completed admission form.

Notes:

- Admission to teacher education is limited each semester. Additional criteria are used to determine admission to the program if the number of applicants exceeds the number of available seats.
- The University reserves the right to consider as part of the admission and retention policy those dispositions, general health, and scholastic achievement, or other standards as may be appropriate. Students must adhere to the WSU Student Conduct Policy.

RETENTION IN WSU TEACHER EDUCATION PROGRAM

Assistance Plan

Students identified by teacher education faculty as needing assistance in academic, personal, or professional domains are required to attend a review meeting to be called by the Education Department Chairperson and to include the education faculty member involved, appropriate department chairperson(s), and the student’s advisor to demonstrate corrective action in the identified areas of concern.

Assistance plans will likely draw upon services such as those provided by the Counseling Center, the Writing Center, Student Support Services,

and the Advising and Retention Office. If a student withdraws from the program for any reason, she or he must reapply for admission to continue in the program.

Continuation in Teacher Education

1. The successful completion of conditions outlined in the student assistance plan will be required for continuation in teacher education programs under the following circumstances:
 - A grade of less than “C” in any Education Department course
 - Withdrawal (WD) from the same Education Department course more than once, or withdrawal (WD) from two different Education Department courses in two different semesters
 - Failure to meet GPA requirements outlined below
2. Teacher education students must maintain at least a 2.75 GPA in order to be placed in student teaching. Teacher education students who do not meet this GPA requirement may not student teach until they meet the 2.75 requirement.
3. Student assistance plans and academic warning letters are treated as part of the student’s teacher education record.

Dismissal from Teacher Education Program

Students may be dismissed from the Teacher Education Program for either of the following reasons:

- Failure to document the fulfillment of student assistance plan commitments.
- Breach of ethical responsibilities, as stated in the Minnesota Code of Ethics for Teachers in the *WSU Teacher Education Student Handbook*. A student dismissed for an ethical violation will not be allowed to continue in any field experience that semester, will be dropped from the Teacher Education Program at the end of the semester, and will not be readmitted to the major.

Student appeals must follow the process outlined in the *WSU Teacher Education Student Handbook*.

STUDENT TEACHING

Requirements

Student teaching is required for all teacher education programs and is done during the final semester at WSU. One full semester is required in an area public school or early childhood program contracted by the University or elsewhere in Minnesota through the Common Market Program. All student teachers will complete a full semester in their licensure area. Student teachers follow the calendars of their respective school districts. The Student Teaching Director will indicate the beginning and ending dates of placement.

Student teaching at the secondary level is required in all major fields. If a second major is completed, the Director of Student Teaching will indicate the WSU student teaching requirements necessary to meet licensure requirements.

Application

Application for student teaching is made to the Director of Student Teaching two semesters prior to the student teaching semester. Students apply for a semester when they will not have other commitments, such as coaching, music tours, classes, etc. Applications are available in the Student Teaching Office (Gildemeister Hall).

Student Teaching Progression Policy

If the classroom supervisor or the University supervisor has any concern(s) regarding the student teacher’s performance (academic or professional), it is imperative that the concern be addressed immediately. All three parties—the classroom supervisor, the University supervisor and the student teacher—will meet and discuss all concerns. It is important that all three parties share a common understanding of the concern(s) and the impact upon the completion of a successful student teaching experience. A clear warning will be given, and a written plan developed, stating clear expectations and the consequences if those expectations are not met within a specified timeline. If students do not satisfactorily complete student teaching after remediation, they may apply to graduate with a Professional Studies degree.

LICENSURE: ELEMENTARY AND SECONDARY TEACHING

Minnesota Licensure

The state of Minnesota requires that all teacher education candidates for licensure shall:

- Hold a baccalaureate degree from a college or university that is accredited by the regional association for the accreditation of colleges and secondary schools.
- Demonstrate the Standards of Effective Practice.

- Verify the completion of an approved teacher preparation program.
- Meet the prescribed scores on the Pre-Professional Skills Tests (Praxis I-PPST) in reading, writing, and mathematics as set by the Minnesota Board of Teaching.
- Meet the prescribed scores on the Principles of Learning and Teaching and a test of content knowledge in each area of their licensure (Praxis II). Praxis II subject assessments include:
 - Business Education
 - Chemistry
 - Communication Arts & Literature, Grades 5-8
 - Communication Arts & Literature, Grades 5-12
 - Early Childhood Education
 - Earth and Space Science
 - Elementary Education
 - French
 - German
 - Health
 - Mathematics, Grades 5-8
 - Mathematics, Grades 5-12
 - Music (Instrumental/Vocal)
 - Physical Education
 - Physics
 - Science, Grades 5-8
 - Social Studies, Grades 5-8
 - Social Studies, Grades 5-12
 - Spanish
 - Special Education
 - Visual Arts

WSU is in full compliance with Title II regulations and its reporting structure. Based on scores reported for the 2003-2006 reporting period, WSU's institutional pass rate is 96%. The statewide pass rate was 94% in 2003-2006.

In the fall semester of 2006, a total of 1,260 students were enrolled in the WSU teacher preparation program. Of those students, 266 were in supervised student teaching experiences, which required a total of 600 hours in 15 weeks. The student-faculty ratio in supervised student teaching experiences is 264 students to 32 full- and part-time faculty.

Licensure in Other States

Students interested in becoming certified to teach in states other than Minnesota must contact that state's Department of Education to obtain licensure requirements. Most states will issue a temporary license to allow time to complete differences in their requirements. Students should contact the Licensure Certification Officer (Gildemeister Hall) regarding any changes in licensure requirements for particular states.

ELEMENTARY TEACHING LICENSES

- **Elementary Education with Early Childhood Emphasis (Birth-Grade 6):** A teacher of early childhood education is authorized to design, implement, and evaluate developmentally appropriate learning experiences for young children from birth through grade 6 in a variety of early childhood or public school P-6 settings. The early childhood education/elementary teacher collaborates with families, colleagues, and related service personnel to enhance the learning of all young children. Students in this program will be eligible for Early Childhood Education and Elementary Education Licensure.
- **K-6 Middle Level with a Content Specialty (K-8):** A teacher with this license is certified to design, implement, and evaluate developmentally appropriate learning experiences for children in kindergarten through grade 8. A K-6 teacher with content specialty also designs, implements, and evaluates learning experiences in a specific content area in grades 6 through 8 and collaborates with families, colleagues, and related service personnel to enhance the learning of school-aged children and youth.

Add-on Licensure for Candidates with Prior Licensure

- **Early Childhood Education (Birth - Grade 3):** A teacher of early childhood education is authorized to design, implement, and evaluate developmentally appropriate learning experiences for young children from birth through grade 3 in a variety of early childhood or public school P-3 settings. The early childhood education teacher collaborates with families, colleagues, and related service personnel to enhance the learning of all young children.
- **Pre-Primary Specialty (Age 3 to Grade 3):** A teacher with this license is certified to design, implement, and evaluate developmentally appropriate learning experiences for young children from age three through grade 3 in a variety of school settings. Teachers collaborate with families, colleagues, and related service personnel to enhance the learning of young children.
- **Middle Level Content Specialty (Grades 5-8):** A teacher with this license is certified to design, implement, and evaluate developmentally

appropriate learning experiences for children in grades 5-8. A K-6 teacher with an add-on content specialty also designs, implements, and evaluates learning experiences in a specific content area in grades 5 through 8 and collaborates with families, colleagues, and related service personnel to enhance the learning of school-aged children and youth.

SECONDARY TEACHING LICENSES

For detailed information regarding the course requirements in secondary teaching majors, please refer to the associated department in this catalog; for detailed information about Business Education, see page 97. Secondary teaching majors are required to complete the Professional Education Sequence in addition to their major content course requirements.

5-12 Majors (Teaching)

- B.S. Major - Business Education (BEDT)
- B.S. Major - Chemistry (CHET)
- B.S. Major - Communication Arts and Literature (CALT)
- B.S. Major - Earth Science (ESCT)
- B.S. Major - Life Science (BLST)
- B.S. Major - Mathematics (MTHT)
- B.S. Major - Physics (PHST)
- B.S. Major - Health Promotion - School Health (HPST)
- B.S. Major - Social Science/History (SSHT)

9-12 Majors (Teaching)

- B.S. Major - Chemistry (CHET)
- B.S. Major - Life Science (BLST)
- B.S. Major - Physical Science (CPST)
(Offered by the Chemistry Department.)
- B.S. Major - Physical Science (PPST)
(Offered by the Physics Department.)

K-12 Majors (Teaching)

- B.S. Major - Art (ARTT)
- B.S. Major - French (FRNT)
- B.S. Major - German (GRMT)
- B.S. Major - Music (MUSI or MUSV)
- B.S. Major - Physical Education (PET)
- B.S. Major - Spanish (SPNT)
- B.S. Major - Special Education: Learning Disabilities (SELD)
- B.S. Major - Special Education: Developmental Disabilities (SEDD)
- B.S. Major - Teaching English as a Second Language (ESLT)

PROFESSIONAL EDUCATION SEQUENCE FOR K-12 AND 5-12 LICENSURE (32-36 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

EDUC	304	Human Development and Learning: Middle Level and K-12 (4) OR
EDUC	305	Human Development and Learning: Secondary (4)
EDUC	308	Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)
O EDUC	311	Instructional Planning and Assessment: Middle Level and K-12 (3) OR
O EDUC	312	Instructional Planning and Assessment: Secondary (3)
EDUC	429	Secondary Reading and Teaching Strategies (4)
PEDUC	449	Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
PEDUC	459	The Professional Educator (3)
I EDST	465	Student Teaching - Senior High School (12 - 16)

PROFESSIONAL EDUCATION SEQUENCE FOR ELEMENTARY EDUCATION LICENSURE (29-32 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised

after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- EDUC 303 Human Development and Learning: Elementary Education with Early Childhood Emphasis (4) OR
 - EDUC 304 Human Development and Learning: Middle Level and K-12 (4)
 - EDUC 308 Human Relations and Student Diversity (3)*
 - O EDUC 310 Instructional Planning and Assessment: Elementary Education with Early Childhood Emphasis (3)
 - O EDUC 311 Instructional Planning and Assessment: Middle Level and K-12 (3)
 - P EDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
 - P EDUC 459 The Professional Educator (3)
 - I EDST 460 Student Teaching – Elementary Education with Early Childhood (1 - 16) OR
 - I EDST 464 Student Teaching – K-6 Middle Level (16)
- * EDUC 308 satisfies the University Studies Multicultural Perspectives category.

LICENSURE REQUIREMENTS FOR POST-BACCALAUREATE STUDENTS

A Bachelor of Arts graduate who holds a degree from WSU or another accredited institution may qualify for teacher licensure by satisfying the following requirements:

1. Complete the Professional Education Sequence (including student teaching in the major field). The student must have a minimum of a “C” grade in each course in the Professional Education Sequence before he or she is allowed to student teach.

Anyone applying for a Minnesota teaching license must complete a course that covers the effects of drugs and alcohol and an approved course in human relations. In addition, Minnesota and Wisconsin both require verification of scores that meet the Minnesota Department of Education’s minimum levels in the reading, writing, and mathematics components of the PRAXIS I test (PPST). In order to be licensed, Minnesota also requires qualifying scores on exit exams called PRAXIS II in the content of all areas in which the teacher will be licensed, and on a test of the Principles of Learning and Teaching. Wisconsin and other states have specific requirements for certification in addition to the completion of WSU’s Professional Education Sequence. Students should contact the Licensure Certification Officer (Gildemeister Hall) for more information about teacher certification.

2. Complete one of the Bachelor of Science teaching majors with a GPA of 2.50-2.75 in the major as required by the major department.
3. Earn a cumulative GPA of 2.75. (All previous college and university credit will be included in computing the cumulative GPA.)
4. Students should consult with the department offering the major for any additional GPA requirements.

To receive a second bachelor’s degree, the student must earn at least 30 semester credits after completing requirement for the first degree. For more information about dual degrees, see page 23.

The Board of Teaching/State Department of Education issues licenses. Application for the license to teach in the State of Minnesota must be made during the last few weeks of the final semester of attendance at WSU. Application forms are available in the Teacher Certification Licensure Office (Gildemeister Hall).

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student’s major or minor program. The Education Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

- EDST 460 Student Teaching – Elementary Education with Early Childhood Emphasis (1-16)
- EDST 464 Student Teaching/K6-Middle Level (1-16)
- EDST 465 Student Teaching – Senior High School K-12 Specialty (1-16)
- EDST 467 Student Teaching – Early Childhood (Birth to Grade 3) (1-16)

Math/Critical Analysis O

- EDUC 310 Instructional Planning and Assessment: Elementary

- EDUC 311 Education with Early Childhood Emphasis (3) Instructional Planning and Assessment: Middle Level and K-12 (3)
- EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 410 Foundations of Early Childhood Education (3)
- EDUC 449 Middle Level Philosophy, Organization, and Interdisciplinary Planning (3)
- EDUC 459 The Professional Educator (3)

Flag courses that can be used to satisfy education major/minor requirements are identified in the lists of required courses and electives in this section. (Flag requirements for business education are listed on page 98.)

ELEMENTARY EDUCATION WITH EARLY CHILDHOOD EMPHASIS (ELEC)

125-128 S.H. Birth to Grade 6

UNIVERSITY STUDIES (48 S.H.)

I. BASIC SKILLS

- ENG 111 College Reading and Writing (4)
- CMST 191 Introduction to Public Speaking (3)
- MATH 100 Survey of Math (3) or higher math course
- HERS 204 Personal and Community Health (3)

II. ARTS AND SCIENCES CORE

- Humanities: HIST 150 OR HIST 151 recommended and one elective (6)
- Natural Science: SCIE 201 and SCIE 401
- Social Science: SPED 400 and SOC 150 (6)
- Fine and Performing Arts: MUS 320 (3)

III. UNITY AND DIVERSITY

- MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)
- Science and Social Policies Elective (3)
- Contemporary Citizenship Elective (3)

LICENSE REQUIREMENTS (16-19 S.H.)

- EDUC 321 Children’s Literature (3)
- EDUC 352 Integrating Microcomputers into the Classroom (3) (test-out option available)
- MTED 125 Mathematics for Elementary Teachers (4)
- PESS 200 Teaching Elementary Physical Education (3)
- HERS 320 Health Education in Elementary Schools (3)
- * SOC 212 The Family (3)

PROFESSIONAL EDUCATION SEQUENCE (26 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, “Admission to the WSU Teacher Education Program.”)
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- EDUC 303 Human Development & Learning: Elementary Education with Early Childhood Emphasis (4)
- EDUC 308 Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)
- O EDUC 310 Instructional Planning & Assessment: Elementary Education with Early Childhood Emphasis (3)
- PEDUC 459 The Professional Educator (3)
- I EDST 460 Student Teaching - Elementary Education with Early Childhood Emphasis (1-16)

METHODS (34 S.H.)

Note: These courses require formal admission to the teacher education program. (See page 91, “Admission to the WSU Teacher Education Program.”)

- ART 300 Elementary Art Education (3)
- EDUC 328 Teaching Reading and Language Arts I (3)
- EDUC 329 Teaching Reading and Language Arts II (3)
- EDUC 333 Teaching Social Studies in the Elementary School (3)
- EDUC 334 Teaching Mathematics in the Elementary School (3)
- EDUC 335 Teaching of Science & Environmental Studies in the Elementary School (3)

* “Additional Requirements” course as defined in Item 3, page 18

- PEDUC 410 Foundations of Early Childhood Education (3)
 EDUC 413 Development in Infancy (3)
 EDUC 414 The Developing Child in the Social World (3)
 EDUC 416 Early Childhood/Kindergarten Curriculum (4)
 EDUC 424 Organization & Administration of Early Childhood Education Programs (3)

K-6 WITH MIDDLE LEVEL COMMUNICATION ARTS & LITERATURE 5-8 SPECIALTY (KMCL)

114-117 S.H. Kindergarten - Grade 8

UNIVERSITY STUDIES (48 S.H.)

I. BASIC SKILLS

- ENG 111 College Reading and Writing (4)
 CMST 191 Introduction to Public Speaking (3)
 MATH 100 Survey of Math (3) or higher math course
 HERS 204 Personal and Community Health (3)

II. ARTS AND SCIENCES CORE

- Humanities: ENG 240 Young Adult Literature and HIST 150 OR HIST 151 recommended (6)
 Science electives: SCIE 201 and SCIE 401 (7)
 Social Science: SPED 400 and one elective (6)
 Fine and Performing Arts: MUS 320 (3)

III. UNITY AND DIVERSITY

- MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)
 Science and Social Policies elective (3)
 Contemporary Citizenship Elective (3)

LICENSE REQUIREMENTS (16-19 S.H.)

- EDUC 321 Children's Literature (3)
 EDUC 352 Integrating Microcomputers into the Classroom (3) (test-out option available)
 MTED 125 Mathematics for Elementary Teachers (4)
 PESS 200 Teaching Elementary Physical Education (3)
 HERS 320 Health Education in Elementary School (3)
 THAD 141 Oral Interpretation (3)

Another course in the language arts to be determined by the department.

PROFESSIONAL EDUCATION SEQUENCE (29 S.H.)

Notes:

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- EDUC 304 Human Development & Learning: Middle Level and K-12 (4)
 EDUC 308 Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)
 O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 (3)
 PEDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
 PEDUC 459 The Professional Educator (3)
 I EDST 464 Student Teaching/K-6-Middle Level (16)

METHODS (21 S.H.)

Note: These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")

- ART 300 Elementary Art Education (3)
 EDUC 328 Teaching Reading and Language Arts I (3)
 EDUC 329 Teaching Reading and Language Arts II (3)
 EDUC 330 Literacy for Second Language Learners (3)
 EDUC 333 Teaching Social Studies in the Elementary School (3)
 EDUC 334 Teaching Mathematics in the Elementary School (3)
 EDUC 335 Teaching of Science & Environmental Studies in the Elementary School (3)

K-6 WITH MIDDLE LEVEL MATHEMATICS 5-8 SPECIALTY (KMMA)

119-122 S.H. Kindergarten - Grade 8

UNIVERSITY STUDIES (49 S.H.)

I. BASIC SKILLS

- ENG 111 College Reading and Writing (4)
 CMST 191 Introduction to Public Speaking (3)
 MATH 100 Survey of Math (3) or higher math course
 HERS 204 Personal and Community Health (3)

II. ARTS AND SCIENCES CORE

- Humanities: HIST 150 OR HIST 151 recommended and one elective (6)
 Natural Science: SCIE 201 and SCIE 401 (7)
 Social Science: SPED 400 and one additional course (6)
 Fine and Performing Arts: MUS 320 (3)

III. UNITY AND DIVERSITY

- MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)
 Science and Social Policies: Elective (3)
 Contemporary Citizenship Elective (3)

LICENSE REQUIREMENTS (20-23 S.H.)

- EDUC 321 Children's Literature (3) OR ENG 240 Young Adult Literature (3)
 EDUC 352 Integrating Microcomputers into the Classroom (3) (test-out option available)
 MATH 120, MATH 140, OR MATH 160 (3)
 MTED 125 Mathematics for Elementary Teachers (4)
 MTED 221 Middle School Methods in Mathematics (1)
 PESS 200 Teaching Elementary Physical Education (3)
 HERS 320 Health Education in the Elementary School (3)
 STAT 110 Fundamentals of Statistics (3)

PROFESSIONAL EDUCATION SEQUENCE (29 S.H.)

Notes:

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- EDUC 304 Human Development & Learning: Middle Level and K-12 (4)
 EDUC 308 Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)
 O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 (3)
 PEDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
 PEDUC 459 The Professional Educator (3)
 I EDST 464 Student Teaching/K-6-Middle Level (16)

METHODS (21 S.H.)

Note: These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")

- ART 300 Elementary Art Education (3)
 EDUC 328 Teaching Reading and Language Arts I (3)
 EDUC 329 Teaching Reading and Language Arts II (3)
 EDUC 333 Teaching Social Studies in the Elementary School (3)
 EDUC 334 Teaching Mathematics in the Elementary School (3)
 EDUC 335 Teaching of Science & Environmental Studies in the Elementary School (3)
 EDUC 434 Remedial Mathematics Methods (3)

K-6 WITH MIDDLE LEVEL SCIENCE 5-8 SPECIALTY (KMSC)

122-126 S.H. Kindergarten - Grade 8

UNIVERSITY STUDIES (48 S.H.)

I. BASIC SKILLS

- ENG 111 College Reading and Writing (4)
 CMST 191 Introduction to Public Speaking (3)
 MATH 100 Survey of Math (3) or higher math course

HERS 204 Personal and Community Health (3)

II. ARTS AND SCIENCE CORE

Humanities: HIST 150 OR HIST 151 recommended and one elective (6)

Science: GEOS 120 and GEOS 130 (7)

Social Science: SPED 400 and one additional course (6)

Fine and Performing Arts: MUS 320 (3)

III. UNITY AND DIVERSITY

MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)

Science and Social Policies: GEOS 103 recommended (3) OR BIOL 104 for Wisconsin licensure

Contemporary Citizenship Elective (3)

LICENSE REQUIREMENTS (27-31 S.H.)

EDUC 321 Children's Literature (3) OR ENG 240 Young Adult Literature (3)

EDUC 352 Integrating Microcomputers into the Classroom (3) (test-out option available)

MTED 125 Mathematics for Elementary Teachers (4)

PESS 200 Teaching Elementary Physical Education (3)

HERS 320 Health Education in Elementary School (3)

Science: *BIOL 118 recommended OR *BIOL 242 (4)

Science: *CHEM 108 (4) or a combination of CHEM 212 (4) AND CHEM 213 (4)

Science: *PHYS 115 (3)

PROFESSIONAL EDUCATION SEQUENCE (29 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

EDUC 304 Human Development & Learning: Middle Level and K-12 (4)

EDUC 308 Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)

O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 (3)

PEDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)

PEDUC 459 The Professional Educator (3)

I EDST 464 Student Teaching/K-6-Middle Level (16)

METHODS (18 S.H.)

Note: These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")

ART 300 Elementary Art Education (3)

EDUC 328 Teaching Reading and Language Arts I (3)

EDUC 329 Teaching Reading and Language Arts II (3)

EDUC 333 Teaching Social Studies in the Elementary School (3)

EDUC 334 Teaching Mathematics in the Elementary School (3)

EDUC 335 Teaching of Science & Environmental Studies in the Elementary School (3)

K-6 WITH MIDDLE LEVEL SOCIAL STUDIES 5-8 SPECIALTY (KMSO)

123-126 S.H. Kindergarten - Grade 8

UNIVERSITY STUDIES (48 S.H.)

I. BASIC SKILLS

ENG 111 College Reading and Writing (4)

CMST 191 Introduction to Public Speaking (3)

MATH 100 Survey of Math (3) or higher math course

HERS 204 Personal and Community Health (3)

Humanities: HIST 150 and HIST 151 (6)

Science electives: one with lab; one without (7)

Social Science: SPED 400 and one elective (6)

Fine and Performing Arts: MUS 320 (3)

II. ARTS AND SCIENCE CORE

Humanities: HIST 150 and HIST 151 (6)

Science electives: SCIE 201 and SCIE 401 (7)

Social Science: SOC 150 (3)

Fine and Performing Arts: MUS 320 (3)

III. UNITY AND DIVERSITY

MTED 201 Technology-Based Geometry and Probability for Elementary Teachers (4)

Science and Social Policies elective (3)

Contemporary Citizenship Elective (3)

LICENSE REQUIREMENTS (27-31 S.H.)

EDUC 321 Children's Literature (3) ENG 220, ENG 221, or ENG 240 (3)

EDUC 352 Integrating Microcomputers into the Classroom (3) (test-out option available)

MTED 125 Mathematics for Elementary Teachers (4)

PESS 200 Teaching Elementary Physical Education (3)

HERS 320 Health Education in Elementary School (3)

SPED 400 Education of Exceptional Children/Youth (3)

Non-Western History: HIST 123 or HIST 165 or HIST 170 (3)

Western Civilization: *HIST 120 or *HIST 121 or *HIST 122 (3)

Social Science: *ECON 202 (3)

Social Science: *GEOG 110 or GEOG 320 (3)

PROFESSIONAL EDUCATION SEQUENCE (29 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

EDUC 304 Human Development & Learning: Middle Level and K-12 (4)

EDUC 308 Human Relations and Student Diversity (3) (EDUC 308 satisfies the University Studies Multicultural Perspectives Category.)

O EDUC 311 Instructional Planning & Assessment: Middle Level and K-12 (3)

PEDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)

PEDUC 459 The Professional Educator (3)

I EDST 464 Student Teaching/K-6-Middle Level (16)

METHODS (18 S.H.)

Note: The courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")

ART 300 Elementary Art Education (3)

EDUC 328 Teaching Reading and Language Arts I (3)

EDUC 329 Teaching Reading and Language Arts II (3)

EDUC 333 Teaching Social Studies in the Elementary School (3)

EDUC 334 Teaching Mathematics in the Elementary School (3)

EDUC 335 Teaching of Science & Environmental Studies in the Elementary School (3)

COURSE DESCRIPTIONS

Note: The prefix for Education courses is EDUC except where noted otherwise.

115 - Improving Reading and Study Skills (1 S.H.)

To assist students who may have problems with reading skills and to help them develop efficient study habits to participate successfully in college level courses. Offered each semester. P/NC only.

120 - Parenting (3 S.H.)

The social, emotional, physical, and intellectual development of children from birth to adolescence is outlined. Parenting strategies and child-rearing practices are discussed. Grade only. Offered each semester.

150 - Introductory Field Experience (1 S.H.)

A general elective teaching assistant experience at a selected school level for either an introductory classroom experience or an additional classroom experience. May be repeated once for two credits. Prerequisite: Instructor's permission. P/NC Only. Offered each semester. **Note:** Persons enrolling in EDUC 150 must arrange their schedule with the Field Experience Director in the Education Department prior to pre-registration.

299 - Latino and Latin American Perspectives (3 S.H.)

This course investigates Latino demographic growth in Minnesota and creates intercultural exchanges between WSU students and Latino K-12 students with Big Brothers Big Sisters of Greater Winona. The course will address issues pertinent to citizen development such as community-based learning and mentoring. Students will also learn about the history of racism, prejudice, and cultural deficit theory in the United States. Students will understand their own personal biases, where these biases came from, and how to think critically about contemporary issues pertinent to Latino populations in Minnesota. Grade only. Offered each semester.

303 - Human Development and Learning: Elementary Education with Early Childhood Emphasis (4 S.H.)

This course introduces students to the psychological and social dimensions of learning and development and their influence on students' participation in school. The course focuses on psychological theories of learning and development, classroom management, and the relationship between psychological theory and classroom practice in early childhood and primary classrooms. 30-40 hours of field experience is required in addition to regularly scheduled on-campus class sessions. Concurrent enrollment with EDUC 310. Grade only. Prerequisite: Admission to the teacher education program. Offered each semester.

304 - Human Development and Learning: Middle Level and K-12 (4 S.H.)

This course introduces students to the psychological and social dimensions of learning and development and their influence on students' participation in school. The course focuses on psychological theories of learning and development, classroom management, and the relationship between psychological theory and classroom practice in elementary and middle school classrooms. 30-40 hours of field experience is required in addition to regularly scheduled on-campus class sessions. Concurrent enrollment with EDUC 311. Grade only. Prerequisite: Admission to the teacher education program. Offered each semester.

305 - Human Development and Learning: Secondary (4 S.H.)

This course introduces students to the psychological and social dimensions of learning and development and their influence on students' participation in school. The course focuses on psychological theories of learning and development, classroom management, and the relationship between psychological theory and classroom practice in secondary classrooms. 30-40 hours of field experience is required in addition to regularly scheduled on-campus class sessions. Concurrent enrollment with EDUC 312. Grade only. Prerequisite: Admission to the teacher education program. Offered each semester.

308 - Human Relations and Student Diversity (3 S.H.)

A basic course in human relations for education majors. The course takes a laboratory and a directed study approach in areas such as communication, group interaction, trust, interpersonal relationships, and the study of minorities, ethnic groups, and second language learners. Prerequisite: Admission to the teacher education program. Offered each semester.

310 - Instructional Planning and Assessment: Elementary Education with Early Childhood Emphasis (3 S.H.)

Principles of curriculum formation including writing objectives, unit planning, and daily lesson planning. Evaluation techniques to determine achievement of objectives through teacher-made tests, standardized tests, and observation techniques as well as statistics of measurement, specialized measurement instruments, and interpretation. Taken concurrently with EDUC 303. Grade only. Prerequisite: Admission to the teacher education program. Offered each semester.

311 - Instructional Planning and Assessment: Middle Level and K-12 (3 S.H.)

Principles of curriculum formation including writing objectives, unit planning, and daily lesson planning for elementary and middle levels form the emphasis of this course. Assessment, measurement, and evaluation techniques are studied to determine achievement of objectives through teacher-made tests, performance assessments, standardized tests, and observation techniques. Statistics of measurement, specialized measurement instruments and test interpretation are also studied. Thirty clock-hours of field experience are required, in addition to the regularly scheduled on-campus class sessions. Taken concurrently with EDUC 304. Grade only. Prerequisite: Admission to the teacher education program. Offered each semester.

312 - Instructional Planning and Assessment: Secondary (3 S.H.)

Principles of curriculum formation including writing objectives, unit planning, and daily lesson planning for secondary education form the emphasis of this course. Assessment, measurement, and evaluation techniques are studied to determine achievement of objectives through teacher-made tests, performance assessments, standardized tests, and observation techniques. Statistics of measurement, specialized measurement instruments and test interpretation are also studied. Thirty clock-hours

of field experience are required, in addition to the regularly scheduled on-campus class sessions. Taken concurrently with EDUC 305. Grade only. Offered each semester.

321 - Children's Literature (3 S.H.)

This course teaches students about children's literature. Consideration will be given to locating and evaluating early literacy, primary, and intermediate children's books and to the method of organizing, teaching, and evaluating a literature program at all age levels. Current issues and research will be examined. Grade only. Offered each semester.

328 - Teaching Reading and Language Arts I (3 S.H.)

The first of a two-course sequence in literacy methods examines the integration of reading, writing, listening, speaking, and viewing competencies in a unified literacy curriculum for learners ages three to eight (Pre-Kindergarten-3rd grade). Instructional emphasis is placed upon assessment, fluency, active construction of meaning, and matching learner capabilities with appropriate instructional strategies. Prerequisites: EDUC 303 or 304, 310 or 311. Offered each semester.

329 - Teaching Reading and Language Arts II (3 S.H.)

The second of a two-course sequence in literacy methods extends the examination of reading, writing, listening, speaking, and viewing competencies by focusing on learners ages nine to fourteen (grades 4-8). Emphasis is placed upon strategies for expanding purposes and genres, integration of assessment and instruction, and teaching for self-regulation of comprehension, composing, and editing strategies. Prerequisite: EDUC 328. Offered each semester.

330 - Literacy for Second Language Learners (3 S.H.)

This course addresses the teaching of literacy for students with a primary language other than English. After examining the interwoven nature of language and culture, the course will focus on the instructional approaches to meet the needs of second language learners in school settings. Special attention will be given to the role of home school communication in programs for second language learners. Prerequisite: EDUC 328. Grade only. Offered yearly.

331 - Teaching Social Studies in Secondary Schools (3 S.H.)

Materials and methods of teaching geography, history and civics, including the newest textbooks, maps, pictures and other electronic visuals. Prerequisites: EDUC 305 and 312. Offered yearly.

333 - Teaching Social Studies in the Elementary School (3 S.H.)

Course covers social studies curriculum for elementary grades. Development of teaching competencies in small group instruction, guiding student inquiry and conducting discovery lessons. Curriculum materials are studied and evaluated for use in the elementary classrooms. Field experience, micro-teaching, unit planning, and the use of children's literature in the social studies curriculum are included in this course. Prerequisites: EDUC 303 and 310, or 304 and 311, or 305 and 312. Offered each semester.

334 - Teaching Mathematics in the Elementary School (3 S.H.)

Teaching competencies such as guiding student inquiry, demonstrating mathematical principles and procedures, and using a variety of instructional aids are developed in relation to scope and sequence of elementary curriculums. Prerequisites: EDUC 303 and 310, or 304 and 311. Offered each semester.

335 - Teaching of Science and Environmental Studies in the Elementary School (3 S.H.)

Study and guided application of current materials and methods designed for science and environmental education. Theoretical background and practical skills necessary for teaching both process and content curriculums are developed through individual and group work, as well as field experiences. Prerequisites: EDUC 303 and 310, or 304 and 311, or SCIE 201. Offered each semester.

352 - Integrating Microcomputers into the Classroom (3 S.H.)

This course covers basic technological knowledge, which will enable the teacher to plan technology-based instruction, integrate technology into the curriculum, and enhance the teacher's technological competencies. Offered each semester. (Test-out option available.)

410 - Foundations of Early Childhood Education (3 S.H.)

This is the introductory course in early childhood education examining the history, theory, trends, and contemporary issues in early childhood education as well as the role of the early childhood teacher. Prerequisite: Admission to the teacher education program. Offered each semester.

413 - Development in Infancy (3 S.H.)

This course addresses the topics of genetics, prenatal development, birth, and physical, social, emotional, and cognitive development in the first two-years with emphasis on care in group settings. Includes 30-hour practicum experiences with infants and toddlers. Prerequisites: EDUC 303 and 410. Grade only. Offered yearly.

414 - The Developing Child in the Social World (3 S.H.)

This course covers physical, social, emotional, language and cognitive development of children ages 3-6, in learning environments and the

community relationships needed to support this development. Prerequisites: EDUC 303 and 410. Grade only. Offered yearly.

416 - Early Childhood/Kindergarten Curriculum (4 S.H.)

Planning the curriculum and developing effective teaching strategies and assessment methods for young children from 2 and 1/2 years old through 5 years old. Students gain experience in a supervised preschool program. Prerequisites: EDUC 303 and 410. Grade only. Offered each semester.

424 - Organization and Administration of Early Childhood Education Programs (3 S.H.)

Local and state laws governing various types of early childhood programs are studied. Financial aspects, buildings, personnel and administrative matters pertaining to the establishment of programs are discussed. Prerequisites: EDUC 303, 410, and 416. Grade only. Offered yearly.

429 - Secondary Reading and Teaching Strategies (4 S.H.)

Emphasis is on reading comprehension, strategies, and study skills in content areas, lesson planning, lesson presentation skills, and media techniques appropriate to the instructional process. Prerequisites: EDUC 305, 312. Offered each semester.

434 - Remedial Mathematics Methods (3 S.H.)

This course covers diagnostic and remediation techniques to facilitate acquisition of basic mathematics skills. Prerequisite: EDUC 334 or instructor's permission. Offered each semester.

442 - The Adult Learner (3 S.H.)

This course focuses on the characteristics and development of adult learners. Offered yearly.

449 - Middle Level Philosophy, Organization and Interdisciplinary Planning (3 S.H.)

The major focus of this course is middle level philosophy, organization, and interdisciplinary team planning. The major objective of this course is to provide future middle school teachers with a background in the components of the middle school movement and planning appropriate instructional strategies for middle level learners. This course is designed for secondary education majors, K-12 majors, and those seeking K-6 MS licensure. Field experiences are required in addition to the regularly scheduled on campus class sessions. Prerequisites: EDUC 304 and 311 or 305 and 312. Grade only. Offered each semester.

450 - Comparative Education (3 S.H.)

A study of the purposes, organization, offerings, and achievements of education in selected foreign countries. Grade only. Offered yearly.

459 - The Professional Educator (3 S.H.)

This course is designed to familiarize teacher education majors and others associated with the education profession with the historical and philosophical foundations of public education, school organizational patterns, legal responsibilities, professional organizations, and related educational issues. Additional components will involve classroom management and topics related to inclusive and special education. Prerequisites: EDUC 303, 304, or 305, 310, 311, or 312. Take this course the semester prior to student teaching. Offered each semester.

460 - Student Teaching (EDST) - Elementary Education with Early Childhood Emphasis (1-16 S.H.)

A capstone student teaching experience. One full semester of student teaching on a daily, full-time basis in an appropriate educational school setting. Prerequisites: All professional courses required for the major. P/NC only.

464 - Student Teaching (EDST) - K-6 Middle Level (1-16 S.H.)

One full semester of student teaching on a full-day basis in a middle school. Offered each semester. Prerequisites: All professional courses required for the major. P/NC only.

465 - Student Teaching (EDST) - Senior High School K-12 Specialty (1-16 S.H.)

A capstone student teaching experience. One full semester of student teaching on a daily, full-time basis in an appropriate educational school setting. Prerequisites: All professional courses required for the major. P/NC only.

467 - Student Teaching (EDST) - Early Childhood (Birth to Grade 3) (1-16 S.H.)

Supervised teaching in two (2) Early Childhood placements. Offered each semester. P/NC only.

483 - Multicultural Children, Youth, and Families (2 S.H.)

This course provides structure for acquiring, building and demonstrating mechanisms for integrating multicultural content into mainstream curricula. Specific attention is geared to goals, concepts and instructional planning in elementary education addressing culture, ethnicity, race, gender, language, socioeconomic levels, religion, age, ethics and exceptionality. The social reconstructionist approach is infused to provide demonstrations of transforming teaching for equity and justice. Offered yearly.

490 - Individual Problems in Education (1-3 S.H.)

Opportunity for the qualified advanced undergraduate and graduate student to work independently. Topics may include research, development of special projects, selected readings, etc. Time-arranged. Offered each semester. Prerequisites: Major advisor's permission; completion of the Professional Sequence, and for elementary majors, completion of the Professional Education Sequence. May be repeated to a total of 4 credits. P/NC only for undergraduates.

498 - Workshops and Seminar (1-3 S.H.)

The subject matter to be developed by the Department and instructor prior to the workshop or seminar. Students may repeat the course without limitation on the number of credits as long as the subject matter is different. P/NC only. Offered on demand.

499 - Workshops and Seminar (1-3 S.H.)

The subject matter to be developed by the Department and instructor prior to the workshop or seminar. Students may repeat the course without limitation on the number of credits as long as the subject matter is different. Grade only. Offered on demand.

BUSINESS EDUCATION

Somsen Hall, Room 319 (507-457-5165)

www.winona.edu/bued

Jeanette Karjala, Advisor

PROGRAM OVERVIEW

The Business Education program's primary goal is to provide the depth of knowledge and competencies required for career advancement in addition to entry-level proficiencies. All programs are designed with a balanced curriculum of general knowledge and specialized skills. The following programs are available:

- Bachelor of Science: Business Education (Teaching)
- Bachelor of Science: Training and Development Minor
- Certificate: Training and Development

Business Education Teaching Major

The Business Education Teaching major prepares students to become teachers of business subjects at the K-12 level. Business education courses integrate technology and business to prepare students for success after graduation. Students pursue a balanced curriculum of computer technology, business administration, administrative information systems, general education, methods of teaching, and professional education. Senior business education students teach in grades 5-12 on a full-time basis for one semester to fulfill their student teaching requirement.

To improve the opportunity and access for interested candidates to complete a business education program and receive licensure, WSU worked closely with the Board of Teaching (BOT) and Minnesota Department of Education to develop a collaborative procedure for students located throughout the state. Since fall 1999, WSU has worked toward preparing online courses. This included a pilot cohort of students from the Mankato area. The program is now ready to be released statewide. Students in this program complete their general education core and certain electives from the MnSCU institution in their area. The Minnesota Standards of Effective Practice must be taken from a single BOT-approved teacher preparation institution and verification of satisfactory completion provided. The business education core of courses is completed online through WSU. For specific information, contact the Business Education office for an advisor.

Training and Development

The Training and Development minor or certification program prepares individuals for professional positions in employer-based training and employee development programs; this program augments many majors. Additionally, it prepares students to fulfill the rapidly expanding training and training administrator market. As one of the most rapidly growing career opportunity areas, the training and development field offers careers in positions such as trainer/instructor, instructional technologist, course developer/designer, training specialist, and training manager.

The training and development minor or certification program includes course work in seven basic areas: business organization and management, instruction and program development, business communications, interpersonal relations, human resources, adult learning, and computers. These competency areas coincide with the competencies that the American Society for Training and Development (ASTD) recommends for well-qualified training professionals. Organizations with training and employee development programs provide internship positions that allow students to actively apply knowledge and skills in a "real" training environment.

Vocational-Technical College Transfer Policy for Business Education Teaching Majors

Students who have completed a one- or two-year business program at a technical or community college may apply for a transfer of approved business credits. Students' transcripts are evaluated by Business Education faculty. (Refer to page 5 for information about transfer of technical or community college credits.) This transfer policy applies only to students majoring in the teaching of business education.

ADMISSION AND RETENTION REQUIREMENTS

For information about admission and retention requirements, see page 91.

STUDENT TEACHING REQUIREMENTS

To receive departmental recommendation for student teaching, a student must:

1. Complete all courses required for the major.
2. Have a minimum 2.75 overall GPA and a 2.5 GPA in the major.
3. Meet the admission requirements of the College of Education listed on page 91.

GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23.

BUSINESS EDUCATION TEACHING MAJORS

Students interested in the business education teaching major should contact the Business Education office for an advisor. Teaching majors must take all courses in the Professional Education Sequence for secondary majors in addition to courses in the content area. Refer to the education program requirements on page 92, or refer to either of these websites: www.winona.edu/bued or www.winona.edu/education. Please refer to the business education website for information regarding the articulation agreement with Minnesota State University—Mankato for the Business Education program.

The business education faculty recommends for student teaching only those students who have a minimum 2.75 overall GPA and a 2.5 GPA in the major. See admission requirements for teacher education on page 91.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Business Education program offers the following flag courses in the University Studies Program:

FLAG

Oral I

BUED	401	General Methods and Foundation (3)
BUED	403	Technology and Business Teaching Methods (3)
BUED	410	Administrative Communication (3)

Writing P

BUED	333	Business Communication (3)
BUED	335	Information Resource Management (3)

Flag courses that can be used to satisfy business education major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR BUSINESS EDUCATION (Teaching) (BEDT)

58 S.H. (No Minor Required) Grade 5-12

REQUIRED COURSES (52 S.H.)

Business Education – BUED (34 S.H.)

	201	Keyboarding (1)
	203	Document Production and Procedures (2)
	215	Personal Finance (3)
	320	Business Technology (3)
	330	Advanced Business Technology (3)
P	333	Business Communication (3)
P	335	Information Resource Management (3)
	340	Integrated Information Systems Applications (3)
	360	Interpersonal Business Relations (3)
I	401	General Methods and Foundations (3)
I	403	Technology and Business Teaching Methods (3)
	435	Information Systems/Personnel Management (3)
	490	Capstone Seminar (1)

Accounting – ACCT (6 S.H.)

	211	Financial Accounting Principles (3)
	212	Managerial Accounting Principles (3)

Business Administration – BUSA (3 S.H.)

	291	Legal Environment of Business (3)
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Economics and Finance (9 S.H.)

ECON	201	Principles of Microeconomics (3)
ECON	202	Principles of Macroeconomics (3)
FIN	360	Corporate Finance (3) OR

FIN	201	Introduction to Finance (3)
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Marketing – MKTG (3 S.H.)

	300	Principles of Marketing (3)
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RECOMMENDED ELECTIVES (3 S.H.)†

Business Administration – BUSA

	106	Introduction to Business (3)
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Business Education – BUED

	206	Administrative Procedures (3)
	218	Job Search Strategies: Résumé (1)
	219	Job Search Strategies: Application Letter and Interview (1)
	336	Information Services Seminar (1)
	350	Quality of Work Life (3)
I	410	Administrative Communication (3)
	412	Team Building (1-3)
	440	Training and Employee Development (3)
	441	Training Techniques and Media (3)
	470	Seminar in Training and Education for Business (1-3)

Education – EDUC

	442	The Adult Learner (3)
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† Other electives may be taken with approval from the student's advisor.

Note: The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Secondary Teaching Licenses courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or website.

B. S. MINOR TRAINING AND DEVELOPMENT (TRDV)

24 S.H.

REQUIRED COURSES (15 S.H.)

Business Education – BUED (12 S.H.)

335	Information Resource Management (3)
I 410	Administrative Communication (3)
440	Training and Employee Development (3)
441	Training Techniques and Media (3)

Education – EDUC (3 S.H.)

442	The Adult Learner (3)
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FOUNDATION REQUIREMENTS (9 S.H.)

BUED 320	Business Technology (3) OR
MIS 202	Microcomputers in Business (3)
BUED 360	Interpersonal Business Relations (3)
BUED 435	Information Systems/Personnel Management (3) OR
P MGMT 317	Management of Human Resources (3)

TRAINING AND DEVELOPMENT CERTIFICATE

15 S.H.

REQUIRED COURSES (15 S.H.)

I BUED 410	Administrative Communication (3)
BUED 440	Training and Employee Development (3)
BUED 441	Training Techniques and Media (3)
EDUC 442	The Adult Learner (3)
BUED 470	Seminar in Training and Education for Business (1-3)

COURSE DESCRIPTIONS (BUED)

201 - Keyboarding (1 S.H.)

Computer keyboarding proficiency and mastery are developed with skill building and proofreading techniques. Technique, speed, and accuracy are emphasized. Offered each semester.

202 - Introduction to Word/Information Processing (3 S.H.)

Knowledge and application of word processing, spreadsheet and database software for personal use. Includes problem-solving and production using integrated software. Prerequisite: BUED 201 or equivalent.

203 - Document Production and Procedures (2 S.H.)

Fundamental word processing software knowledge and skills are developed for personal and business uses. Current input devices and methods, such as voice and slate, are included. Prerequisite: BUED 201 or equivalent. Offered yearly.

206 - Administrative Procedures (3 S.H.)

Administrative procedures and methods for implementing the administrative support function.

215 - Personal Finance (3 S.H.)

For all students. Units focus on the major personal financial planning problems that individuals and families encounter. Emphasis on using the activity involved with personal financial planning as a framework for developing effective money management practices. Consumer units include budgets, banking, tax strategies, investments, credit, insurance, real estate, interest, pensions, and estate and retirement planning. Offered each semester.

218 - Job Search Strategies: Resumé (1 S.H.)

An examination of job search strategies with emphasis on the written and oral communications necessary to market one's potential. Special focus on developing a competitive resumé. Offered each semester.

219 - Job Search Strategies: Application Letter and Interview (1 S.H.)

An examination of job search strategies with emphasis on the written and oral communications necessary to market one's potential. Special focus is placed on developing effective application correspondence, follow-up correspondence, and interviewing techniques. Offered each semester.

320 - Business Technology (3 S.H.)

Intermediate design principles for print-based documents and computer-generated outputs such as word processing, database, spreadsheets, and use of presentation and voice recognition technology. Publishing features will be used to enhance materials graphically for more effective communication. Prerequisite: BUED 203 or equivalent.

330 - Advanced Business Technology (3 S.H.)

Expert concepts of word processing, database, spreadsheets, and use of presentation and voice recognition technology. Provides a vocabulary and understanding of computers in business, including business application software. Prerequisite: BUED 203 and BUED 320 or equivalent. Offered yearly.

332 - Business Report Writing (1-2 S.H.)

Principles and practices for effective written reports. Emphasis on a

functional writing style applied to routine, periodic and analytical reports. Includes formal reports based on secondary and primary research methods.

333 - Business Communication (3 S.H.)

The application of a functional writing style to produce effective business communications: memos, correspondence, and short informal reports. Includes basics of communication management, communication technology, intercultural business communication, and collaborative organizational writing. Offered yearly.

335 - Information Resource Management (3 S.H.)

A study of information and image media systems, and the structures and functions related to the planning, controlling, organizing, and leadership activities of the information and image systems manager. Image media as information storage include paper, micrographics, computer-output microfilm, and electronic as well as other forms of information generation, recording, and storage. Focuses on image technology, computer-based records management systems, archival management, forms design, control policies and procedures, legal retention requirements, disaster prevention and recovery, information value and security, and information as a critical organizational asset. Offered yearly.

336 - Information Services Seminars (1 S.H.)

A series of seminars to include such topics as time management, administrative workplace layout, interpersonal relations, microcomputer applications in the administrative area, active listening, and applied problem-solving.

340 - Integrated Information Systems Applications (3 S.H.)

Information management systems concepts for the user and/or designer of information systems; systems analysis design system outputs, inputs, data files, methods and procedures, and systems and procedures analysis. Includes software applications. Overview and introduction to networking technologies and foundations of local area networks. Prerequisite: BUED 203 or equivalent. Offered yearly.

350 - Quality of Work Life (3 S.H.)

Focuses on a quality of work life approach to diversity in the workplace including gender, cultural, age, social, racial, and ethnic differences. Examines professional and interpersonal dynamics within organizational cultures, human resource values and politics. Includes leadership styles and career enhancement strategies. An experiential approach to attitudinal and professional development. Offered alternate years.

360 - Interpersonal Business Relations (3 S.H.)

Confronting and coping with interpersonal problems specific to the business environment. Focus is on strategies for managing productive work relationships. Includes leadership styles, power and authority, listening and feedback skills, conflict resolution, relating to minority groups, and multi-cultural business relationships. Offered yearly.

397 - Information Services Internship (3 S.H.)

Practical administrative management work experience in a supervised workplace setting. Contact BUED faculty for requirements. P/NC only. Offered each semester.

398 - Training & Development Internship (3 S.H.)

An on-the-job supervised work experience in training and development. Contact BUED faculty for requirements. P/NC only. Offered each semester.

399 - General Internship (1-6 S.H.)

On-the-job supervised work experience in administrative information systems. Credit applies to general electives, not to major credits/requirements. Contact BUED faculty for requirements. P/NC only. Offered each semester.

401 - General Methods and Foundations (3 S.H.)

A course for business teacher preparation in the methods and materials of business education. Topics include philosophical foundations of business education, general curriculum trends, and instructional change. Focuses on the refinement of teaching abilities and competencies required in the teaching of business law, consumer education, general business, and economics. Open only to Business Education teaching majors/minors. Recommended prerequisites: EDUC 305 and EDUC 312. Grade only. Offered yearly.

403 - Technology and Business Teaching Methods (3 S.H.)

A study of strategies for teaching technology and business subjects. Teaching practices are related to theories of learning and include specific techniques of classroom management, motivation, planning, evaluation, and appropriate use and management of technology. Open only to Business Education majors/minors. Recommended prerequisites: EDUC 305 and EDUC 312. Grade only. Offered yearly.

410 - Administrative Communication (3 S.H.)

Leadership communication for personnel at all organizational levels. An emphasis on spoken communication includes such topics as persuasive proposals, presentations, and case analysis; meeting management; visual briefing; and multimedia and communication technology applications. Offered yearly.

412 - Team Building (1-3 S.H.)

Introduces teamwork concepts and skills as a collaborative approach to improved performance. Covers structural and process attributes of teams with the objective of enhancing team leader and participant effectiveness; focuses on designing and implementing an effective system, blending individual and team performance. Team participation skills applied to collaborative class activities. Offered yearly.

434 - Word/Information Processing for Paralegals (3 S.H.)

Knowledge of word/information processing in the paralegal profession. Includes information processing software and legal research using the Internet. Prerequisite: Basic keyboarding proficiency. Grade only. Not open to Business Education majors.

435 - Information Systems/Personnel Management (3 S.H.)

The study of effective management for the information function in organizations and principles of administrative personnel management. Focuses on the feasibility, design, justification, implementation, and evaluation of administrative information systems. Administrative policies and procedures applied to personnel issues, recruitment and hiring, performance appraisal, employee productivity, and managerial communication. Prerequisite: BUED 330. Offered yearly.

440 - Training and Employee Development (3 S.H.)

An overview of the training and development field with an emphasis on the systems approach to training program design. Focuses on the key phases of training program development: reassessment, needs analysis, design

implementation, and evaluation. Includes the principle of instructional design using the experiential learning approach. Offered yearly.

441 - Training Techniques and Media (3 S.H.)

Instructional techniques, methods and multimedia to use for effective employer-based learning delivery systems. Topics include trainer styles, training structures and formats, instructional presentation skills, training aids and technology, and computer-based training. A skills-based approach to effective training for adult learners. Offered yearly.

470 - Seminar in Training and Education for Business (1-3 S.H.)

Specific subject matter is arranged by the BUED faculty. May be repeated when offered with different subject matter content and title. Offered when demand warrants.

480 - Independent Studies in Training and Education for Business (1-3 S.H.)

Reading and/or research in relevant areas of a student's special interest. Prerequisite: Instructor's permission.

490 - Capstone Seminar(1 S.H.)

A synthesis of major course work and internship experiences for seniors in BUED programs. A comprehensive analysis and compilation of students' learning outcomes; a culminating experience and evaluation of indicators that demonstrate students' success in achieving program learning outcome goals. Offered yearly.

ENGINEERING

Stark Hall, Room 203 (507-457-5685)

www.winona.edu/engineering

Beckry Abdel-Magid (Chairperson)

FACULTY

Beckry Abdel-Magid, Professor; B.S., University of Khartoum; M.S., Ph.D., University of Wisconsin-Madison; 1990 –

Keith Dennehy, Professor; B.S., Rensselaer Polytechnic Institute; M.S., Youngstown State University; M.B.A., University of Utah; Ph.D., Rensselaer Polytechnic Institute; 1990 –

Maryam Eslamloo-Grami, Professor; B.S., M.S., Shiraz University, Iran; Ph.D., University of California-Davis, 1993 –

Fariborz Parsi, Professor; B.S., M.S., Ph.D., University of South Carolina, Columbia; 1991 –

Saeed Ziaee, Assistant Professor; B.S., Ph.D., University of Texas at Austin; 2003 –

PURPOSE

The Department of Engineering offers the Bachelor of Science degree in composite materials engineering. Composites represent a new group of manufactured materials. These lightweight materials, which have high strength and stiffness, are formed by combining reinforcing fibers in a polymer, ceramic, or metal matrix. Over the past three decades, the use of composites has grown significantly in the following industries: aerospace, automotive, biotechnology, construction, electronics, marine, and sporting goods. The future for people educated in the engineering of composite materials is bright.

The Composite Materials Engineering (CME) Program has been developed to meet the engineering needs of the composites industry and is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). Graduates from this program will be prepared to practice engineering at a professional level and to enter the composites industry in positions that provide opportunities for professional growth. Graduates also will be prepared to enter graduate-level programs in composite materials and other related engineering disciplines.

The CME Program is the only accredited undergraduate program in the United States that offers a Bachelor of Science degree in composite materials engineering. Majors in the program may choose to focus on the design, analysis, and manufacture of composite structures (mechanical focus); or on the development, processing, and chemistry of the materials used in composites including fibers, matrices and fiber/matrix systems (chemical focus).

MISSION/OBJECTIVES/OUTCOMES

The mission of the CME Program is “to serve society by developing creative engineering minds for the world of tomorrow!”

- The Educational Objectives of the CME Program are to prepare graduates who:
 - a. Thoroughly understand the materials, processes, and performance of composites.
 - b. Can successfully address engineering problems within a given global, economic, environmental, and societal context.
 - c. Can design creative solutions to meet the needs of the composites industry.
 - d. Can design and recommend tests and properly interpret the results.
 - e. Can effectively communicate views and interact with others.
 - f. Can work in and function within multidisciplinary teams.
 - g. Understand their responsibility to the engineering profession and demonstrate it by properly responding to ethical quandaries.
 - h. Have knowledge of contemporary issues and recognize the importance of sustaining this knowledge through life-long learning.
- The Learning Outcomes of the CME Program are demonstrated by students who attain:
 1. An understanding of the fundamentals of mathematics, science, and engineering science and their application in engineering.
 2. The ability to identify, formulate, model, and solve engineering problems.
 3. The ability to use state-of-the-art engineering tools (experimental, computational, and statistical) necessary to select, analyze, design, fabricate, and test materials.
 4. The ability to design and conduct experiments as well as to analyze and interpret data related to structure, properties, processing, and performance of materials.
 5. The theoretical knowledge and hands-on ability to confidently design components, systems, and processes to meet the needs of the composites industry within a set of realistic constraints including economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
 6. The ability to communicate effectively in oral, written, and visual forms.
 7. The ability to work effectively in a team environment.

8. An understanding of the proper response to ethical issues and their responsibility to the engineering profession.
9. An understanding of the impact of their engineering decisions in a global, economic, environmental, and societal context.
10. Knowledge of contemporary issues and recognition of the importance of sustaining this knowledge through life-long learning.

HIGH SCHOOL PREPARATION

The Department of Engineering recommends that high school preparation for the CME major include two years of algebra, one year of geometry, one-half year of trigonometry, one-half year of college algebra, as well as one year each of physics and chemistry. Without this background, it is unlikely that a student will be prepared to complete the degree requirements in four years. In addition, courses in industrial technology will be helpful.

ADMISSION TO THE PROGRAM

Admission to the CME major is selective and is determined by the Engineering Admissions Committee. Before students can be considered for admission to the CME major, they must:

- Complete 4 S.H. of English composition, 3 S.H. of speech communication, and a minimum of 38 S.H. of required lower-division engineering, physics, mathematics, and chemistry courses. These courses can be taken at WSU or transferred from other institutions. However, courses with grades below "C" will not be accepted in transfer.
- Must have obtained a grade of "C" or higher in the required courses and have a minimum GPA of 2.5 in the required courses. Students will not be allowed to enroll in upper-division 300-level engineering courses until either they are admitted into the major or they are granted special permission from their Department of Engineering major advisor.

PROBATION POLICY

CME majors will be placed on probation if their previous semester's GPA in courses required for the major falls below 2.0 or if they do not complete at least one course in the major each semester. Students will be disqualified from the major if they have been on probation for two consecutive semesters or for three non-consecutive semesters after admission to the major. Petition for reinstatement will be considered by the Department of Engineering.

UNIVERSITY STUDIES REQUIREMENTS

The objectives of the University Studies component of the Bachelor of Science in Composite Material Engineering degree are consistent with the objectives of the WSU University Studies program. However, the University Studies credits required for CME majors have been adjusted because of the courses that students must complete as part of the CME major. **Note:** Students who receive a waiver from certain University Studies courses must take an equal number of credit hours of elective courses.

UNIVERSITY STUDIES COMPONENT FOR CME MAJORS

I. Basic Skills (11 S.H.)

MATH	160	Calculus I (4)
ENG	111	College Reading & Writing (4)
CMST	191	Introduction to Public Speaking (3)

II. Arts and Sciences Core (20 S.H.)

Humanities (6)		
Social Science (6)		
Natural Sciences (8):		
CHEM	212	Principles of Chemistry I (4)
PHYS	221	University Physics I (4)

III. Unity and Diversity (9 S.H.)

Critical Analysis: STAT 303 Introduction to Engineering Statistics (3)		
Science and Social Policy: A sequence of 3 engineering courses (3):		
ENGR	102	Introduction to Engineering
ENGR	390	Composites Manufacturing
ENGR	480	Design Project II
Global or Multicultural Perspectives (3)		

IV. Flag Courses (13 S.H.)

† Oral Flag: A sequence of two engineering courses (3):		
ENGR	475	Design Project I
ENGR	491	Engineering Seminar
Math/Critical Analysis Flag: MATH 260 Multivariable Calculus (4)		
† Writing Flag: A sequence of four engineering courses (6):		
ENGR	285	Properties of Materials
ENGR	394	Polymer Science and Characterization
ENGR	451	Transport Phenomena Lab
ENGR	452	Mechanical Characterization Lab

† All courses in the sequence should be completed to receive full credit in the University Studies requirement.

GRADING METHOD

Except for foreign language courses, all WSU courses taken for credit toward the Bachelor of Science degree in Composite Materials Engineering must be taken for a letter grade. In foreign language courses, students may obtain a grade of "P" (pass) either by passing an exam or by successfully completing upper-level foreign language courses.

B.S. MAJOR - COMPOSITE MATERIALS ENGINEERING (CME)

106 S.H. (No Minor Required)

CORE REQUIREMENTS (97 S.H.)

LOWER-DIVISION (56 S.H.)

Mathematics (16 S.H.)

MATH	160	Calculus I (4)
MATH	165	Calculus II (4)
MATH	260	Multivariable Calculus (4)
MATH	270	Differential Equations & Linear Algebra (4)

Chemistry (12 S.H.)

CHEM	212	Principles of Chemistry I (4)
CHEM	213	Principles of Chemistry II (4)
CHEM	340	Organic Chemistry Survey (4)

Physics (8 S.H.)

PHYS	221	University Physics I (4)
PHYS	222	University Physics II (4)

Engineering (20 S.H.)

ENGR	102	Introduction to Engineering (2)
ENGR	182	Engineering Graphics & Design (2)
ENGR	210	Computer Applications in Engineering (3)
ENGR	250	Statics (3)
ENGR	260	Mechanics of Materials (3)

- ENGR 270 Dynamics (3)
ENGR 285 Properties of Materials (4)

UPPER-DIVISION (41 S.H.)

Mathematics (3 S.H.)

- STAT 303 Introduction to Engineering Statistics (3)

Chemistry (3 S.H.)

- CHEM 410 Polymer Chemistry (3)

Physics (3 S.H.)

- PHYS 302 Electrical Circuits & Systems (3)

Engineering (32 S.H.)

- ENGR 300 Thermodynamics (3)
ENGR 350 Fluid Mechanics (3)
ENGR 360 Introduction to Composites Materials (3)
ENGR 370 Heat and Mass Transfer (3)
ENGR 390 Composites Manufacturing (3)
ENGR 394 Polymer Science and Characterization (3)
ENGR 401 Engineering Economics (1)
ENGR 450 Mechanics of Composites (3)
ENGR 451 Transport Phenomena Laboratory (1)
ENGR 452 Mechanical Characterization Laboratory (2)
ENGR 475 Design Project I (3)
ENGR 480 Design Project II (3)
ENGR 491 A/B Engineering Seminar (1)

TECHNICAL ELECTIVES (9 S.H.)

Engineering Electives (6 S.H.)

- ENGR 410 Polymer Process (3)
ENGR 420 Manufacturing Systems Analysis (3)
ENGR 430 Rheology (3)
ENGR 460 Introduction to Finite Element Analysis (3)
ENGR 485 Advanced Microscopic Techniques (3)
ENGR 499 Independent Study (1-3)

Non-Engineering Electives (3 S.H.)

- CHEM 411 Synthesis and Characterization of Polymers (3)
CHEM 412 Physical Chemistry I (3)
MATH 340 Advanced Linear Algebra (3)
MATH 420 Numerical Analysis (4)
STAT 321 Industrial Design of Experiments I (3)
PHYS 330 Electronics (4)
PHYS 420 Control Theory (3)

GENERALIZED CLASS SCHEDULE

Freshman Year- Fall (17 S.H.)

- ENGR 102 Introduction to Engineering (2)
MATH 160 Calculus I (4)
CHEM 212 Principles of Chemistry I (4)
ENG 111 College Reading and Writing (4)
University Studies (3)

Spring (17 S.H.)

- CHEM 213 Principles of Chemistry II (4)
ENGR 182 Engineering Graphics and Design (2)
MATH 165 Calculus II (4)
PHYS 221 University Physics I (4)
CMST 191 Introduction to Public Speaking (3)

Sophomore Year - Fall (18 S.H.)

- ENGR 210 Computer Applications in Engineering (3)
ENGR 250 Statics (3)
CHEM 340 Organic Chemistry Survey (4)
MATH 260 Multivariable Calculus (4)
PHYS 222 University Physics II (4)

Spring (17 S.H.)

- MATH 270 Differential Equations and Linear Algebra (4)
ENGR 260 Mechanics of Materials (3)
ENGR 270 Dynamics (3)
ENGR 285 Properties of Materials (4)
University Studies (3)

Junior Year - Fall (15 S.H.)

- ENGR 300 Thermodynamics (3)
ENGR 350 Fluid Mechanics (3)
ENGR 360 Introduction to Composite Materials (3)
STAT 303 Introduction to Engineering Statistics (3)
CHEM 410 Polymer Chemistry (3)

Spring (15 S.H.)

- ENGR 370 Heat and Mass Transfer (3)
ENGR 390 Composites Manufacturing (3)
ENGR 394 Polymer Science and Characterization (3)
PHYS 302 Electrical Circuits and System (3)
Technical Elective (3)

Senior Year - Fall (15 S.H.)

- ENGR 401 Engineering Economics (1)
ENGR 450 Mechanics of Composites (3)
ENGR 452 Mechanical Characterization Laboratory (2)
ENGR 475 Design Project I (3)
ENGR 491A Engineering Seminar (0)
University Studies (3)
University Studies (3)

Spring (14 S.H.)

- ENGR 451 Transport Phenomena Laboratory (1)
ENGR 480 Design Project II (3)
ENGR 491B Engineering Seminar (1)
Technical Elective (3)
Technical Elective (3)
University Studies (3)

COURSE DESCRIPTIONS (ENGR)

All engineering courses are to be taken for grade only. All courses are offered at least once a year except where indicated otherwise.

102 - Introduction to Engineering (2 S.H.)

Overview of engineering and various engineering disciplines with emphasis on composite materials engineering, introductory hands-on experience with composites, elementary concepts of engineering science, ethical aspects of engineering, safety and environmental issues regarding the use of chemicals, machine shop technology. Grade only.

103 - Understanding Engineering (for non-majors) (2 S.H.)

This course is for non-engineers who want to learn what it is like to be an engineer. The topics covered in this course include engineering design, ethics, intellectual property, personal and environmental safety, and principles of engineering. Grade only.

182 - Engineering Graphics and Design (2 S.H.)

A lecture-laboratory course. Engineering design process. Visualization and design communication. Engineering drawing standards and conventions. Computer-aided drafting and design (CADD) software are used throughout the course. Sectional views, auxiliary views, dimensioning, tolerancing, and reading of drawings. Grade only.

210 - Computer Applications in Engineering (3 S.H.)

A lecture-laboratory course. Formulate an overall solution algorithm and solve engineering and scientific problems utilizing spreadsheets, programming language(s), and mathematical software. Topics include engineering and scientific problems that employ statistics, algebra, calculus, linear algebra, optimization, and image processing in their solutions. Use of computers as a mean for technical communication is stressed. Prerequisite: MATH 160. Grade only.

250 - Statics (3 S.H.)

Force systems and equilibrium. Applications to simple trusses, frames and machines; distributed loads; properties of areas and masses; laws of friction. Designed to develop the ability to analyze and solve engineering problems. Prerequisites: MATH 160 and PHYS 221. Grade only.

260 - Mechanics of Materials (3 S.H.)

Concept of stress and strain, internal reactions (stresses and strains) to external load for axially loaded prismatic structural member; torsion members and beams; deformation and buckling of structural and machine elements. Statically determinate and statically indeterminate problems. Prerequisites: ENGR 250 and MATH 165. Grade only.

270 - Dynamics (3 S.H.)

Kinematics: translation, rotational, plane motion and relative motion of particles and rigid bodies. Planar kinematics of rigid bodies. Kinetics of particles and rigid bodies by methods of force-mass-acceleration, work energy, impulse and momentum, introduction to vibrations. Prerequisites: ENGR 250, PHYS 222 and credit or concurrent registration in MATH 270. Grade only.

285 - Properties of Materials (4 S.H.)

A lecture-laboratory course. Introduction to structure-property relationships of engineering materials. Classification of materials, atomic structure and bonding, crystal structures, imperfection in solids, stress-strain behavior and hardness of metals, phase diagrams, structure and properties of ceramics, polymer structures, stress-strain behavior of polymers, and corrosion of materials. Laboratory: crystal structures; X-ray diffraction; determination of tensile, hardness, microhardness, microstructure, and corrosion properties of metallic materials. Technical writing is an integral part of the course. Prerequisites: ENG 111 and CHEM 213. Grade only.

300 - Thermodynamics (3 S.H.)

Basic concepts, First and Second Law of Thermodynamics, properties and phase changes of pure substances, ideal gases, energy analysis of closed and open systems, enthalpy, entropy, reversibility, and Carnot and gas power cycles. Prerequisite: PHYS 222. Grade only.

350 - Fluid Mechanics (3 S.H.)

Pressure and flow measurements, hydrostatic force, continuity and momentum equations, flow in conduits, velocity distribution, drag force, pump calculations, flow through porous media. Prerequisite: MATH 270. Grade only.

360 - Introduction to Composite Materials (3 S.H.)

Basic concepts and definitions of composite materials. Fabrication, structure, properties, and applications of fibrous materials. Structure and properties of polymer matrix, metal matrix, and ceramic matrix materials. Study of interface between fiber and matrix. Fabrication methods, properties and applications of polymer matrix composites, metal matrix composites, ceramic matrix composites, and carbon/carbon composites. Prerequisites: ENGR 285 and credit or concurrent registration in CHEM 340 or CHEM 410. Grade only.

370 - Heat and Mass Transfer (3 S.H.)

Conduction, convection, radiation, energy equation, design and analysis of heat exchanger, boiling and condensation heat transfer, Fick's Law, molecular diffusion in solids, gases and liquids, and mass balance. Prerequisite: ENGR 350. Grade only.

390 - Composites Manufacturing (3 S.H.)

A lecture-laboratory course. General manufacturing issues including flow of a product through a manufacturing firm, environmental, health and safety issues, and learning curve. Fabrication processes for polymeric and non-polymeric composite materials. Prerequisite: ENGR 360. Grade only.

394 - Polymer Science and Characterization (3 S.H.)

A lecture-laboratory course. Investigate and determine thermal and physical properties of thermoplastics, thermosets, and their blends to get insight into their thermodynamic state and morphology. Correlate kinetics of cure to macroscopic behavior of thermosets. Theories discussed in the course include group contribution technique, polymer miscibility, and phase separation. Technical writing is an integral part of this course. Prerequisites: CHEM 340 and ENGR 285. Grade only.

401 - Engineering Economics (1 S.H.)

Fundamentals of engineering economics and its relationship to the engineering design process. Topics include interest and time value of money; annual, discrete, and continuous compounding; rate of return, payback period, and investment alternatives. Prerequisite: Credit or concurrent registration in ENGR 475. Grade only.

410 - Polymer Processing (3 S.H.)

Chemical and physical properties of polymers, additives, mixing and compounding, rheology of polymer melts, continuity, energy, and momentum equations, qualitative description and quantitative modeling of: extrusion, blow molding, thermoforming, injection molding, compression molding, and rotational molding processes. Recycling. Prerequisite: ENGR 350. Grade only. Offered a minimum of once every two years.

420 - Manufacturing Systems Analysis (3 S.H.)

Evolution of the manufacturing system. Functions and interactions in a manufacturing system. Analytical tools used in evaluating a manufacturing system. Simulation as a tool for analyzing a manufacturing system. Prerequisite: ENGR 390. Grade only. Offered a minimum of once every two years.

430 - Rheology (3 S.H.)

A lecture-laboratory course. Stress and strain, Newtonian and non-Newtonian fluids, rheological equations of state, viscometric flows, viscoelasticity, fluid mechanics of rheometry, plastic melt and suspension rheology. Prerequisite: ENGR 350. Grade only. Offered a minimum of once every two years.

450 - Mechanics of Composites (3 S.H.)

Micromechanics of composite materials. Behavior and mechanical properties of unidirectional composites. Study of failure modes, hygrothermal and transport properties. Stress transfer, stiffness and strength properties of short fiber composites. Generalized Hooke's Law and stress-strain relations of an orthotropic lamina. Stiffness and strength criteria of orthotropic composite materials. Laminated Plate Theory. Composites Design. Prerequisites: MATH 270, ENGR 260 and ENGR 360. Grade only.

451 - Transport Phenomena Laboratory (1 S.H.)

A lecture-laboratory course. Theories of pressure, flow, and temperature measurements. Experiments in momentum, heat and mass transfer. Prerequisites: ENGR 350, ENGR 370 and STAT 303. Grade only.

452 - Mechanical Characterization Laboratory (2 S.H.)

A lecture-laboratory course. Experimental characterization of composite materials, including density of fibers, fiber content, tension, compression, flexure, in-plane shear, interlaminar shear, fatigue and impact properties of composite materials. Effect of stress concentration in composites. Lamina thermoelastic and off-axis response, and nondestructive evaluations of composites. Prerequisites: STAT 303, ENGR 260 and ENGR 360. Grade only.

460 - Introduction to Finite Element Analysis (3 S.H.)

Theory and practice of the finite element method with emphasis on stress analysis in two dimensions by means of assumed displacement fields. Direct stiffness method, variational method, isoperimetric formulations, shell and composite elements formulations, algorithms for construction and solution of the governing equations, numerical errors and convergence, modeling and programming. Prerequisites: ENGR 260, MATH 270 and ENGR 210. Grade only. Offered a minimum of once every two years.

475/480 - Design Project I/II (3 S.H. each)

Develop product from requirements definition through prototype fabrication. Includes definition of product requirements, development of product and tooling design, analysis, definition of fabrication process, development of quality assurance plan, fabrication of prototype, inspection and testing. Work is performed in student teams. Prerequisite: ENGR 390. Grade only.

485 - Advanced Microscopic Techniques (3 S.H.)

A lecture-laboratory course. Theory and the use of scanning electron microscopes and transmission electron microscopes; theory of field ion microscopes, atomic force microscopes, and scanning tunneling microscopes. Comparisons are made to optical microscopy. Explores the relationships between chemistry, microscopic structure and properties of engineering materials. Qualitative and semi-quantitative X-ray microanalysis of metal matrix composites. Emphasis on technical writing of laboratory reports. Prerequisite: ENGR 360. Grade only. Offered a minimum of once every two years.

491 A/B Engineering Seminar (1 S.H.)

Varying topics seminar class. Students are required to give presentations on topics pertinent to engineering. Also includes guest speakers from the engineering profession. Students must take 491A in order to receive credit for 491B. Grade only.

499 - Independent Study (1-3 S.H.)

Designed for the undergraduate student who wishes to engage in research. Subject and credit to be arranged with instructor. Requires the approval of the Department of Engineering. Grade only.

ENGLISH

Minné Hall, Room 302 (507-457-5440)

www.winona.edu/english/

Ruth Forsythe (Chairperson)

FACULTY

James Armstrong, Associate Professor; B.A., Northwestern University; M.F.A., Western Michigan University; Ph.D., Boston University; 1999 –
Rob Brault, Associate Professor; B.A., Macalester College; Ph.D., University of Minnesota; 2000 –
Chris Buttram, Associate Professor; B.A., Emory University; M.A., M.Phil., Ph.D., Columbia University; 2000 –
Jane Carducci, Professor; B.A., Colorado College, Colorado Springs; M.A., Ph.D., University of Nevada-Reno; 1992 –
Debra Cumberland, Associate Professor; B.A., Carleton College; M.A., Ph.D., University of Nebraska-Lincoln; 2002 –
Gary Eddy, Professor; B.A., State University of New York-Brockport; M.A., University of Texas-El Paso; M.F.A., University of Arizona; Ph.D., State University of New York-Binghamton; 1988 –
Ruth Forsythe, Professor; B.A., St. Olaf College; M.A., Ph.D., University of Minnesota; 1977 –
Carol Galbus, Associate Professor; B.S., Edgewood College (Wisconsin); M.A.T., St. Mary's College of Minnesota; 1986 –
William Hacker, Assistant Professor; B.A., Brown University; M.A., Ph.D., Cornell University; 2006 –
April Herndon, Assistant Professor; B.A., M.A., Radford University; Ph.D., Michigan State University; 2006 –
Goldie Johnson, Associate Professor; B.S., M.S., University of Wisconsin-Superior; 1988 –
J. Paul Johnson, Professor; B.S., Valley City State University; M.A., University of North Dakota; Ph.D., University of Minnesota; 1987 –
Ethan Krase, Assistant Professor; B.A., M.A., Illinois State University; Ph.D., University of Tennessee; 2004 –
Ditlev Larsen, Assistant Professor; B.A., University of Aalborg; M.A., St. Cloud University; Ph.D., University of Minnesota; 2003 –
Gretchen Michlitsch, Assistant Professor; B.A., Gustavus Adolphus; M.A., Ph.D., University of Wisconsin-Madison; 2005 –
Elizabeth Oness, Associate Professor; B.A., James Madison University; M.F.A., University of Maryland; Ph.D., University of Missouri-Columbia; 2001 –
Wayne Ripley, Assistant Professor; B.A., Michigan State University; M.A., University of Tennessee; Ph.D., University of Rochester; 2006 –
Holly Shi, Professor; B.A., Shanghai International Studies University; M.A., Ph.D., Indiana University of Pennsylvania; 1995 –
Myles Weber, Assistant Professor; B.A., Augsburg College; M.A., George Washington University; M.A., Syracuse University; Ph.D., University of Maryland-College Park; 2007 –

PURPOSE

The English Department is concerned with the English language as art and communication. At the lower academic levels, courses are designed to help students acquire competence in reading and writing, thinking critically, and understanding and responding to aesthetic values.

At the upper levels, the emphasis shifts increasingly to British and American literature and to more sophisticated forms of writing and linguistic studies. Students majoring in English should complete the lower-division requirements in English before registering for the upper-division courses.

TEACHING MAJORS

- CALT (Communication Arts and Literature) Majors: Except in unusual circumstances, the English Department recommends for student teaching only those students who have a minimum 2.75 GPA and who have earned at least a "B" in each of the following courses: ENG 290 and ENG 402.
- ESLT (TESOL) Majors: Except in unusual circumstances, the English Department recommends for student teaching only those students who have a minimum 2.75 GPA and who have earned at least a "B" in each of the following courses: ENG 328 and ENG 481. Additionally, this major requires a minimum of two years of second/foreign language instruction in a high school setting or one year in a college setting or equivalent.

PREREQUISITES

- ENG 111 is a prerequisite for the ESLT, ENGA, ENGE, and EAPW major and minor programs.
- ENG 111 and ENG 290 are prerequisites for all other major and minor programs in English.

Prerequisites for individual courses are designated in the course descriptions.

PASS/NO CREDIT (P/NC) COURSES

Except for some internships, no courses in the department are open to declared English majors or minors on a P/NC basis. Students not majoring or minoring in English can take any course in the department on a P/NC basis (provided they have met the prerequisites) unless the course is designated as a grade-only course.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The English Department offers the following flag courses in the University Studies Program:

Oral I

- ENG 402 Teaching Secondary English (3)
- ENG 470 Seminar in American Literature (3)
- ENG 471 Seminar in British Literature (3)
- ENG 481 TESOL Theory and Methods (3)

Math/Critical Analysis O

- ENG 290 Literary Studies (3)
- ENG 483 Pedagogical Grammar (3)

Writing P

- ENG 414 Shakespeare: Comedies and Histories (3)
- ENG 417 Shakespeare: Tragedies (3)
- ENG 439 Technical Writing (3)
- ENG 447 Modern Literary Criticism (3)
- ENG 480 Theories of Second Language Acquisition (3)

Flag courses that can be used to satisfy English major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - ENGLISH: LITERATURE AND LANGUAGE (ENGL)

49 S.H. (No Minor Required)

REQUIRED COURSES (36 S.H.)

- O 290 Literary Studies (5)

Choose one of the following two courses:

- 223 Classical Mythology (3) OR
- 224 Bible as Literature (3)
- 301 British Literature to 1660 (3)
- 302 Enlightenment, Revolution, and Enslavement (3)

- 303 British and American Romanticism (3)
- 304 Victorian and post-Civil War Literature (3)
- 305 Modernism and Beyond (3)
- 405 Chaucer (3)

Choose one of the following two courses:

- 328 English Syntax (3) OR
- 350 Introduction to Language Study (3)

Choose one of the following two courses:

- P414 Shakespeare: Comedies and Histories (3) OR
- P417 Shakespeare: Tragedies (3)
- P 447 Modern Literary Criticism (3)
- 490 Portfolio (1)

ELECTIVES (13 S.H.)

Electives must be English courses at the 200-level or above, including at least 6 S.H. in English courses numbered 400 or above.

B.A. MAJOR - ENGLISH: WRITING OPTION (ENGW)

49 S.H. (No Minor Required)

REQUIRED COURSES (36 S.H.)

- O 290 Literary Studies (5)
- 211 Writing in Communities (3)
- 309 Nonfiction Prose Writing (3) OR
- 310 Story Writing (3) OR
- 312 Poetry Writing (3)
- 305 Modernism and Beyond (3)
- 328 English Syntax (3)
- P 439 Technical Writing (3)
- Choose one of the following three courses:
 - 404 Advanced Creative Writing: Nonfiction (3) OR
 - 410 Advanced Creative Writing: Prose (3) OR
 - 412 Advanced Creative Writing: Poetry (3)
- Choose one of the following two courses:
 - P 414 Shakespeare: Comedies and Histories (3) OR
 - P 417 Shakespeare: Tragedies (3)
- P 447 Modern Literary Criticism (3)
- 490 Portfolio (1)

ELECTIVES (13 S.H.)

Electives must be English courses at the 200-level or above, including at least 9 S.H. in English courses numbered 300 or above.

B.A. MAJOR - ENGLISH: APPLIED LINGUISTICS (ENGA)

40 S.H. (Minor Required)

REQUIRED COURSES (21 S.H.)

- 250 Grammar and Usage (2)
- 328 English Syntax (3)
- 350 Introduction to Language Study (3)
- P 480 Theories of Second Language Acquisition (3)
- I 481 TESOL Theories and Methods (3)
- O 483 Pedagogical Grammar (3)
- 484 ESL Materials, Resources, and Assessment (3)
- 490 Portfolio (1)

ELECTIVES (19 S. H.)

Electives must be chosen from the following English courses:

- 210 Advanced Expository Writing (3)
 - 211 Writing in Communities (3)
 - 221 Topics in World Literature (3)
 - 227 Topics in Language (1-3)
 - 324 Projects in Writing and Language (1-3)
 - 399 Internship (1-12)
 - P 439 Technical Writing (3)
 - 461 Independent Studies (1-3)
 - 472 Seminar in Language and Discourse (3)
 - 482 Second Language Composition Studies (3)
- Other departmental or extradepartmental electives may be allowed with approval of the department chairperson.

B.A. MAJOR - ENGLISH: FIRST COMBINING MAJOR - LITERATURE AND LANGUAGE (ENGF)

37 S.H.

This major can be taken only in combination with another full major, and students failing to complete a second major must take one of the full (non-combining) majors listed in the catalog if they wish to major in English.

REQUIRED COURSES (27 S.H.)

- O 290 Literary Studies (5)
- Choose one of the following two courses:
 - 223 Classical Mythology (3) OR
 - 310 Bible as Literature (3)
- Choose three of the following five courses:
 - 301 British Literature to 1600 (3)
 - 302 Enlightenment, Revolution and Enslavement (3)
 - 303 British and American Romanticism (3)
 - 304 Victorian and post-Civil War Literature (3)
 - 305 Modernism and Beyond (3)

Choose one of the following two courses:

- 328 English Syntax (3) OR
- 350 Introduction to Language Study (3)

Choose one of the following two courses:

- P 414 Shakespeare: Comedies and Histories (3) OR
- P 417 Shakespeare: Tragedies (3)
- P 447 Modern Literary Criticism (3)
- 490 Portfolio (1)

ELECTIVES (10 S.H.)

Electives must be English courses at the 200-level or above, including at least 6 S.H. in courses numbered 400 or above.

B.A. MAJOR - ENGLISH: SECOND COMBINING MAJOR - WRITING OPTION (ENGS)

37 S.H.

This major can be taken only in combination with another full major, and students failing to complete a second major must take one of the full (non-combining) majors listed in the catalog if they wish to major in English.

REQUIRED COURSES (27 S.H.)

- O 290 Literary Studies (5)
- 211 Writing in Communities (3)
- Choose one of the following three courses:
 - 309 Nonfiction Prose Writing (3) OR
 - 310 Story Writing (3) OR
 - 312 Poetry Writing (3)
- 305 Modernism and Beyond (3)
- 328 English Syntax (3)
- Choose one of the following four courses:
 - P 439 Technical Writing (3) OR
 - 404 Advanced Creative Writing: Nonfiction (3) OR
 - 410 Advanced Creative Writing: Prose (3) OR
 - 412 Advanced Creative Writing: Poetry (3)
- Choose one of the following two courses:
 - P 414 Shakespeare: Comedies and Histories (3) OR
 - P 417 Shakespeare: Tragedies (3)
- P 447 Modern Literary Criticism (3)
- 490 Portfolio (1)

ELECTIVES (10 S.H.)

Electives must be English courses at the 200-level or above, including at least 6 S.H. in courses numbered 400 or above.

B.S. MAJOR - COMMUNICATION ARTS AND LITERATURE (Teaching) (CALT)

61 S.H.

REQUIRED COURSES (61 S.H.)**English - ENG (40 S.H.)**

- O 290 Literary Studies (5)
- Choose one of the following three courses:
 - 220 Multicultural American Literatures (3) OR
 - 223 Classical Mythology (3) OR
 - 224 Bible as Literature (3)
- Choose one of the following two courses:
 - 211 Writing in Communities (3) OR
 - 222 Introduction to Creative Writing (3)
- Choose two of the following four courses:
 - 302 Enlightenment, Revolution, and Enslavement (3)
 - 303 British and American Romanticism (3)
 - 304 Victorian and post-Civil War Literature (3)
 - 305 Modernism and Beyond (3)
- 301 British Literature to 1660 (3)
- 328 English Syntax (3)
- I 402 Teaching Middle School and Secondary English (4)
- Choose one of the following two courses:
 - P 414 Shakespeare: Comedies and Histories (3) OR
 - P 417 Shakespeare: Tragedies (3)
- 350 Introduction to Language Study (3)
- 432 Comparative Literature (3)
- P 447 Modern Literary Criticism (3)
- 490 Portfolio (1)

Communication Studies - CMST (15 S.H.)

- Choose one of the following four courses:
 - * 287 Conflict and Communication (3) OR
 - * 289 Gender and Communication (3) OR
 - 290 Disability Communication and Culture (3) OR

* "Additional Requirements" course as defined in Item 3, page 18

- 291 Topics in Multicultural Communication (3)
- * 282 Introduction to Communication Studies (3)
- P 371 Discussion and Small Group Dynamics (3)
- 375 Argumentation and Advocacy (3)
- 493 Teaching and Coaching Oral Communication (3)

Mass Communication - MCOM (3 S.H.)

- 100 Mass Media and Society (3)

Theatre and Dance - THAD (3 S.H.)

- * 141 Oral Interpretation (3)

Teachers in communication arts and literature are generally recruited to coach/direct one or more of the following activities: (1) forensics/speech, (2) debate, (3) journalism/newspaper/yearbook, (4) literary journal, (5) theater, (6) radio station, (7) related activities. Therefore, all communication arts and literature majors are required to show competency in two of the aforementioned categories. Students will be required to submit a portfolio in CMST 493 demonstrating their participation in two or more of these categories. This participation could have been gained in various settings: high school, college, community activities, or work-related assignments. If students have no experience in at least two of the categories, they will need to acquire that experience during their college careers, either through volunteer experience or through activities courses (for credit) in communication studies, English, mass communication, and theatre/dance.

OTHER REQUIRED COURSES

- HERS 204 Personal and Community Health (3)
- * SPED 400 Education of Exceptional Children/Youth (3)

PROFESSIONAL EDUCATION SEQUENCE FOR 5-12 LICENSURE (32-36 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 305 Human Development and Learning: Secondary (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 449 Middle Level Philosophy, Organization, and Planning (3)
- P EDUC 459 The Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

Note: EDUC 305 and 312 must be taken the first semester after admission to the Education Program and must be taken in the same semester.

B.S. MAJOR - TEACHING ENGLISH AS A SECOND LANGUAGE K-12 (Teaching) (ESLT)

31 S.H.

REQUIRED COURSES (24 S.H.)

English – ENG

- 250 Grammar and Usage (2)
- 328 English Syntax (3)
- 350 Introduction to Language Study (3)
- P 480 Theories of Second Language Acquisition (3)
- I 481 TESOL Theories and Methods (3)
- O 483 Pedagogical Grammar (3)
- 484 ESL Materials, Resources, and Assessment
- 490 Portfolio (1)

Education – EDUC

- 330 Literacy for Second Language Learners

ELECTIVES – ENG (7 S.H.)

- 227 Topics in Language (1-3)
- 324 Projects in Writing and Language (1-3)
- 399 Internship (1-12)
- 461 Independent Studies (1-3)
- 472 Seminar in Language and Discourse (3)
- 482 Second Language Composition Studies (3)
- 210 Advanced Expository Writing (3)
- 211 Writing in Communities (3)
- 439 Technical Writing (3)

Extrdepartmental electives may be allowed with the approval of the department chairperson.

OTHER REQUIRED COURSES FOR LICENSURE

- HERS 204 Personal and Community Health (3)
- * SPED 400 Education of Exceptional Children/Youth (3)

PROFESSIONAL EDUCATION SEQUENCE FOR K-12 (32-36 S. H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 304/305 Human Development and Learning (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 311/312 Instructional Planning and Assessment (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 449 Middle School Philosophy and Organization (3)
- P EDUC 459 Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

Note: EDUC 304/305 and 311/312 must be taken the first semester after admission to the Education Program and must be taken in the same semester.

Foreign Language: This major requires a minimum of two years of second/foreign language instruction in a high school setting or one year in a college setting or equivalent.

B.A. MINOR - ENGLISH: LITERATURE AND LANGUAGE (ENGL)

24 S.H.

REQUIRED COURSES (17 S.H.)

- O 290 Literary Studies (5)
- Choose three of the following five courses:
 - 301 British Literature to 1660 (3)
 - 302 Enlightenment, Revolution, and Enslavement (3)
 - 303 British and American Romanticism (3)
 - 304 Victorian and post-Civil War Literature (3)
 - 305 Modernism and Beyond (3)
- Choose one of the following two courses:
 - P 414 Shakespeare: Comedies and Histories (3) OR
 - P 417 Shakespeare: Tragedies (3)

ELECTIVES (7 S.H.)

Electives must be chosen from any English course numbered 200 or above.

B.A. MINOR - ENGLISH: CREATIVE WRITING (ENGC)

27 S.H.

REQUIRED COURSES - ENG (20 S.H.)

- O 290 Literary Studies (5)
- 305 Modernism and Beyond (3)
- 309 Nonfiction Prose Writing (3)
- 310 Story Writing (3)
- 312 Poetry Writing (3)
- Choose one of the following three courses:
 - 404 Advanced Creative Writing: Nonfiction (3) OR
 - 410 Advanced Creative Writing: Fiction (3) OR
 - 412 Advanced Creative Writing: Poetry (3)

ELECTIVES (7 S.H.)

Electives must be chosen from any English course numbered 200 or above.

B.A. MINOR - APPLIED AND PROFESSIONAL WRITING (EAPW)

24 S.H.

This minor is designed for students completing a full major in a traditional content area in the sciences, humanities, arts, health, or education. The EAPW minor provides students with the theoretical knowledge and practical skills to write convincingly and successfully in a variety of workplaces and civic situations.

REQUIRED COURSES - ENG (17 S.H.)

- 211 Writing in Communities (3)
- 250 Grammar and Usage (2)
- 309 Nonfiction Prose Writing (3)
- 328 English Syntax (3)
- 399 Internship (1-12 S.H.); must be completed for at least 3 S.H.
- P 439 Technical Writing (3)

ELECTIVES (7 S.H.)

Electives may be chosen from any English course numbered 200 or above. Extradepartmental electives may be allowed at the discretion of the department chair.

B.A. MINOR – ENGLISH: TESOL (ENGE)

24 S.H.

REQUIRED COURSES – ENG (17 S.H.)

- 250 Grammar and Usage (2)
 - 328 English Syntax (3)
 - 350 Introduction to Language Study (3)
 - P 480 Theories of Second Language Acquisition (3)
- Choose two of the following four courses:
- I 481 TESOL Theories and Methods (3)
 - 482 Second Language Composition Studies (3)
 - O 483 Pedagogical Grammar (3)
 - 484 ESL Materials, Resources, and Assessment (3)

ELECTIVES – ENG (7 S.H.)

Choose electives from the following English courses:

- 227 Topics in Language (1-3)
 - 324 Projects in Writing and Language (1-3)
 - 399 Internship (1-12)
 - 461 Independent Studies (1-3)
 - 472 Seminar in Language and Discourse (3)
- Any two of the following not chosen above:
- I 481 TESOL Theories and Methods (3)
 - 482 Second Language Composition Studies (3)
 - O 483 Pedagogical Grammar (3)
 - 484 ESL Materials, Resources, and Assessment (3)

Extradepartmental electives may be allowed with the approval of the department chairperson.

COURSE DESCRIPTIONS**ENGLISH (ENG)****099 - Introduction to College Writing (3 S.H.)**

Students undertake intensive writing practice with special focus on the fundamentals of sentence and paragraph structure. The course aims to prepare students for ENG 111, College Reading and Writing. Students who do not pass this course will not be permitted to take ENG 111. (Credit does not count toward graduation.) Grade only.

105 - ESL: Listening to Academic Speech (3 S.H.)

Intensive practice in understanding academic lectures. Attention is also paid to pronunciation and other oral language skills. Designed to help ESL learners function successfully in American university classrooms. Grade only.

106 - ESL: Academic Reading and Writing I (3 S.H.)

Intensive practice in academic English with special attention to reading comprehension, including vocabulary, grammar, and basic writing skills. Designed to prepare non-native speakers for more advanced English courses and help them become successful in other academic disciplines. Must be followed by ENG 107. Grade only.

107 - ESL: Academic Reading and Writing II (3 S.H.)

Further development of communicative skills in academic reading and writing for advanced non-native speakers. Focusing on organizational/rhetorical skills in writing and comprehension of culturally particular academic texts. Specific practice and preparation for ENG 111. Prerequisite: ENG 106 or placement through testing. Grade only.

111 - College Reading and Writing (4 S.H.)

This course aims to strengthen students' reading and writing abilities in preparation for college-level writing. A means of learning and inquiry, the writing in this course is based on interpreting, analyzing, and critiquing texts as well as on conducting research, synthesizing sources, and using citation/documentation formats. Prerequisite: Qualifying ACT English sub-score, or minimum score on the English placement exam, or successful completion of ENG 099. Grade only.

112 - Research Writing (1 S.H.)

Course focuses on researching and composing a documented argumentative essay. For students transferring an appropriate 3 S.H. composition course in

order to meet University Studies Basic Skills requirement usually fulfilled by ENG 111. Department Chairperson's permission required. Grade only.

120 - Introduction to Literature (3 S.H.)

Intensive reading in selected major forms and themes of literature. Variable content: semester schedules announce each section's content. Grade only.

210 - Advanced Expository Writing (3 S.H.)

An advanced course in writing expository essays for academic audiences, this course emphasizes the development of a mature prose style and a sophisticated approach to textual interpretation. Students refine their rhetorical and grammatical/mechanical competence and strengthen their skills in academic research, source integration, critical analysis, and evaluative judgment. Prerequisite: ENG 111. Grade only.

211 - Writing in Communities (3 S.H.)

This course concerns the study and practice of writing as a means of participation in a diverse, democratic, and literate society. Students may work with community partners to define and complete writing projects. Prerequisite: ENG 111. Grade only.

220 - Multicultural American Literatures (3 S.H.)

Recognizing the rich array of cultures that have contributed to American history, life, and art, this course focuses on one such culture or on a cross-cultural topic and offers students a study of vital literary voices and their social contexts. Variable content: semester schedules announce each section's subject. Grade only.

221 - Topics in World Literature (3 S.H.)

Furnishing students with an opportunity to read artful writing of cultures other than those of the United States and England, this course focuses on a selected theme, genre, period, language, nationality, or region. Variable content: semester schedules announce each section's subject. Grade only.

222 - Introduction to Creative Writing (3 S.H.)

An introduction to writing poetry, fiction, and other creative genres (may include drama, screenwriting, or creative nonfiction). Covers basics of genre, style, and voice. Prerequisite: ENG 111. Grade only.

223 - Classical Mythology (3 S.H.)

This course covers the principal characters, narratives, and genres of Greek and Roman "mythologies." Studying this ancient literature and its contexts, students acquire knowledge of the Classical tradition and its influences in literary history. Prerequisite: ENG 111. Grade only.

224 - The Bible as Literature (3 S.H.)

The literary structure and genres of the Hebrew and Christian scriptures with special attention to the cultures that created them and major translations. Prerequisite: ENG 111. Grade only.

225 - Topics in Literature (1-3 S.H.)

Intensive study of a selected topic in English and foreign literature in translation. Variable content: semester schedules announce each section's subject and credit.

226 - Topics in Writing (1-3 S.H.)

This course enables inquiry into and practice with specialized kinds of writing such as journal writing, web writing, and review writing. Variable content: semester schedules announce each section's subject and credit.

227 - Topics in Language (1-3 S.H.)

Study of a topic of current importance in linguistics such as language variation, world English, language and culture, language and gender, or any other area of language in society. Variable content: semester schedules announce each semester's subject and credit.

240 - Young Adult Literature (3 S.H.)

A study of the genres included in the literatures of the young adult culture. Course content will continue to add recent literature for young adults. Students may prepare and teach actual lessons. ENG 240 is required by state licensure for some levels of teaching. Prerequisite: Instructor's permission.

250 - English Grammar and Usage (2 S.H.)

This course introduces students to the basic concepts and elements of English grammar and usage. The primary purpose is to develop students' abilities to understand grammar from a formal perspective. This course prepares students for ENG 328.

290 - Literary Studies (5 S.H.)

An introductory course in literary analysis, focusing on the major genres and introducing literary history, methods of interpretation, and research and documentation. Prerequisite: ENG 111. Grade only.

301 - British Literature to 1660 (3 S.H.)

A literary-history survey course of early English literature from the Old English period to the early 17th century. Prerequisite: ENG 290.

302 - Enlightenment, Revolution, and Enslavement (3 S.H.)

A literary-history survey of the "long eighteenth century" in a transatlantic context. This course covers the diverse body of English-language literature from the English Civil War through the French Revolution. Prerequisite: ENG 290.

303 - British and American Romanticism (3 S.H.)

A literary-history survey spanning the 18th century and early-to-middle 19th century in American and British literature. This course covers Romanticism,

*"Additional Requirements" course as defined in Item 3, page 18

Transcendentalism, and the “American Renaissance.” Prerequisite: ENG 290.

304 - Victorian and post-Civil War Literature (3 S.H.)

A literary-history survey of mid- to late-19th century literature in England and America, this course covers selected major writers, works, and genres. The course also surveys aesthetic concepts and historical contexts associated with British literature of the Victorian period and with American literature from the mid-1800s to the turn of the century. Prerequisites: ENG 290.

305 - Modernism and Beyond (3 S.H.)

A literary-history survey of Modernism in England, Ireland, and America. This course concentrates on selected writers and works of the early to middle 1900s and covers aesthetic concepts and historical contexts that frame studies of Modernist literature. The course may also address questions of Postmodernism and dynamics of late 20th century literature. Prerequisite: ENG 290.

309 - Nonfiction Prose Writing (3 S.H.)

Study and practice in the techniques and forms of nonfiction prose; reading and writing a variety of essay and nonfiction prose genres. Prerequisite: ENG 290.

310 - Story Writing (3 S.H.)

Study and practice in the techniques and forms of fiction writing. Prerequisite: ENG 290.

312 - Poetry Writing (3 S.H.)

Study and practice in the techniques and forms of poetry writing with emphasis on contemporary approaches. Prerequisite: ENG 290.

324 - Projects in Writing and Language (1-3 S.H.)

Special projects in writing, publishing, and/or language, including such work as tutoring writing, teaching English as a Second Language, editing literary publications, or other similar undertakings. Variable content: semester schedules announce each section's subject and credit. Prerequisite: ENG 111.

325 - Works of Literature (1-3 S.H.)

Concentrating on a single major work of literature or on a small set of connected literary works, this course provides not only an intensive exploration of the work(s) in question, but also, as relevant, study of the author, composition, historical milieu, and critical reception of the piece, as well as apt theoretical approaches thereto. Variable content: semester schedules announce section's subject and credit. Prerequisite: ENG 290.

326 - Writers of Literature (1-3 S.H.)

Concentrating on a major or a compelling minor literary figure, this course addresses the biography and selected writings by the writer whose historical period, generic orientations, and cultural contexts are covered. Topics bearing on authorial intention, compositional process, and theoretical approaches may also be treated. Variable content: semester schedules announce each section's subject and credit. Prerequisite: ENG 290.

327 - Genres of Literature (1-3 S.H.)

Narrowing literary studies to the treatment of a specific mode, style, genre, or sub-genre, this course is intended to educate students in both the historical manifestations of that literary category and the historical, abstract definitions thereof. Accordingly, the course concerns issues of genre study and its complexities. Variable content: semester schedules announce each section's subject and credit. Prerequisite: ENG 290.

328 - English Syntax (3 S.H.)

This course introduces students to the structure of English as described by modern linguists. The course aims to develop students' ability to analyze and describe English and to apply syntactic knowledge of English to stylistic analyses of texts. Prerequisite: ENG 111.

350 - Introduction to Language Study (3 S.H.)

This course provides an introduction to the study of language from a linguistic standpoint. Topics include phonetics, phonology, morphology, semantics, pragmatics, sociolinguistics, psycholinguistics, language acquisition, and language and culture. This introduction to linguistics prepares students for further studies in the field. Prerequisite: ENG 111.

399 - Internship (1-12 S.H.)

Supervised, practical experience in a wide variety of fields. Must be arranged well in advance of the registration period. P/NC at the instructor's discretion.

402 - Teaching Middle School and Secondary English (4 S.H.)

A study of the goals and methods of the secondary English teacher and of the content and structure of the middle school and secondary English curriculum. Attention to young adult literature. This course should be taken in the last semester that it is offered prior to one's student teaching. Prerequisite: ENG 290.

404 - Advanced Creative Writing: Nonfiction (3 S.H.)

Advanced practice in writing and revising creative nonfiction, with an emphasis on the development of the student's individual style. Variable content depends on the discretion of the instructor. Examples of other topics may include nature writing, the spiritual memoir, and travel writing. Prerequisite: ENG 309.

405 - Chaucer (3 S.H.)

A study of Chaucer's major works (including *The Canterbury Tales*) read in Middle English. Prerequisite: ENG 290.

410 - Advanced Creative Writing: Fiction (3 S.H.)

Opportunity to produce a significant body of new fiction or creative nonfiction and to develop a literary aesthetic and philosophy. Application of various expressive, imitative, and experimental writing techniques. Prerequisite: ENG 310.

412 - Advanced Creative Writing: Poetry (3 S.H.)

Advanced study of selected poets and poetics; advanced practice in poetry writing. Prerequisite: ENG 312.

414 - Shakespeare: Comedies and Histories (3 S.H.)

Study of Shakespeare's major comedies and history plays. Prerequisite: ENG 290.

417 - Shakespeare: Tragedies (3 S.H.)

Study of Shakespeare's major tragedies. Prerequisite: ENG 290.

423 - Shakespeare in Performance (3 S.H.)

This intensive two-week course is based on careful reading and discussion of Shakespeare's plays and their performances; the choice of plays for the course will correspond to the offerings of the Great River Shakespeare Festival. This course entails extra fees. Prerequisite: ENG 290.

432 - Comparative Literature (3 S.H.)

Examination of texts within their cultural contexts and exploration of strategies for comparing texts from various cultural traditions. Prerequisite: ENG 290.

439 - Technical Writing (3 S.H.)

The theory and practice of creating technical documents with text and graphics such as proposals, reviews, reports, newsletters, descriptions, instructions, manuals, websites, and/or correspondence. Using available technology (hardware and software), students will develop these documents with attention to their personal, organizational, cultural, legal, and ethical consequences. Prerequisite: ENG 111.

447 - Literary Criticism: Theory and Practice (3 S.H.)

Following students' introduction to literary-critical methodologies in ENG 290 and coinciding with students' exercise of those approaches in various upper-division classes, this course covers—through readings in and about 20th century literary theory and criticism—major figures, ideas, and movements from New Criticism to the present. In this reading- and writing-intensive course, students produce papers that, from defined critical perspectives, interpret literary works by applying theoretical paradigms. Prerequisite: ENG 290.

461 - Independent Studies (1-3 S.H.)

Independent studies determined by the needs of the individual student. Offered by previous arrangement only. A student may earn no more than 6 S.H. through independent studies. Prerequisite: ENG 290.

470 - Seminar in American Literature (3 S.H.)

This reading- and writing-intensive course offers advanced study of a period, genre, figure, or theme in American literature and includes seminar-style presentations by students. Variable content: semester schedules announce each section's subject. Prerequisite: ENG 290.

471 - Seminar in British Literature (3 S.H.)

This reading- and writing-intensive course offers advanced study of a period, genre, figure, or theme in British literature and includes seminar-style presentations by students. Variable content: semester schedules announce each section's subject. Prerequisite: ENG 290.

472 - Seminar in Language Study and Discourse (3 S.H.)

Advanced study of topics in language and linguistics. Topics may include history of the English language, sociolinguistics, psycholinguistics, language and social context, contrastive rhetoric, pragmatics, and language and culture. Variable content: semester schedules announce each section's subject. Prerequisites: ENG 111 and ENG 350 or instructor's permission.

480 - Theories of Second Language Acquisition (3 S.H.)

This course introduces students to core issues in second language acquisition and research. Students work to understand what is occurring linguistically, cognitively, and socially as humans learn languages beyond their native language. The course focuses on both theoretical and pragmatic interactions among learner, language, and context. Prerequisites: ENG 111 and ENG 350 or instructor's permission.

481 - TESOL Theory and Methods (3 S.H.)

The course examines theories, methods and techniques of teaching English to speakers of other languages (TESOL), including psychological socio-cultural, political, and pedagogical factors affecting learning and teaching and the influence of these factors on current teaching methods. Prerequisites: ENG 111 and ENG 350 or instructor's permission.

482 - Second Language Composition Studies (3 S.H.)

The course is a survey of theories of second language writing, including analysis of theoretical perspectives and pedagogical materials. This may also include application of TESOL theory and methods to the teaching

of composition. Prerequisites: ENG 111 and ENG 350 or instructor's permission.

483 - Pedagogical Grammar (3 S.H.)

In this course, students examine the structural features of English as they apply to the teaching and learning of English as a second or foreign language. The primary focus is on explaining grammatical concepts within pedagogical contexts. Prior experience in the formal study of English grammar is necessary background for this course. Prerequisites: ENG 111 and ENG 328 or instructor's permission.

484 - ESL Materials, Resources, and Assessment (3 S.H.)

The major focus of this course is the examination of theories and principles guiding successful ESL material development and language test creation. Students typically practice developing their own course materials, evaluate their suitability in a sample lesson, and prepare tests for a variety of student levels. Prerequisites: ENG 111 and ENG 350 or instructor's permission.

490 - Portfolio (1 S.H.)

Students compile portfolio materials including a vita, a critical introduction, and selected papers and projects from their former coursework. Required of all English majors as a capstone project in the senior year. Grade only.

HUMANITIES (HUM)

140 - Approaches to Film (3 S.H.)

A general introduction to the art of the film, the course addresses elements of narrative, composition, design, cinematography, acting, directing, editing, and sound as well as theory and criticism. Grade only.

ENVIRONMENTAL SCIENCE

ENVIRONMENTAL SCIENCE STEERING COMMITTEE

Biology: *Michael DeLong, Neal Mundahl*
Pasteur Hall, Room 215 (507-457-5165)

Chemistry: *Mark Engen, Jeanne Franz*
Pasteur Hall, Room 312 (507-457-5290)

Geoscience: *Jennifer L. B. Anderson, Toby Dogwiler*
Pasteur Hall, Room 120 (507-457-5260)

PURPOSE

The Environmental Science Program is an interdisciplinary program sponsored by the Biology, Chemistry, and Geoscience Departments. This broadly based program is composed of a common set of introductory courses; an in-depth set of option courses in the biology, chemistry, or geoscience areas; and a capstone experience, which involves an individual research problem and a group seminar course. Depending on the set of in-depth option courses chosen for their program, students graduate with one of following degrees:

- B.S. Biology - Environmental Science Option
- B.S. Chemistry - Environmental Science Option
- B.S. Geoscience - Environmental Science Option

Graduates of this program are broadly educated and prepared for graduate school or entry-level positions in a variety of environmental science fields. The Environmental Science Program is designed to provide students with a basic understanding of the environmental challenges that face modern society and to provide students with the skills necessary to address these challenges through a successful career in an environmental science field. The common set of introductory courses provides students with the strong, interdisciplinary science background necessary to understand, critically evaluate, and mitigate environmental problems. While pursuing the common set of introductory courses, students have additional time to choose the option portion of their programs and the department in which they will declare their major. The option portion of the program allows students to develop an in-depth understanding of an area of environmental science of their choice.

The capstone research experience fosters independent thought and hones problem-solving skills while integrating the common set of environmental courses and the option area studies with a real-life environmental problem. Field work is an integral part of the environmental science curriculum and the capstone research project in particular. Students participate in ongoing research projects, including nearby field stations and localities, often in cooperation with governmental agencies, private landowners, or environmental advocacy groups. The capstone seminar course sharpens communication skills and encourages interactions between students from different majors and faculty from different environmental science areas by providing a forum for discussing, analyzing, and debating environmental issues and topics related to any branch of environmental science.

Students are encouraged to maintain a broad perspective and to augment their in-depth study with an understanding of the connections among public policy, economics, law, and the adjustment to social needs, which can result in the destruction or the preservation of the environment.

ENVIRONMENTAL SCIENCE CORE REQUIREMENTS - ALL OPTIONS

48-50 S.H.

(These courses are listed again under each department option.)

- * CHEM 212 Principles of Chemistry I (4)
- * CHEM 213 Principles of Chemistry II (4)
- CHEM 320 Environmental Chemistry (4)
- * BIOL 241 Basics of Life (4)
- * BIOL 242 Organismal Diversity (4)
- BIOL 312 General Ecology (3)
- BIOL 313 General Ecology Laboratory (1)
- * GEOS 120 Dynamic Earth (4)
- * GEOS 130 Earth and Life Through Time (4)
- GEOS 240 Watershed Science (4)

The following two courses (6 S.H.)

- ECON 315 Environmental and Natural Resource Economics (3)
- POLS 340 Environmental Policy (3)

One of the following courses not within the major discipline of the elected option:

- I BIOL 315 Environmental Biology (3)

- BIOL 335 Plant Ecology (4)
- BIOL 360 Entomology (4)
- P BIOL 415 Ecology of Large Rivers (4)
- BIOL 420 Limnology (4)
- CHEM 425 Analytical Chemistry I (4)
- I CHEM 436 Topics in Environmental Chemistry (3)
- GEOS 325 Environmental Geoscience (3)
- O GEOS 415 Advanced Geomorphology (4)
- I GEOS 370 GIS and Imaging Techniques (3)
- O GEOS 420 Applied Hydrogeology (4)
- GEOS 425 Global Climate Change (3)

A research capstone course from the major discipline of the elected option:

- P BIOL 499 Capstone Project (1-3)
- P CHEM 430 Individual Problems in Chemistry (2-3)
- GEOS 400 Directed Research in Geoscience (2-3)

A seminar capstone course from the major discipline of the elected option:

- BIOL 495 Seminar in Biology – Environmental Science (1)
- I CHEM 475 Seminar in Chemistry – Environmental Science (1)
- GEOS 475 Geoscience Seminar – Environmental Science (1)

B.S. MAJOR BIOLOGY - ENVIRONMENTAL SCIENCE OPTION (BIES)

94-95 S.H. (No Minor required)

BIOLOGY CORE COURSES - BIOL (18 S.H.)

- 241 Basics of Life (4)
- 242 Organismal Diversity (4)
- P 308 Cell Biology (3)
- O 310 Genetics (3)
- 312 General Ecology (3)
- 313 General Ecology Lab (1)

REQUIREMENTS - BIOL (12 S.H.)

- 318 Invertebrate Zoology (4) OR
- 319 Vertebrate Biology (4)
- 335 Plant Ecology (4) OR BIOL 350 Plant Taxonomy (4)
- I 315 Environmental Biology (3)
- 495 Seminar – Environmental Science (1)

ELECTIVES - BIOL (7 S.H.)

- 318 Invertebrate Zoology (4)
- 319 Vertebrate Biology (4)
- 320 Ornithology (4)
- 335 Plant Ecology (4)
- 350 Plant Taxonomy (4)
- 360 Entomology (4)
- 380 Evolution (3)
- 405 Fishery Biology (3)
- 409 Microbiology (4)
- P 415 Ecology of Large Rivers (4)
- 420 Limnology (4)
- I 423 Ecosystem Ecology (3)
- 424 Biogeography (3)
- 425 Animal Behavior (3)

BIOLOGY CAPSTONE REQUIREMENT (3 S.H.)

- P 499 Capstone Project (1-3)

OTHER REQUIRED COURSES (54-55 S.H.)

Chemistry (16 S.H.)

- CHEM*212,*213 Principles of Chemistry I, II (8)
- CHEM 320 Environmental Chemistry (4)
- CHEM 340 Organic Chemistry Survey (4)

Geoscience (12 S.H.)

- * GEOS 120 Dynamic Earth (4)
- * GEOS 130 Earth and Life Through Time (4)
- GEOS 240 Watershed Science (4)

Mathematics (9 S.H.)

- MATH 150 Modeling Using Precalculus and Statistics (3)
- MATH 155 Calculus Based Modeling (3)
- MATH 305 Biometry (3)

Note: Calculus I, II (MATH 160, 165) may be submitted for MATH 150, 155.

Physics (8 S.H.)

- PHYS *201,*202 General Physics (8)

Note: University Physics I, II (*221,*222) may be submitted for General Physics I, II (201, 202).

The following two courses (6 S.H.):

- ECON 315 Environmental and Natural Resource Economics (3)
- POLS 340 Environmental Policy (3)

One of the following five courses (3-4 S.H.):

- CHEM 425 Analytical Chemistry I (4)
- I CHEM 436 Topics in Environmental Chemistry (3)
- GEOS 325 Environmental Geoscience (3)
- O GEOS 415 Advanced Geomorphology (4)
- O GEOS 420 Applied Hydrogeology (4)
- GEOS 425 Global Climate Change (3)

B.S. MAJOR CHEMISTRY - ENVIRONMENTAL SCIENCE OPTION (CHES)

92-93 S.H.

CHEMISTRY CORE COURSES - CHEM (29 S.H.)

- 212 Principles of Chemistry I (4)
- 213 Principles of Chemistry II (4)
- 350 Principles of Organic Chemistry I (4)
- 351 Principles of Organic Chemistry II (5)

- O 412 Physical Chemistry I (3)
- P 413 Physical Chemistry I Lab (1)
- 425 Analytical Chemistry I (4)
- P 426 Analytical Chemistry II (4)

REQUIREMENTS - CHEM (10 S.H.)

- 320 Environmental Chemistry (4)
- P 430 Individual Problems (2)
- I 436 Topics in Environmental Chemistry (3)
- I 475 Chemistry Seminar (1)

ELECTIVES - CHEM (4 S.H.)

- 400 Biochemistry I (4)
- 401 Biochemistry II (3)
- 410 Polymer Chemistry (3)
- O 414 Physical Chemistry II (3)
- P 415 Physical Chemistry Lab II (2)
- 420 Topics in Industrial Chemistry (2)
- 427 Topics in Instrumental Chemistry (2)
- 428 Chemical Separations (3)
- 450 Advanced Organic Chemistry (2)
- 470 Isotope, Nuclear and Radiochemistry (2)
- I 475 Seminar in Chemistry (1) OR other advanced chemistry electives as approved by the Chemistry Department

OTHER REQUIRED COURSES (49-50 S.H.)

Biology (12 S.H.)

- * BIOL 241 Basics of Life (4)
- * BIOL 242 Organismal Diversity (4)
- BIOL 312, 313 General Ecology lecture and lab (4)

Geoscience (12 S.H.)

- * GEOS 120 Dynamic Earth (4)
- * GEOS 130 Earth and Life through Time (4)
- GEOS 240 Watershed Science (4)

Mathematics (8 S.H.)

- MATH 160, 165 Calculus I, II (8)

Physics (8 S.H.)

- PHYS *221,*222 University Physics I, II (8)

The following two courses (6 S.H.):

- ECON 315 Environmental and Natural Resource Economics (3)
- * POLS 340 Environmental Policy (3)

One of the following courses (3-4 S.H.):

- I BIOL 315 Environmental Biology (3)
- BIOL 335 Plant Ecology (4)
- BIOL 360 Entomology (4)
- BIOL 420 Limnology (4)
- O GEOS 415 Advanced Geomorphology (4)
- GEOS 325 Environmental Geoscience (3)
- I GEOS 370 GIS and Imaging Techniques (3)
- P BIOL 415 Ecology of Large Rivers (4)
- O GEOS 420 Applied Hydrogeology (4)
- GEOS 425 Global Climate Change (3)

B.S. MAJOR - GEOSCIENCE: ENVIRONMENTAL SCIENCE OPTION (GEES)

92 - 96 S.H. (No Minor Required)

GEOSCIENCE CORE COURSES - GEOS (23 S.H.)

- * 120 Dynamic Earth (4)
- * 130 Earth and Life through Time (4)
- 220 Minerals and Rocks (4)
- P 280 Field and Analytical Methods I (2)
- 330 Structural Geology (4)
- P 340 Sedimentology and Stratigraphy (4)
- 475 Geoscience Seminar (1)

Note: Majors in all options are urged to take a geology summer field course prior to graduation. This can satisfy an upper-division elective.

REQUIREMENTS - GEOS (20-21 S.H.)

- 240 Watershed Science (4)
- 325 Environmental Geoscience (3)
- I 370 GIS and Imaging Techniques (3)
- 400 Directed Research in Geoscience (2-3)
- O 415 Advanced Geomorphology (4)
- O 420 Applied Hydrogeology (4)

OTHER REQUIRED COURSES (43-44 S.H.)

Biology - BIOL (12 S.H.)

- * 241 Basics of Life (4)
- * 242 Organismal Diversity (4)
- 312, 313 General Ecology, Ecology Lab (4)

Chemistry - CHEM (12 S.H.)

- *212, *213, Principles of Chemistry I, II (8)
- 320 Environmental Chemistry (4)

Mathematics - MATH (6 S.H.)

- 150 Modeling Using Precalculus and Statistics (3)
- 155 Calculus Based Modeling (3) OR may substitute 120 and MATH 160 or MATH 160 and MATH 165

Physics - PHYS (4 S.H.)

One of the following three courses:

- * 115 Conceptual Physics (4)
- * 201 General Physics I (4)
- * 221 University Physics I (4)

The following two courses (6 S.H.):

- ECON 315 Environmental and Natural Resource Economics (3)
- POLS 340 Environmental Policy (3)

One of the following courses (3-4 S.H.):

- l BIOL 315 Environmental Biology (3)
- BIOL 335 Plant Ecology (4)
- BIOL 360 Entomology (4)
- †PBIOL 415 Ecology of Large Rivers (4) (See Note below.)
- † BIOL 420 Limnology (4) (See Note below.)
- * CHEM 425 Analytical Chemistry I (4)
- l CHEM 436 Topics in Environmental Chemistry (3)

†If students take BIOL 415 or BIOL 420 as their elective from this group of courses, they may not choose the same course as an elective course under "Electives" below.

ELECTIVES (6-8 S.H.)

(See note below.)

Courses totaling 6-8 S.H. to be chosen from:

Geoscience - GEOS

- l 320 Optical Mineralogy and Petrology (4)
- 385 Geology of North America (3)
- 405 Current Topics in Geoscience (1-3)
- 425 Global Climate Change (3)
- 450 Travel Study in Costa Rica (3)
- 470 Geologic Research Strategies (2)

Biology - BIOL

- P 415 Ecology of Large Rivers (4) OR
- 420 Limnology (4)

Chemistry - CHEM

- 340 Organic Chemistry Survey (4)
- 350 Principles of Organic Chemistry I (4)

Statistics - STAT

- * 210 Statistics (3)

Note: The courses selected as "Electives" must not duplicate the courses selected under "Other Required Courses" above. At least two courses must be used to fulfill the elective requirement.

FAA AIRWAY SCIENCE CERTIFICATION PROGRAM

146-162 S.H. (FAA Airway Science Certification)

Pasteur Hall, Room 114A (507-457-5264)

George Bolon, Advisor

PURPOSE

The Federal Aviation Administration (FAA), along with the aviation industry, has recognized the need for a cadre of well-qualified men and women to support the national airspace system of the future. Therefore, the FAA initiated the Airway Science curriculum to prepare the next generation of aviation technicians, managers, and aircraft crew members. The FAA has approved WSU as an Airway Science University; WSU offers an Airway Science Program with two options: Computer Science Option and Management Option. When students in the Airway Science Program satisfy the respective major department degree requirements, they are granted either of the following degrees:

- B.S. in Computer Science with a Physics/Airway Science/Aviation minor
- B.S. in Business Administration with a Physics/Airway Science/Aviation minor

To fulfill the curriculum for FAA Airway Science Certification, students must complete additional requirements beyond the bachelor degree as outlined in this section.

Airway Science Options

The FAA Airway Science curriculum requirements are subject to change by the Federal Aviation Administration. Therefore, this catalog may not show the latest requirements. See the Airway Science faculty advisor for more information.

COMPUTER SCIENCE OPTION

Degree program: 128 S.H.; Certification: 141 S.H.

UNIVERSITY STUDIES (USP) (46 S.H.)

Basic Skills (12 S.H.)

Arts and Sciences (22 S.H.)

Humanities (6 S.H. – two departments)

- HIST 122 Western Civilization 1815 to Present (3)
- Electives from USP-approved courses offered by another department other than History (3)

Natural Science (7 S.H.)

- GEOS 115 Meteorology (4)
- PHYS 200 Fundamentals of Aviation (3)

Social Science (6 S.H.)

- ECON 201 Principles of Microeconomics (3)
- PSY 210 Introduction to Psychological Science (3)

Fine and Performing Arts (3 S.H.)

Unity and Diversity (12 S.H.)

Critical Analysis (3 S.H.)

Science and Social Policy (3 S.H.)

Global or Multicultural Perspectives (3 S.H.)

Contemporary Citizenship or Democratic Institutions (3 S.H.)

Note: All students must fulfill 12 S.H. of flag requirements.

REQUIRED COURSES (47 S. H.)

Computer Science – CS (33 S.H.)

- 234 Algorithms and Problem Solving (4)
- 250 Algorithms and Data Structures (4)
- 301 Discrete Structures for Computer Science (3)
- 341 Advanced Data Structure (4)
- 351 Introduction to Assembler and Architecture (3)
- 371 Object Oriented Design and Development (3)
- 405 Operating Systems (3)
- P410 Software Engineering (3)
- 415 Principles of Program Language (3)
- 435 Theory of Computation (3)

Mathematics – MATH (12 S.H.)

- 160 Calculus I (4)
- 165 Calculus II (4)
- 210 Foundations of Mathematics(4)

Physics – PHYS (2 S.H.)

- 332 Computer Organization (2)

ELECTIVES (21 S. H.)

Computer Science – CS

- 385 Applied Database Management Systems (3)
I 411 Software Testing (3)
412 Networking/Telecommunications (3)
413 Advanced Networking (3)
420 Computer Architecture (3)
425 Numerical Analysis (4)
430 Computer Graphics (3)
440 Theory of Algorithms (3)
445 Artificial Intelligence (3)
450 Compilers (3)
465 Topics: Computing Theory (1-3)
466 Topics: General Computing Applications (3) OR
P470 System Design with CASE Tools (3)
476 Distributed System: Concepts and Designs (3)
485 Database System Design (3)
491 Practicum in Computer Science (6)

Physics – PHYS (4)

- 333 Microprocessor Electronics (4)

REQUIRED AVIATION/PHYSICS – PHYS (9 S.H.)

- 205 Airspace, Communications and Regulations (1)
383 Air Traffic Control (3)
387 Flight Safety (3)
388 Legislative and Legal Aspects (2)

ADDITIONAL REQUIREMENTS FOR FAA AIRWAY SCIENCE CERTIFICATION

30 S.H.

Business Administration (3 S.H.)

- PBUSA 220 Business Statistics (3)
BUSA 301 Business Law I (3)
MGMT 315 Principles of Management (3) OR
PMGMT 317 Management of Human Resources (3)
PMGMT 325 Organization of Dynamics (3)
OM 334 Production and Operations Management (3)

Chemistry (4 S.H.)

- CHEM 212 Principles of Chemistry (4)

Geography (3 S.H.)

- GEOG 212 Physical Geography (3)

Physics (8 S.H.)

- PHYS 201 General Physics I (4)
PHYS 202 General Physics II (4)

MANAGEMENT OPTION

Degree Requirement: 128 S.H. Certification: 163 S.H.

UNIVERSITY STUDIES (USP) (53 S.H.)

Basic Skills (12 S.H.)

Selected courses must include MATH 140, Applied Calculus (3).

Arts and Sciences (29 S.H.)

Humanities (6 S.H. - two departments)

- HIST 122 Western Civilization 1815 to Present (3)
Electives from USP-approved courses offered by another department other than History

Natural Science (8 S.H.)

- GEOS 115 Meteorology (4)
PHYS 201 General Physics I (4)

Social Science (12 S.H.)

- ECON 201 Principles of Microeconomics (3)
ECON 202 Principles of Macroeconomics (3)
POLS 103 Introduction to Politics (3)
PSY 210 Introduction to Psychological Science (3)

Fine and Performing Arts (3 S.H.)

Unity and Diversity (12 S.H.)

Critical Analysis (3 S.H.)

Science and Social Policy (3 S.H.)

Global or Multicultural Perspectives (3 S.H.)

Contemporary Citizenship or Democratic Institutions (3 S.H.)

Note: All students must fulfill 12 S.H. of flag requirements.

MANAGEMENT (60 S.H.)

Business Administration (36 S.H.)

- MIS 202 Microcomputers in Business (3)
O BUSA 220 Business Statistics (3)
BUSA 301 Business Law I (3)
BUSA 311 Business Law II (3)
MGMT 315 Principles of Management (3) OR
PMGMT 325 Organization of Dynamics (3)
PMGMT 317 Management of Human Resources (3)
BUSA 320 Intermediate Business Statistics (3)
OM 334 Production and Operations Management (3)
BUSA 340 Management Science (3)
MIS 362 Management Information Systems (3)
OM 434 Quality and Productivity Management (3) OR
MGMT 435 Managing for Quality (3) OR
MGMT 495 Strategic Management (3)

Accounting (3 S.H.)

- ACCT 212 Managerial Accounting (3)

Finance (3 S.H.)

- FIN 360 Corporate Finance (3)

Marketing (3 S.H.)

- MKTG 315 Principles of Marketing (3)

BUSINESS ADMINISTRATION ELECTIVES (15 S.H.)

Select electives from either Option A or Option B below.

Option A:

- MIS course (3)
- Management course (3)
- International Business/Management (3) OR an international course from Accounting, Business Administration, Economics and Finance, or Marketing (3)
- Any course from the Department of Business Administration (3)
- Any course from the Departments of Business Administration, Accounting, Economics and Finance, or Marketing (3)

Option B:

A minor or second major from the Departments of Accounting, Business Administration, Finance and Economics, or Marketing, which includes a minimum of 15 S.H. of non-duplicative courses.

Computer Science (3 S.H.)

- CS 110 Computers in a Global Society (3)

AVIATION (18 S.H.)

Physics – PHYS (18 S.H.)

- 200 Fundamentals of Aviation (3)
205 Airspace, Communications and Regulations (1)
381 Corporate Operations (2)
382 Airline Operations (2)
383 Air Traffic Control (3)
384 Airport Operations (2)
387 Flight Safety (3)
388 Legal and Legislative Aspects (2)

ADDITIONAL REQUIREMENTS FOR FAA AIRWAY SCIENCE CERTIFICATION

32 S.H.

Chemistry (4 S.H.)

- CHEM 212 General Inorganic Chemistry (4)

Communication Studies (9 S.H.)

- CMST 387 Interpersonal Communication (3)
CMST 366 Organizational Communication (3)
CMST 485 Senior Seminar in Communication Theory (3)

Geography (3 S.H.)

- GEOG 212 Physical Geography (3)

Mathematics (6 S.H.)

See advisor for specific recommendations.

Physics (4 S.H.)

- PHYS 202 General Physics II (4)

Psychology (3 S.H.)

- PSY 305 Theories of Personality (3)

Sociology (3 S.H.)

- SOC 150 Introduction to Sociology

FOREIGN LANGUAGES

Somsen Hall, Room 319 (507-457-5165)

www.winona.edu/foreignlanguages/

<i>Lilian Ramos</i> (Chairperson):	German and Spanish
Frisk:	French and Spanish
Fernandez Iglesias:	Spanish
Gonzalez:	Spanish
Mazur:	German, French, and Spanish
Tenenbaum:	French and Spanish

FACULTY

Juan Fernandez Iglesias, Assistant Professor; B.A., Universidad de Santiago de Compostela; M.A., Ph.D., University of Kansas; 2004 –
Timothy Frisk, Associate Professor; B.S., Winona State University; B.A., M.A., Ph.D., University of Minnesota; 1990 – 2004 –
Ronald M. Mazur, Professor; B.A., University of Detroit; M.A., Ph.D., University of Michigan; 1978 –
Lilian Ramos, Associate Professor; B.A., Seattle University; M.A., University of Washington; Ph.D., University of Washington; 1992 –
Rosine Tenenbaum, Professor; B.A., M.A., University of Paris-Sorbonne; Ph.D., University of North Carolina; 1990 –

PURPOSE

Foreign language classes are designed to develop proficiency in the four skills areas: listening, reading, writing, and speaking. Their further goal is to develop an understanding and appreciation of individual foreign cultures. Students who enhance their occupational skills with linguistic and cultural training will increase their opportunities for employment in multinational corporations, government agencies, humanitarian organizations, and a variety of health professions. The following offerings are available:

- Complete B.A./B.S. major/minor in French
- Complete B.S. (teaching) major in French
- Complete B.A./B.S. major/minor in German
- Complete B.S. (teaching) major in German
- Complete B.A./B.S. major/minor in Spanish
- Complete B.S. (teaching) major in Spanish

The Foreign Language Department is authorized to recommend graduates for licensure in French, German, and Spanish majors. (Minnesota does not grant teaching licenses for foreign language minors.) All coursework for the degrees is available on campus. Language courses 101, 102, 201, 202 are offered on a yearly basis. Most other courses are offered every two years. For this reason, majors and minors in foreign languages are expected to register for the “specialized study” courses when they are offered.

Arranged classes are discouraged and will be offered only under the most exceptional circumstances and require approval of the entire Foreign Language Department faculty. Independent studies courses are not offered.

PROFESSIONAL EDUCATION SEQUENCE FOR SECONDARY MAJORS

(32-36 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, “Admission to the WSU Teacher Education Program.”)
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 305 Human Development and Learning (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 449 Middle Level Philosophy, Organization and Planning (3)
- P EDUC 459 The Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

PLACEMENT

All students with prior study of a foreign language are strongly encouraged to take a placement examination to determine the correct level of coursework at WSU. Students who are high school graduates from a French-, Spanish-, or German-speaking country cannot register or receive credit for French, German, or Spanish 101 or 102. These students can register for a 201 or 202 course only if they have declared a major or a minor in a foreign language. Students should consult with the department chairperson for details.

Note: Courses beyond the intermediate level are only offered every other year except for French 303 and Spanish 301. This means that students who have not completed intermediate courses during their sophomore year will have difficulty graduating in four years with a foreign language major unless they participate in a department- or university-approved study abroad program. Students of Spanish can participate in the Granada, Spain program. The foreign language faculty reserves the right to depart from these guidelines when warranted by exceptional circumstances.

CREDIT FOR PREVIOUS LANGUAGE STUDY

The department recommends that students who meet the prerequisites for French, German, or Spanish 101, 102, or 201 enroll in the next higher elementary or intermediate course. By earning a grade of “A” or “B” in WSU’s language courses 102, 201, or 202, students may obtain retroactive credit for course 101 and any sequel courses below the course in which they earned the “A” or “B.” Qualifying students may apply for retroactive credit by completing the appropriate form(s) and paying a fee of \$5 per credit in order to receive a grade of “P” (pass) in the appropriate course(s). For information about credit by examination, see page 23. The foreign language faculty reserves the right to depart from these guidelines when warranted by exceptional circumstances.

STUDY ABROAD

WSU students who wish to immerse themselves in a foreign culture and language for one or more semesters have several options available to them. For specific information, please contact the Study Abroad Office or consult the Study Abroad section in this catalog (page 29). Students who wish to receive University credit for participation in a study abroad program must have prior approval from the Foreign Language Department. The foreign language majors and minors are strongly encouraged to study abroad in order to acquire language proficiency. Students have the opportunity to study Spanish with a WSU-sponsored program in Granada, Spain.

PASS/NO CREDIT (P/NC) COURSES

Elementary and intermediate language courses (101,102, 201 and 202) may be taken for pass/no credit. Except for internships and practica, students must take all courses in their major, minor, options, concentrations, and licensures on a grade-only basis. In addition, a pass will be accepted for Intermediate 201 in French, German, or Spanish for those majors/minors who received an "A" or "B" in Intermediate 202 French, German, or Spanish. In this instance, students can qualify for retroactive credit for Intermediate 201 after completing the appropriate forms. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

GPA REQUIREMENTS

1. A cumulative GPA of 2.00 to graduate with a foreign language major or minor.
2. A cumulative 2.50 GPA in the courses taken for the B.A. major or minor.
3. A cumulative 2.75 GPA in the courses taken for the B.S. teaching major.
4. A cumulative 2.75 GPA to be admitted to teacher education.

For a checklist of the University's graduation requirements, see page 23.

Note: Specialized study courses are offered on a two-year cycle except for French 303 and Spanish 301. Therefore, students planning to major or minor in a foreign language should register for all specialized study courses offered in any given semester if they plan to graduate with a foreign language major or minor in four years.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Foreign Languages offers the following flag courses in the University Studies Program:

FLAGS

FRENCH

Oral I

FREN 401 Phonetics and Pronunciation (French) (3)

Math/Critical Analysis O

FREN 403 French Literature II (3)

Writing P

FREN 301 French Composition (4)

FREN 402 French Literature I (3)

GERMAN

Oral I

GERM 302 German Conversation and Composition (4)

Math/Critical Analysis O

GERM 403 20th Century Literature (German) (3)

Writing P

GERM 401 Medieval to Baroque Literature (3)

GERM 402 18th and 19th Century Literature (3)

SPANISH

Oral I

SPAN 302 The Culture of Spain (3)

Math/Critical Analysis O

SPAN 402 Spanish Peninsular Literature II (3)

Writing P

SPAN 301 Spanish Composition and Conversation (4)

SPAN 401 Spanish Peninsular Literature I (3)

Flag courses that can be used to satisfy foreign language major/minor requirements are identified in the lists of required courses and electives in this section.

B. A. MAJOR - FRENCH (FREN) 36 S.H.

(Minor Required in another discipline or in another language)

LANGUAGE SKILLS FOR MAJORS AND MINORS (8 S.H.)

FREN 201 Intermediate French I (4)

FREN 202 Intermediate French II (4)

SPECIALIZED STUDY - FREN (28 S.H.)

204 Special Topics in French Literature (2)

205 Special Topics in French Culture (2)

P 301 French Composition (4)

302 French Civilization and Culture (4)

303 Advanced Grammar and Stylistics (4)

I 401 Phonetics and Pronunciation (3)

P 402 French Literature I (3)

O 403 French Literature II (3)

404 French Literature III (3)

B.S. MAJOR - FRENCH (Teaching) (FRNT) 40 S.H.

(Minor Required in another discipline or in another language)

LANGUAGE SKILLS (8 S.H.)

FREN 201 and 202

Note: Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area. Refer to these requirements in the Education Department section of this catalog (page 90), or refer to the *WSU Teacher Education Student Handbook*.

SPECIALIZED STUDY (32 S.H.)

FREN 204 Special Topics in French Literature (2)

FREN 205 Special Topics in French Culture (2)

P FREN 301 French Composition (4)

FREN 302 French Civilization and Culture (4)

FREN 303 Advanced Grammar and Stylistics (4)

I FREN 401 Phonetics and Pronunciation (3)

P FREN 402 French Literature I (3)

O FREN 403 French Literature II (3)

FREN 404 French Literature III (3)

FLAN 405 Methods of Teaching a Modern Foreign Language (4)

B.A. MINOR - FRENCH (FREN) 28 S.H.

LANGUAGE SKILLS (8 S.H.)

FREN 201 and 202

SPECIALIZED STUDY - FREN (20 S.H.)

204 Special Topics in French Literature (2) OR

205 Special Topics in French Culture (2)

P 301 French Composition (4)

302 French Civilization and Culture (4)

303 Advanced Grammar and Stylistics (4)

Choose two of the following courses:

I 401 Phonetics and Pronunciation (3)

P 402 French Literature I (3)

O 403 French Literature II (3)

404 French Literature III (3)

B.A. MAJOR - GERMAN (GERM) 32 S.H.

(Minor Required in another discipline or in another language)

LANGUAGE SKILLS (8 S.H.)

GERM 201 Intermediate German I (4)

GERM 202 Intermediate German II (4)

SPECIALIZED STUDY - GERM (24 S.H.)

204 Special Topics: German Literature (2)

205 Special Topics: German Culture and Language (2)

301 Advanced Reading and Structural Analysis (3)

I 302 German Conversation and Composition (4)

303 German Culture and Civilization (4)

P 401 Medieval to Baroque Literature (3)

P 402 18th and 19th Century Literature (3)

O 403 20th Century Literature (3)

B.S. MAJOR - GERMAN (Teaching) (GRMT) 36 S.H.
(Minor Required)**LANGUAGE SKILLS (8 S.H.)**

GERM 201 and 202

Note: Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area. Refer to these requirements in the Education Department section of this catalog (page 90), or refer to the *WSU Teacher Education Student Handbook*.

SPECIALIZED STUDY - GERM (28 S.H.)

- GERM 204 Special Topics: German Literature (2)
- GERM 205 Special Topics: German Culture and Language (2)
- GERM 301 Advanced Reading and Structural Analysis (3)
- I GERM 302 German Conversation and Composition (4)
- GERM 303 German Culture and Civilization (4)
- P GERM 401 Medieval to Baroque Literature (3)
- P GERM 402 18th and 19th Century Literature (3)
- O GERM 403 20th Century Literature (3)
- FLAN 405 Methods of Teaching a Modern Foreign Language (4)

B.A. MINOR - GERMAN (GERM) 24 S.H.**LANGUAGE SKILLS (8 S.H.)**

GERM 201 and 202

SPECIALIZED STUDY - GERM (16 S.H.)

- 204 Special Topics: German Literature (2) OR
 - 205 Special Topics: German Culture and Language (2)
 - 301 Advanced Reading and Structural Analysis (3)
 - I 302 German Conversation and Composition (4)
 - 303 German Culture and Civilization (4)
- Choose one of the following three courses:
- P 401 Medieval to Baroque Literature (3)
 - P 402 18th and 19th Century Literature (3)
 - O 403 20th Century Literature (3)

B.A. MAJOR - SPANISH (SPAN) 32 S.H.

(Minor Required in another discipline or in another language)

LANGUAGE SKILLS (8 S.H.)

- SPAN 201 Intermediate Spanish I (4)
- SPAN 202 Intermediate Spanish II (4)

SPECIALIZED STUDY - SPAN (24 S.H.)

- 204 Special Topics in Hispanic Literature and Culture (2)
- 300 Spanish Linguistics (2)
- P 301 Spanish Composition and Conversation (4)
- I 302 The Culture of Spain (3)
- 303 The Culture of Latin America (3)
- P 401 Spanish Peninsular Literature I (3)
- O 402 Spanish Peninsular Literature II (3)
- 403 Latin American Literature (4)

B.S. MAJOR - SPANISH (Teaching) (SPNT) 36 S.H.

(Minor Required in another discipline or in another language)

LANGUAGE SKILLS (8 S.H.)

SPAN 201 and 202

Note: Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area. Refer to these requirements in the Education Department section of this catalog (page 90), or refer to the *WSU Teacher Education Student Handbook*.

SPECIALIZED STUDY - SPAN (28 S.H.)

- SPAN 204 Special Topics in Hispanic Literature and Culture (2)
- SPAN 300 Spanish Linguistics and Phonetics (2)
- P SPAN 301 Spanish Composition and Conversation (4)
- I SPAN 302 The Culture of Spain (3)
- SPAN 303 The Culture of Latin America (3)
- P SPAN 401 Spanish Peninsular Literature I (3)
- O SPAN 402 Spanish Peninsular Literature II (3)
- SPAN 403 Latin American Literature (4)
- FLAN 405 Methods of Teaching a Modern Foreign Language (4)

B.A. MINOR - SPANISH (SPAN) 24 S.H.**LANGUAGE SKILLS (8 S.H.)**

SPAN 201 and 202

SPECIALIZED STUDY - SPAN (16 S.H.)

- 204 Special Topics in Hispanic Literature and Culture (2) OR
- 300 Spanish Linguistics and Phonetics (2)
- P 301 Spanish Composition and Conversation (4)
- I 302 The Culture of Spain (3) OR
- 303 The Culture of Latin America (3)
- P 401 Spanish Peninsular Literature I (3) OR
- O 402 Spanish Peninsular Literature II (3)
- 403 Latin American Literature (4)

COURSE DESCRIPTIONS**FOREIGN LANGUAGE (FLAN)****218 – The New Europeans: Understanding the EU (3 S.H.)**

Through the use of stimulating readings, this course serves as an introduction to the issues shaping contemporary Europe. The main topic of the course will be to explore the evolution of the concept of Europe throughout different historical periods, learn about the different institutions that govern Europeans, highlight the important events in the unification of Europe, discuss the symbols that make Europe real for the average citizen, analyze the competing visions of where Europe is headed and what it should be, and explore the concept of the European dream and way of life by comparing it with its American counterpart. Offered yearly.

405 – Methods of Teaching a Modern Foreign Language (4 S.H.)

Discussion of foreign language teaching methods with respect to their effectiveness in achieving pedagogical goals. Practical applications are offered. Must be taken before the student teaching assignment. Prerequisite: FREN, GERM, or SPAN 202 or equivalent. Offered every two years.

ARABIC (ARAB)**101 – Arabic for Beginners (4 S.H.)**

This course is an introduction to the Arabic language and its script. ARAB 101 is a combination of oral and written exercises. Prerequisites: None. Letter grade only. Offered according to demand.

102 – Introduction to Arabic Grammar and Literature (4 S.H.)

This is a continuation of ARAB 101. Students will learn to recognize patterns in the language and to differentiate between verbs, nouns and adjectives. Prerequisite: ARAB 101 or equivalent. Letter grade only. Offered according to demand.

FRENCH (FREN)**101 – Elementary French I (4 S.H.)**

Introductory French for students with little or no prior French training. Instruction in speaking, listening, reading, and writing through classroom drills and language lab work. Prerequisite: None. Offered yearly.

102 – Elementary French II (4 S.H.)

Continuation of FREN 101. Prerequisites: FREN 101 or 1-2 years of high school French or equivalent. Offered yearly.

201 – Intermediate French I (4 S.H.)

Further development of communication skills. In-depth study of grammar. Selected readings in French. Prerequisite: FREN 102 or equivalent of three years of high school French. Offered yearly.

202 – Intermediate French II (4 S.H.)

Continuation of FREN 201. Further development of all the skills essential for communication. Further development of understanding written and spoken French. Practice in translation and practice in writing accentuated. Prerequisite: FREN 201 or equivalent of 4-5 years of high school French. Offered yearly.

204 – Special Topics in French Literature (2 S.H.)

Directed readings of French contemporary writers. Focusing particularly on African writers and French writers outside of France. Reading knowledge of French required. Offered every two years.

205 – Special Topics in French Culture (2 S.H.)

Study of contemporary issues in the French media, particularly cinema. Prerequisite: FREN 202 or equivalent. Offered every two years.

301 – French Composition (4 S.H.)

This course reinforces skills in written French through translation of a wide variety of texts taken from various fields such as business and literature. The writing of poems, essays, and articles in French is practiced in order to reinforce and refine writing skills. Prerequisite: FREN 202 or equivalent. Offered every two years.

302 - French Civilization and Culture (4 S.H.)

The unfolding of French culture and civilization from the Lascaux Caves to French rap music. Topics include architecture, plastic arts, literary movements, and contemporary French popular culture. The course is taught in French with texts in French. Students present reports on selected topics in French. Prerequisite: FREN 202 or equivalent. Offered every two years.

303 - Advanced Grammar and Stylistics (4 S.H.)

This course is an introduction to literary instruction as well as a practice of French advanced writing. It is a transition between FREN 202 (fourth-semester French) and French literature courses. Prerequisite: FREN 202 or equivalent. Letter grade only. Offered yearly.

401 - Phonetics and Pronunciation (3 S.H.)

Each student perfects his/her pronunciation through class and language laboratory exercises. The class relies on pronunciation tapes to teach the proper French accent. The sounds are studied so that one can describe and teach them to students. Some pronunciation rules are also mastered: rule of three consonants, silent "e", "e" before "yod," etc. Students read articles from the French press in order to practice correct pronunciation. Prerequisite: FREN 202 or equivalent. Offered every two years.

402 - French Literature I (3 S.H.)

Middle Ages, Renaissance French Literature. The course is taught in French. The French Explication De Texte type of critical analysis is taught. Writings such as Song of Roland, Romance of the Rose, Villon's poems, Rabelais' Gargantua, Montaigne's Essays, and The Pleiade are studied. Prerequisite: FREN 202 or equivalent. Offered every two years.

403 - French Literature II (3 S.H.)

Seventeenth and 18th century French literature. The course is taught in French. Writers such as Corneille, Moliere, Racine, Marivaux, Voltaire, Diderot, Rousseau, and Beaumarchais are studied. Prerequisite: FREN 202 or equivalent. Offered every two years.

404 - French Literature III (3 S.H.)

Nineteenth and 20th century French literature. Romanticism, the Parnasse, Symbolism and Naturalism, as well as Surrealism, Existentialism, and contemporary writers are studied. Prerequisite: FREN 202 or equivalent. Offered every two years.

GERMAN (GERM)

101 - Elementary German I (4 S.H.)

Introductory German for students with little or no prior German training. Instruction in speaking, listening, reading, and writing through classroom drill and language lab work. Offered yearly.

102 - Elementary German II (4 S.H.)

Continuation of GERM 101. Prerequisite: GERM 101 or two years of high school German or equivalent. Offered yearly.

201 - Intermediate German I (4 S.H.)

Further development of communication skills. Study of grammar essential to skills. Selected readings in German. Prerequisite: GERM 102 or equivalent of three years of high school German. Offered yearly.

202 - Intermediate German II (4 S.H.)

Continuation of GERM 201. Further development of all the skills essential for communication. Further development of understanding written and spoken German. Practice in translation and practice in writing accentuated. Prerequisite: GERM 201 or equivalent of five years of middle school/high school German. Offered yearly.

204 - Special Topics: German Literature (2 S.H.)

The course focuses on an individual author, a literary period/movement, or a special literary category/genre. Prerequisite: GERM 202 or equivalent. Offered every two years.

205 - Special Topics: German Culture and Language (2 S.H.)

This course deals with such topics as modern cultural developments in the German-speaking world, modern usage and themes in the German-language media, the development of the German language into its modern form, or the application of the German language to a specific professional field. Prerequisite: GERM 202 or equivalent. Offered every two years.

301 - Advance Reading and Structural Analysis (3 S.H.)

Advanced study and analysis of the German language. The course includes a discussion of advanced German grammar (with exercises), the development of effective reading strategies and an introduction to basic linguistic concepts. Prerequisite: GERM 202 or equivalent. Offered every two years.

302 - German Conversation and Composition (4 S.H.)

The practice of advanced language skills through guided conversation and composition. Prerequisite: GERM 202 or equivalent. Offered every two years.

303 - German Civilization and Culture (4 S.H.)

The evolution of German culture from its beginnings to the present, including analysis of historical, literary, and artistic movements. Prerequisite: GERM 202 or equivalent. Offered every two years.

401 - Medieval to Baroque Literature (3 S.H.)

A survey of representative works by major authors in various genres from the beginnings of Old High German literature (8th century) to the literary Baroque (17th century). Class work focuses on the close reading and critical discussion of texts in their literary and cultural contexts. Prerequisite: GERM 202 or equivalent. Offered every two years.

402 - 18th and 19th Century Literature (3 S.H.)

A survey of representative works by major authors in various genres from the Enlightenment through Symbolism and Naturalism (late 19th century). Class work focuses on the close reading and critical discussion of texts in their literary and cultural contexts. Prerequisite: GERM 202 or equivalent. Offered every two years.

403 - 20th Century Literature (3 S.H.)

A survey of representative works by major authors in various genres from the turn of the 20th century to the present. Class work focuses on the close reading and critical discussion of texts in their literary and cultural contexts. Prerequisite: GERM 202 or equivalent. Offered every two years.

SPANISH (SPAN)

101 - Elementary Spanish I (4 S.H.)

Introductory Spanish for students with little or no prior training in Spanish. Instruction in speaking, listening, reading and writing through classroom drill and language lab work. Offered yearly.

102 - Elementary Spanish II (4 S.H.)

Continuation of 101. Prerequisite: SPAN 101 or equivalent. Offered yearly.

201 - Intermediate Spanish I (4 S.H.)

Further development of communication skills. Study of grammar essential to skills. Selected readings in Spanish. Prerequisite: SPAN 102 or equivalent. Offered yearly.

202 - Intermediate Spanish II (4 S.H.)

Continuation of SPAN 201. Further development of skills essential for communication. Study of grammar and syntax. Additional practice in reading and writing. Prerequisite: SPAN 201 or equivalent. Offered yearly.

204 - Special Topics in Hispanic Literature and Culture (2 S.H.)

Directed readings in Hispanic literature and culture. Prerequisite: SPAN 202 or equivalent. Offered every two years.

300 - Spanish Linguistics and Phonetics (2 S.H.)

Practice in all the sounds of the language with observations on its development from Latin. Exploration of the grammatical structures of Spanish. Prerequisite: SPAN 202 or equivalent. Offered every two years.

301 - Spanish Composition and Conversation (4 S.H.)

The emphasis is on class discussion and the development of critical thinking. Readings to be included are short stories by modern and classical authors. Overview of semantics and stylistics. Prerequisite: SPAN 202 or equivalent. Offered yearly.

302 - The Culture of Spain (3 S.H.)

This course is taught in Spanish and focuses on the successive phases in the development of the culture of Spain. The development of Spanish art, architecture, music and lifestyle are studied as well as the different characteristics of the individual regions of Spain. Prerequisite: SPAN 202 or equivalent. Offered every two years.

303 - The Culture of Latin America (3 S.H.)

This course is taught in Spanish and focuses on the countries of Central and South America, a study of the pre-Columbian cultures as well as their development after the Spanish colonization: their art, their traditions and their present lifestyle and customs. Prerequisite: SPAN 202 or equivalent. Offered every two years.

401 - Spanish Peninsular Literature I (3 S.H.)

The course is taught in Spanish. Class work focuses on the study of early Peninsular Spanish literature: epic poetry, novel, theater, the renaissance, baroque literature. Prerequisite: SPAN 202 or equivalent. Offered every two years.

402 - Spanish Peninsular Literature II (3 S.H.)

The course is taught in Spanish. It covers Peninsular literature of the Age of Enlightenment, the Romantic period, the generation of 98, the generation of 27, the literature of the Civil War, and the post-Civil War as well as contemporary authors. Prerequisite: SPAN 202 or equivalent. Offered every two years.

403 - Latin American Literature (4 S.H.)

A survey of Latin American literature from pre-colonial to contemporary literature. This course includes the study of pre-Hispanic writings (Nahautl, maya, quechua), Los Cronistas, colonial literature, Neoclassicism, Romanticism, and the transition of the "gaucho epic" from the 19th to the 20th century. It also includes Modernism; the Criollismo; Post-Modernism; Magic Realism; and the Boom with writers such as Gabriel Garcia, Marquez, Carols Fuentes, Cortazar, and Vargas Llosa; the theater; and other essay writers. Prerequisite: SPAN 202 or equivalent. Offered every two years.

GEOGRAPHY

Minné Hall, Room 228 (507-457-5432)

FACULTY

Jerry Gerlach, Professor; B.A., M.A., University of Nebraska; Ph.D., University of Oklahoma; 1988 -

PURPOSE

The study of geography affords students the opportunity to examine the differences and similarities of the various physical and cultural environments in which we live. Drawing on concepts from both the physical and the social sciences, geographers work in such fields as education, urban and regional planning, government agencies, conservation, international business, tourism, cartography, and international relations.

GRADUATION REQUIREMENTS

- For a checklist of the University's graduation requirements, see page 23. Specific requirements for geography minors are as follows:
- A grade of "C" or better is required for any course used to complete the requirements of the minor.
 - Four courses (12 S.H.) must be taken at WSU.

B.A. MINOR - GEOGRAPHY (GEOG) 24 S.H.

REQUIRED COURSES - GEOG (12 S.H.)

211	Economic Geography (3)
212	Physical Geography (3)
213	Cultural Geography (3)
450	Cartography (3)

ELECTIVES (12 S.H.)

Six credits must be from courses 300-level or above. GEOG 110 does not apply to the minor.

COURSE DESCRIPTIONS (GEOG)

110 - World Regional Geography (3 S.H.)

A survey of physical and cultural aspects of world regions including landforms; climate; levels of economic development; cultural diffusion; attitudes toward the land, the social structure, and values. Grade only. Offered yearly.

211 - Economic Geography (3 S.H.)

A systematic study of the geographic bases of human economic activities in agriculture, mining, and manufacturing. This course explains—by theory and example—why, where, and how activities are distributed in our economic world. Grade only. Offered yearly.

212 - Physical Geography (3 S.H.)

An introduction to the significance and aerial distribution of various physical elements of our environment with emphasis on climate, landforms, gradational work of streams, and glaciation. Grade only. Offered yearly.

213 - Cultural Geography (3 S.H.)

An introduction to the significance and aerial distribution of various cultural elements of our environment with emphasis on population, cultural origins, language, religion, and agriculture. Grade only. Offered yearly.

223 - Geography of the Orient (3 S.H.)

A study of the physical and cultural features of the Far East. Grade only. Offered every other year.

224 - Geography of Africa (3 S.H.)

Natural setting, distribution of people, important occupations and problems of Africa's future development. Grade only. Offered every other year.

225 - Geography of Latin America (3 S.H.)

A study of the complex cultural, racial, political, demographic, and economic patterns which have developed in Latin American since 1492—within its physical geographic setting. Grade only. Offered yearly.

233 - Geography of the Middle East (3 S.H.)

Environmental setting, population distribution, important occupations, crossroads, functions, and problems of development. Grade only. Offered every other year.

270 - Introduction to the Geography of Tourism (3 S.H.)

An introduction to the study of the geography of tourism. This course studies the origin, development, and spread of tourism. Particular emphasis is placed on the location of tourist areas in the U.S. Grade only. Offered every other year.

320 - Geography of the United States (3 S.H.)

An examination of the various regions of the United States with emphasis on the ways in which physical geography, sources of economic activity, and cultural heritage combine to produce the unique character of each region. Grade only. Offered yearly.

326 - Geography of Europe (3 S.H.)

A study of nations, regions, and economies of Europe with special attention to current problem areas. Grade only. Offered every other year.

332 - Geography of Canada (3 S.H.)

A detailed examination of Canada's geography with special emphasis on developmental problems. Grade only. Offered every other year.

349 - Maps and Air Photos (3 S.H.)

A study of the elements of map scale and projection, and the use of air photos in map preparation. Practice in reading and interpreting various kinds and series of maps. Grade only. Offered every other year.

370 - The Geography of Tourism: Advanced Study (3 S.H.)

An in-depth study of tourist locations worldwide. The course emphasizes detailed examination and classification of tourist types and locations. Grade only. Offered every other year.

450 - Cartography (3 S.H.)

Theory and design of map-making skills using a variety of techniques in the production and reproduction of qualitative and quantitative maps. Grade only. Offered every other year.

455 - Remote Sensing (3 S.H.)

An examination of various remote sensing techniques including radar, infrared, high-altitude photography and LANDSAT earth satellite imagery, and their application to geographical inquiry in areas such as land use, agriculture, forest and range management, and urban studies. Prerequisite: instructor's permission. Grade only. Offered every other year.

490 - Independent Reading in Geography (1-3 S.H.)

A course designed to aid those planning to attend graduate school or who have a special area of interest which they desire to pursue beyond formal course limits. Work is undertaken with an instructor chosen by the student. Prerequisite: instructor's permission. Grade only. Offered by arrangement.

GEOSCIENCE

Pasteur Hall, Room 120 (507) 457-5260

<http://www.winona.edu/geology>

Toby Dogwiler (Chairperson and Director of Water Resources Center)

FACULTY

Stephen T. Allard, Associate Professor; B.S., M.S., University of New Hampshire; Ph.D., University of Wyoming; 2002 –

Jennifer L. B. Anderson, Assistant Professor; B.S., University of Minnesota; Sc.M., Ph.D., Brown University; 2005 –

Toby Dogwiler, Associate Professor; B.A., Wittenberg University; M.Sc., Mississippi State University; Ph.D., University of Missouri, Columbia; 2002 –

Nancy O. Jannik, Acting Associate Vice President for Research, Graduate Affairs and Assessment; B.S., College of William & Mary; M.S., Rutgers University; Ph.D., New Mexico Institute of Mining & Technology; 1986 –

James H. Meyers, Professor; B.A., Franklin & Marshall College; Ph.D., Indiana University; 1980 –

Catherine L. Summa, Professor; B.A., Wellesley College; Ph.D., Massachusetts Institute of Technology; 1996 –

WHY STUDY GEOSCIENCE?

One of the hallmarks of Winona State University students is their incredible curiosity about the world around them. The Geoscience Department can help satisfy your curiosity about your natural environment. This curiosity may be stimulated by travels to state and national parks, where you have been confronted by questions about the origin of landscapes and the underlying rocks. Your interest in planet Earth may have been heightened by accounts of natural disasters caused by floods, earthquakes, and volcanism, or by concerns for clean air and water and the trend of global warming. Perhaps the realization that energy shortages will become the norm rather than the exception stirs you to action in learning about how we can better manage Earth's finite resources. Maybe the spectacular news of extraterrestrial exploration causes you to think about the ways in which geology can help to answer questions about planetary evolution.

If you have such a curiosity about Earth, we invite you to enroll in one or more of the courses offered by the Department of Geoscience, where faculty strive to help you understand how the Earth works. Many lower-division geoscience courses fulfill University Studies Program requirements in a broad array of categories and provide a basis for you to make the observations needed to provide possible answers to your questions. By asking the right questions and seeking ways to answer them, you become a more informed citizen. Each year, many of you will decide to seek more depth in understanding Earth, and will become a major or minor in geoscience. As a major in one of the geoscience programs, you will prepare for one of the many geoscience careers that are available to graduates in the first decade of this new century. In fact, a recent Yahoo™ survey lists geoscience as one of the top areas of study for successful 21st century employment.

As a geoscience graduate, you might work to solve a broad range of environmental problems through private industries and consulting firms or in local, county, state and federal governmental agencies. Or you may become a part of the ongoing search for mineral and energy resources. Perhaps you will become a teacher at an elementary school, middle school, secondary school, or in a program of higher education. You might pursue work with a museum, a state or national park system; you might decide to practice environmental law; or you might become a journalist or a writer focusing on Earth-related themes. Some day you might start your own business in environmental consulting or energy exploration. The possibilities really are limited only by your imagination: Geoscience is such an interdisciplinary field that it connects in various and still unidentified ways with a wide range of disciplines.

Instead of seeking a career with the Bachelor of Science degree, you might decide to continue your education in a graduate program, where your study for the Master of Science or other advanced degree will deepen your understanding of the Earth and give you additional credentials for your professional career. Even if you don't pursue a career where geoscience is directly applicable, your geoscience major provides an ideal 21st century liberal arts education. Our curriculum provides you a broad preparation in the natural sciences; it helps you develop the skills of observation, hypothesis-building, testing of ideas, and critical thinking, which prepare you to succeed in many other professions including business and law.

DEPARTMENTAL EQUIPMENT AVAILABLE FOR STUDENT USE

The Geoscience Department boasts an impressive array of analytical and field equipment. Students in our program routinely use geotechnical equipment that is typically only found in graduate-level departments and in industry. This hands-on training and experience provides our students a competitive edge in the job market and graduate school.

Throughout the curriculum, courses emphasize both traditional and cutting-edge scientific techniques. During weekly laboratories, students might gauge a stream using a Sontek™ FlowTracker Acoustic Doppler Velocimeter and analyze water samples using a Hach™ SensION156 Multi-parameter meter and DR2400 Spectrophotometer. On another day, students might process a rock sample in our state-of-the-art Thin Section Preparation Lab and then investigate the crystallization history preserved in the rock using a Nikon™ petrographic microscope, or they might identify chemical zonation in minerals using our Relion Luminoscope to study cathodoluminescence of crystals. In another course, students take geophysical equipment such as our 12-channel Geode™ seismic system or our AGI SuperSting Earth Resistivity Imager out into the field. Students use this equipment to characterize sub-surface rock layers and analyze environmental hazards associated with caves, sinkholes, and other groundwater-related features.

The department is also actively integrating Geographical Information Systems (GIS) technology into the curriculum. Students learn to solve real world problems by combining survey data collected in the field using our suite of Trimble™ GeoExplorer XT GPS mapping units and Nikon™ reflectorless pulse-laser Total Stations with analysis in our GIS computing facility. Students use GPS/GIS to solve problems ranging from tectonic reconstructions of the North American plate to water resource management in local streams. In an employment market in which GIS experience has almost become a universal job requirement, WSU Geoscience students don't just know GIS—they know how to use it.

When it is too cold to be in an actual stream, students investigate river processes in the Sediment Transport and River Studies (STaRS) Flume Laboratory. The STaRS Lab was funded through a competitive grant from the National Science Foundation. The flumes, one of which is six feet wide and over 16 feet long, allow large-scale modeling of rivers. Students, from the introductory through senior-level, complete hands-on assignments and directed research that include projects such as modeling the effects of the lock and dam system on the Upper Mississippi River. Additionally, the STaRS Lab includes advanced equipment for processing and studying sediments and soils, including a Spectrex™ Laser Particle Counter and a full range of drying ovens, sieve shakers, analytical balances, and combustion furnaces.

CAREER OPPORTUNITIES

Employment opportunities in the geosciences described by the Geological Society of America for the new millennium are bright. The Federal Bureau of Labor reports that demand for earth science professionals will increase over the next decade, particularly in the Midwest. Federal and state regulatory legislation regarding waste disposal and its relationship to clean water and clean air has greatly increased employment opportunities for geoscientists. Many new positions are created each year with consulting firms, industries, and state and local governmental agencies. These positions are being filled by persons with bachelor's and master's degrees, but the majority of employers prefer graduates with the Master of Science degree. Hiring in the petroleum industry has increased. Graduates with master's degrees have the best opportunities.

The aging of the faculties of colleges and universities is beginning to result in employment opportunities for geoscientists in higher education. Now is an excellent time to begin preparation for such a career, and interested students should plan to earn a Ph.D. degree. According to national teacher-employment surveys, there are employment opportunities for earth science teachers in most regions of the United States. Earth science teachers are employed in middle and secondary schools where Earth Science is usually a required component of the science curriculum. Up-to-date information on careers in the geosciences, including Earth Science Teaching, can be found through the American Geological Institute (AGI) at <http://www.agiweb.org/careers.html>.

GRADUATE SCHOOL PREPARATION

The Department of Geoscience has an excellent record of placement of graduates into master's and doctoral programs, and most graduates have received financial support for graduate study. Students who are considering graduate studies must supplement their curriculum with a minimum of a full year of chemistry, physics, and calculus. They should also take a summer field course in addition to their required degree program.

ADVISING

All geoscience and earth science majors must have an advisor from the Department of Geoscience. Students must keep in mind when planning schedules that many upper-division courses are offered on an every-other-year basis. Therefore, students should meet with their advisor regularly to do long-range program planning and to ensure timely graduation. Geoscience minors are encouraged to meet with their academic advisor to review their progress in the program.

DEGREE OPTIONS

Geoscience Major

- **B.S. Major - Geology Option:** Prepares students for graduate study or employment in classic geologic sub-disciplines, including mineralogy and petrology, structural geology, stratigraphy, sedimentology, petroleum exploration, and economic geology.
- **B.S. Major - Environmental Science Option:** Prepares students for graduate study or employment in hydrogeology and environmental careers that focus on ground-water quality, ground-water quantity, contaminant problems, and related soil investigations.
- **B.A. Major - Geoscience:** Prepares students for careers or graduate study in fields that explicitly integrate geoscience with a second discipline. Students choose their second disciplinary field and work closely with faculty in both disciplines to prepare for post-graduate options.

Earth Science Teaching Major

The B. S. Major Earth Science (Teaching) is designed for students who desire a middle level to secondary school teaching career (grades 5-12); the program conforms to Minnesota Board of Teaching licensure standards. Students completing this program are eligible to apply for a Minnesota license in General Science for grades 5-8 or a license in earth and space science for grades 9-12.

Geoscience Minor

The B.S. Minor: Geoscience is a flexible program that enables the student to couple his or her interest in geoscience with a second discipline.

PASS/NO CREDIT (P/NC) COURSES

All courses in the Department of Geoscience must be taken on a grade-only basis.

DEPARTMENTAL REQUIREMENTS

Geoscience majors and minors must achieve a grade of "C" or better in all geoscience courses numbered 240 and higher. For a checklist of the University's graduation requirements, see page 23.

GEOSCIENCE HONORS PROGRAM

The Department of Geoscience offers students the option to engage in independent research culminating in an honors thesis. Geoscience majors maintaining a minimum 3.0 GPA are eligible to participate in the program. Refer to the department website for complete eligibility requirements and expectations.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Geoscience offers the following flag courses in the University Studies Program:

FLAG

Oral I

- GEOS 320 Optical Mineralogy and Petrology (4)
 GEOS 370 GIS and Imaging Techniques (3)

Math/Critical Analysis O

- GEOS 415 Advanced Geomorphology (4)
 GEOS 420 Applied Hydrogeology (4)

Writing P

- GEOS 280 Field and Analytical Methods I (2)
 GEOS 340 Sedimentology and Stratigraphy (4)

Flag courses that can be used to satisfy geoscience major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - GEOSCIENCE: GEOLOGY OPTION (GEGE)

67-71 S.H. (No Minor Required)

CORE REQUIREMENTS - GEOS (23 S.H.)

- 120 Dynamic Earth (4)
 130 Earth and Life through Time (4)
 220 Minerals and Rocks (4)
 P 280 Field and Analytical Methods I (2)
 330 Structural Geology (4)
 P 340 Sedimentology and Stratigraphy (4)
 475 Geoscience Seminar (1)

Note: Majors in all options are urged to take a geology summer field course prior to graduation. This can satisfy the requirement for an upper-division elective.

REQUIRED COURSES (35-36 S.H.)

Geoscience - GEOS (12 S.H.)

- 240 Watershed Science (4)
 I 320 Optical Mineralogy and Petrology (4)
 O 415 Advanced Geomorphology (4) OR
 O 420 Applied Hydrogeology (4)

Chemistry - CHEM (4 S.H.)

- * 212 Principles of Chemistry I (4)

Physics/Chemistry (8 S.H.)

Choose one of the following two courses (4 S.H.):

- * PHYS 201 General Physics I (4) OR
 * PHYS 221 University Physics I (4)

Plus one of the following (4 S.H.)

- * PHYS 202 General Physics II (4) OR
 * PHYS 222 University Physics II (4) OR
 * CHEM 213 Principles of Chemistry II (4)

Mathematics - MATH (6-8 S.H.)

- 150 Modeling Using Precalculus and Statistics (3) AND
 MATH 155 Calculus Based Modeling (3) OR
 120 Precalculus (4) AND MATH 160 Calculus I (4) OR
 160 Calculus I (4) AND MATH 165 Calculus II (4) OR
 150 Modeling Using Precalculus (3) AND MATH 160
 Calculus I (4) OR
 155 Calculus Based Modeling (3) AND
 MATH 165 Calculus II (4)

Computer Skills (2-3 S.H.)

Choose one of the following two courses:

- ENGR 182 Engineering Graphics and Design (2) OR
 CS 130 Visual Basic (3)

English – ENG (3 S.H.)**Choose one of the following two courses:**

- P 439 Technical Writing (3) OR
 449 Scientific Writing (3)

GEOSCIENCE ELECTIVES (9-12 S.H.)

Select from the “Electives Pool” list (page 122), except for geoscience courses listed as requirements for the major.

B.S. MAJOR - GEOSCIENCE: ENVIRONMENTAL SCIENCE OPTION (GEES)

122-126 S.H. (No Minor Required; this total includes University Studies requirements)

Note: Alliance with environmental science options of other departments is given under “Environmental Science” on page 109.

UNIVERSITY STUDIES COURSES (30 S.H.)**BASIC SKILLS (9 S.H.)**

- ENG 111 College Reading and Writing (4)
 CMST 191 Introduction to Public Speaking (3)
 MATH (0 S.H.; included below with MATH 150, 155)
 Courses selected from approved list of physical education activities courses (2)

ARTS AND SCIENCES CORE (15 S.H.)*Humanities (6 S.H.)*

Courses selected from approved list of humanities courses

Natural Science (0 S.H.)

(7 S.H. included below with CHEM 212, 213; PHYS 115; BIOL 241, 242)

Social Science (6 S.H.)

Courses selected from approved list of social science courses

Fine and Performing Arts (3 S.H.)

Courses selected from approved list of fine and performing arts courses

UNITY AND DIVERSITY (6 S.H.)*Critical Analysis (0 S.H.)*

(3 S.H. included below with GEOS 240)

Science and Social Policy (0 S.H.)

(3 S.H. included below with GEOS 325)

Multicultural or Global Perspectives (3 S.H.)

Courses selected from approved list of Multicultural or Global Perspectives courses (3 S.H. may be included if GEOS 450 or GEOS 425 is taken as an elective for the major.)

Democratic Institutions or Contemporary Citizenship (3 S.H.)

Courses selected from approved list of Democratic Institutions or Contemporary Citizenship courses

Note: Many courses required in the program outlined below can be used to satisfy certain University Studies requirements.

GEOSCIENCE CORE COURSES - GEOS (23 S.H.)

- 120 Dynamic Earth (4)
 130 Earth and Life through Time (4)
 220 Minerals and Rocks (4)
 P 280 Field and Analytical Methods I (2)
 330 Structural Geology (4)
 P 340 Sedimentology and Stratigraphy (4)
 475 Geoscience Seminar (1)

Note: Majors in all options are urged to take a geology summer field course prior to graduation. This can substitute for an upper-division elective.

REQUIREMENTS – GEOS (20-21 S.H.)

- 240 Watershed Science (4)
 325 Environmental Geoscience (3)
 I 370 GIS and Imaging Techniques (3)
 400 Directed Research in Geoscience (2-3)
 O 415 Advanced Geomorphology (4)
 O 420 Applied Hydrogeology (4)

OTHER REQUIRED COURSES (43-46 S.H.)**Biology – BIOL (12 S.H.)**

- * 241 Basics of Life (4)
 * 242 Organismal Diversity (4)
 312, 313 General Ecology, Ecology Lab (4)

Chemistry – CHEM (12 S.H.)

- * 212, 213, Principles of Chemistry I, II (8)
 320 Environmental Chemistry (4)

Mathematics – MATH (6-8 S.H.)

- 150 Modeling Using Precalculus and Statistics (3) AND
 MATH 155 Calculus Based Modeling (3) OR

- 120 Precalculus (4) AND MATH 160 Calculus I (4)

Physics – PHYS (4 S.H.)

- * 115 Conceptual Physics (4) OR
 * 201 General Physics I (4) OR *221 University Physics I (4)

The following two courses (6 S.H.)

- ECON 315 Environmental and Natural Resource Economics (3)
 * POLS 340 Environmental Policy (3)

One of the following courses (3-4 S.H.)**Biology – BIOL**

- I 315 Environmental Biology (3)
 335 Plant Ecology (4)
 360 Entomology (4)
 †P415 Ecology of Large Rivers (4) (See below)
 420 Limnology (4) (See below)

Chemistry – CHEM

- 425 Analytical Chemistry I (4)
 436 Topics in Environmental Chemistry (3)

†**Note:** If BIOL 415 or BIOL 420 is chosen as the elective from this group, that course must not be selected from the list of courses under “Electives” below.

ELECTIVES (6-8 S.H.)

Note: The courses selected as “Electives” must not duplicate the courses selected under “Other Required Courses” above. At least two courses must be used to fulfill the elective requirement.

Courses totaling 6-8 S.H. to be chosen from:

Geoscience – GEOS

- I 320 Optical Mineralogy and Petrology (4)
 385 Geology of North America (3)
 405 Current Topics in Geoscience (1-3)
 425 Global Climate Change (3)
 450 Travel Study in Costa Rica (3)
 470 Geologic Research Strategies (2)

Biology – BIOL

- P 415 Ecology of Large Rivers (4) OR
 420 Limnology (4)

Statistics – STAT

- 210 Statistics (3)

B.A. MAJOR - GEOSCIENCE

This program prepares students for graduate study or employment in geologic disciplines or in a variety of other disciplines, depending on the student’s chosen minor field. The goal is to prepare students for success in an increasingly interdisciplinary world. Students should speak with a Geoscience department advisor about their career goals so that this program can be tailored to best suit their goals.

Students choose a minor (or double major) field that they must relate to their work in geoscience by completing an internship or research project. Students must obtain approval from the Geoscience department before engaging in this work. The research project topic must integrate geoscience with the second discipline.

The flexibility of this program enables students to pursue careers in diverse areas such as geochemistry and geophysics or environmental law and environmental justice, scientific illustration, scientific writing, etc. Professionals in many disciplines, including science, law, medicine, and politics, hold undergraduate B.A. degrees in Geoscience.

B.A. MAJOR - GEOSCIENCE OPTION (GSCE)

40-42 S.H. (Approved minor or second major required)

CORE REQUIREMENTS - GEOS (19 S.H.)

- 120 Dynamic Earth (4)
 130 Earth and Life through Time (4)
 220 Minerals and Rocks (4)
 240 Watershed Science (4)
 280 Field and Analytical Methods I (2)
 475 Geoscience Seminar (1)

Note: Majors in all options are urged to complete a geology summer field course prior to graduation. This can substitute for an upper-division elective.

REQUIRED COURSES - GEOS (10-11 S.H.)

Choose one from each of the three pairs of courses listed below (See ** below.):

- 330 Structural Geology (4) OR GEOS 340 Sedimentology & Stratigraphy (4)
 415 Advanced Geomorphology (4) OR GEOS 420 Applied Hydrogeology (4)

399 Internship (2-3)
OR GEOS 400 Directed Research (2-3)

Note: Internship or research topic must integrate Geoscience and minor field (see advisor for details).

**Students may choose one of the courses in each of the above pairs of courses to fulfill option requirements, and may also choose the other course in any or all of the above pairs of courses to fulfill elective requirements below.

GEOSCIENCE ELECTIVES (11-13 S.H.)

Select from the "Electives Pool" list (Page 122), except for geoscience courses listed as requirements for the major. Elective choices must include at least one laboratory course (4 S.H.) numbered 300 or above. Choices may include one additional course from Geoscience offerings at the 100-level (but may not include GEOS 120 or GEOS 130). (See also ** above.)

B.S. MAJOR - EARTH SCIENCE (Teaching) (ESCT)

124-126 S.H. (128 S.H. required for graduation)

The program below meets Minnesota Board of Teaching (BOT) 5-12 Earth and Space Science licensure requirements in place at the time the catalog went to press. Students should be aware that the program described below may change significantly in the near future, as the BOT considers changes to the Science Licensure programs; therefore, students should work closely with their academic advisor to ensure that they will be able to graduate with a BOT-approved degree. Completion of the program outlined below will enable the student to apply for a license to teach grades 5-12 science with an earth science specialty.

In addition, work is underway to fully align the major program requirements with the requirements of the University Studies Program. Some courses included in the major program below may be approved for University Studies credit in the future. The Geoscience Department is working in cooperation with other secondary licensure programs and the Education Department to ensure that teacher-licensure programs meet both BOT and University Studies requirements. See your academic advisor for more information.

Note: Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area listed below. Refer to these requirements in the Education Department section of this catalog (page 90), or refer to the *WSU Teacher Education Student Handbook*. Students must gain admission to the teacher education program before they enroll in Professional Education Sequence courses. See your academic advisor or the Department of Education Admissions Coordinator for more information.

UNIVERSITY STUDIES (USP) (19 S.H.)

BASIC SKILLS (7 S.H.)

ENG 111 College Reading and Writing (4)
CMST 191 Introduction to Public Speaking (3)
Physical Education (Filled by HERS 204 below) (0)
Math (0) filled by major requirements below

ARTS AND SCIENCES CORE (6 S.H.)

Humanities (3) (3 S.H. filled by PHIL 240)
Social Sciences (0) (3 S.H. filled by SPED 400;
3 S.H. filled by EDUC 305 below)
Natural Science (0) (filled by major requirements)
Fine and Performing Arts (3)

UNITY AND DIVERSITY (6 S.H.)

Critical Analysis (3 S.H.)
Science and Social Policy (0) (3 S.H. filled by GEOS 325 below)
Multicultural or Global Perspectives (0) (3 S.H. filled by EDUC 308)
Democratic Institutions or Contemporary Citizenship (3 S.H.)

FLAG REQUIREMENTS (0 S.H.)

Writing Flag (0) (6 S.H. filled by EDUC 449 and
EDUC 459 below)
Oral Flag (0) (3 S.H. filled by EDUC 465 below)
Mathematics/Statistics or Critical Analysis Flag (0)
(3 S.H. filled by EDUC 312)

EARTH SCIENCE REQUIREMENTS (80-82 S.H.)

Geoscience Courses - GEOS (34-36 S.H.)

105 Astronomy (4)
110 Oceanography (4)
115 Meteorology (4)
120 Dynamic Earth (4)
130 Earth and Life through Time (4)
220 Minerals and Rocks (4)
P 280 Field and Analytical Methods I (2)

325 Environmental Geoscience (3)
P 340 Sedimentology and Stratigraphy (4)
OR GEOS 415 Advanced Geomorphology (4) (O)
400 Directed Research (2-3)

OTHER REQUIRED COURSES (46-48 S.H.)

Biology - BIOL (8 S.H.)

* 241 Basics of Life (4)
* 242 Organismal Diversity (4)

Chemistry - CHEM (8 S.H.)

*212, *213 Principles of Chemistry I, II (8)

Physics - PHYS (12 S.H.)

*201, *202 General Physics I, II (8)
311 Science Teaching Methods (4)

Mathematics - MATH (6-8 S.H.)

150 Modeling Using Precalculus and Statistics (3), MATH
155 Calculus Based Modeling (3) OR
Precalculus (4) AND MATH 160 Calculus I (4)

Philosophy - PHIL (3 S.H.)

* 240 Philosophy of Science (3)
(counts as USP Humanities)

Health, Exercise Science and Rehabilitative Sciences - HERS (3 S.H.)

204 Personal and Community Health (3) (counts as USP
Physical Development and Wellness)

Special Education - SPED (3 S.H.)

* 400 Education of Exceptional Children/Youth (3) (counts as
USP Social Sciences)

Women's and Gender Studies - WAGS (3 S.H.)

220 Power, Privilege, and Gender (3) (counts as USP
Multicultural Perspectives)

PROFESSIONAL EDUCATION SEQUENCE (32 S.H.)

Notes:

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

* EDUC 305 Human Development and Learning (4)
EDUC 308 Human Relations and Student Diversity (3)
O EDUC 312 Instructional Planning and Assessment: Secondary (3)
EDUC 429 Secondary Reading and Teaching Strategies (4)
P EDUC 449 Middle Level Philosophy, Organization and
Planning (3)
P EDUC 459 The Professional Educator (3)
I EDST 465 Student Teaching (12)

Note: EDUC 305 and 312 must be taken together in the same semester; they will not be offered during the summer term.

OTHER REQUIREMENTS

In addition to the above course requirements, all students must demonstrate that they have:

- Judged a local, regional, or state science fair, or mentored K-12 students on their science fair projects
- Hosted a geoscience visit by a K-4 class
- Hosted a geoscience visit by a 5-12 class
- Worked as a departmental teaching assistant or peer tutor in geoscience.

B.S. MINOR - GEOSCIENCE (GEOS)

24-25 S.H.

REQUIRED COURSES - GEOS (9-10 S.H.)

120 Dynamic Earth with Laboratory (4)
OR GEOS 121 Dynamic Earth (3)
130 Earth and Life through Time (4)
P 280 Field and Analytical Methods I (2)

GEOSCIENCE ELECTIVES (15 S.H.)

Choose electives from the Geoscience "Electives" pool. Electives must include at least two laboratory courses numbered 300 or above. Electives may include one course from the Geoscience Introductory Pool (courses numbered 100 - 199) other than those listed as required above.

ELECTIVES POOL - GEOS (for all geoscience majors):

220	Minerals and Rocks (4)
240	Watershed Science (4)
320	Optical Mineralogy and Petrology (4)
325	Environmental Geoscience (3)
P 340	Sedimentology and Stratigraphy (4)
I 370	GIS and Imaging Techniques (3)
385	Geology of North America (3)
399	Geoscience Internship (1-3)
400	Directed Research, Geoscience (1-3)
405	Current Topics in Geoscience (1-3)
O 415	Advanced Geomorphology (4)
O 420	Applied Hydrogeology (4)
425	Global Climate Change (3)
450	Travel Study in Costa Rica (3)
470	Geological Research Strategies (2)

GEOSCIENCE INTRODUCTORY POOL - GEOS

100	Minnesota Rocks and Waters (3)
102	Resources of the Earth (3)
103	Natural Disasters (3)
104	Catastrophes and Extinctions (3)
105	Astronomy with Laboratory (4)
106	Astronomy (3)
108	Geology of the Mississippi River (3)
110	Oceanography with Laboratory (4)
111	Oceanography (3)
115	Meteorology with Laboratory (4)
116	Meteorology
120	Dynamic Earth with Laboratory (4)
121	Dynamic Earth (3)
130	Earth and Life through Time (4)

COURSE DESCRIPTIONS

GEOSCIENCE (GEOS)

100 - Minnesota's Rocks and Waters (3 S.H.)

Introduction to Minnesota's geological history focusing on such topics as Minnesota's rock record and history, fossils, mining, soils, lakes, rivers, and ground water. Lecture; no laboratory. Offered with sufficient demand.

102 - Resources of the Earth (3 S.H.)

An investigative exploration of significant global resources with emphasis on fossil fuels, non-fossil fuels, water, and other energy resources. Geologic processes governing each are explored. Prediction, impacts, economic, and political scenarios are examined. Offered with sufficient demand.

103 - Natural Disasters (3 S.H.)

An investigative exploration of significant geohazards impacting the Earth with emphasis on volcanoes, earthquakes, landslides and other hill slope failures, hurricanes, and tornadoes, pollution, and floods. Geologic processes governing each type of disaster are explored. Prediction, impacts and mitigation potential for each hazard are examined. Lecture; no laboratory. Offered yearly.

104 - Catastrophes and Extinctions (3 S.H.)

Over 99% of the animal species that once inhabited the Earth are now extinct. Remarkably, most of these extinctions have been associated through time with significant geologic events that are considered by many to be catastrophic. In this course, students will explore the major extinctions that have taken place through geologic history. These include the extinction of numerous marine invertebrate species, the extinction of the dinosaurs 65 million years ago, the extinction of large mammals during the last ice age, and many others. Weekend (overnight) field trip required. Lecture only. Prerequisites: None. Offered with sufficient demand.

105 - Astronomy with Laboratory (4 S.H.)

History of astronomy. Study of the planets, their moons, comets, asteroids, meteors, and other planetary bodies. Origin of the universe, solar system, sun, and other stars. Lecture, laboratory, and observation required. Offered yearly, usually in the fall semester. **Note:** Students may enroll in either GEOS 105 or GEOS 106, but they cannot earn credit for both courses.

106 - Astronomy (3 S.H.)

History of astronomy. Study of the planets, their moons, comets, asteroids, meteors, and other planetary bodies. Origin of the universe, solar system, sun, and other stars. Lecture only. Offered yearly, usually fall semester. **Note:** Students may enroll in either GEOS 105 or GEOS 106, but they cannot earn credit for both courses.

108 - Geology of the Mississippi River (3 S.H.)

Investigation of the geologic history, river processes, and resource management of large rivers, particularly focusing on the Mississippi River. Topics include an exploration of the relationship between the Mississippi River and its watershed, soils, groundwater, bedrock geology, and humans. Concepts emphasized will include the hydrologic cycle, plate tectonics, river morphology, river dynamics, resource management, and public policy issues. Lecture; no laboratory. Prerequisites: None. Offered alternate years.

110 - Oceanography with Laboratory (4 S.H.)

Introduction to oceans including the ocean floor, marine sediments, composition of sea water, ocean currents, waves and tides, marine biology, and oceanic resources. Lecture and laboratory required. Offered alternate years, usually spring semester. **Note:** Students may enroll in either GEOS 110 or GEOS 111, but they cannot earn credit for both courses.

111 - Oceanography (3 S.H.)

Introduction to oceans including the ocean floor, marine sediments, composition of sea water, ocean currents, waves and tides, marine biology, and oceanic resources. Lecture only. Offered alternate years, usually spring semester. **Note:** Students may enroll in either GEOS 110 or GEOS 111, but they cannot earn credit for both courses.

115 - Meteorology with Laboratory (4 S.H.)

Study of Earth's dynamic weather system including atmospheric structure, composition, and processes; origin and development of storms and related phenomena. Lecture and laboratory required. Offered alternate years, usually spring semester. **Note:** Students may enroll in either GEOS 115 or GEOS 116, but they cannot earn credit for both courses.

116 - Meteorology (3 S.H.)

Study of Earth's dynamic weather system including atmospheric structure, composition, and processes; origin and development of storms and related phenomena. Lecture only. Offered alternate years, usually spring semester. **Note:** Students may enroll in either GEOS 115 or GEOS 116, but they cannot earn credit for both courses.

120 - Dynamic Earth with Laboratory (4 S.H.)

An introduction to geologic principles and the processes shaping planet Earth. Composition and distribution of Earth materials; examination of internal processes and their relationship to the distribution of continents over time; surficial processes and environmental problems. Lecture and laboratory. Offered each semester. **Note:** Students may enroll in either GEOS 120 or GEOS 121, but they cannot earn credit for both courses.

121 - Dynamic Earth (3 S.H.)

An introduction to geologic principles and the processes shaping planet Earth. Composition and distribution of earth materials; examination of internal processes and their relationship to the distribution of continents over time; surficial processes and environmental problems. Lecture only. **Note:** Students may enroll in either GEOS 120 or GEOS 121, but they cannot earn credit for both courses.

130 - Earth and Life through Time (4 S.H.)

Traces the physical, chemical, and biological evolution of the Earth from the origin of the solar system to the present including origin and evolution of Earth's crust, interior, hydrosphere, and atmosphere; plate tectonics and mountain building; absolute age dating; paleomagnetism. Focuses on the assembly and evolution of North America as a model for global processes. Lecture and laboratory. Weekend field trip required. Prerequisite: GEOS 120 or equivalent. Offered spring semester.

220 - Minerals and Rocks (4 S.H.)

Introduction to minerals as naturally occurring inorganic chemical compounds. Physical and chemical properties of minerals, classification and description of minerals, with emphasis on rock-forming minerals. Classification, description, and interpretation of major rock groups. Lecture and laboratory combined in studio format. Prerequisite: GEOS 120 or instructor's permission. Field trips required. Offered fall semester.

240 - Watershed Science (4 S.H.)

Examination of the hydrologic cycle and surface-water and ground-water relationships. Study of interrelationship of water and Earth materials, including ground-water occurrence, movement and determination of aquifer characteristics. Lecture and laboratory. Prerequisite: GEOS 130. Field trips required. Offered yearly, usually fall semester.

280 - Field and Analytical Methods I (2 S.H.)

Basic geologic field techniques including sampling methods, rock identification, field descriptions, and use of Brunton compass. Measurement and description of stratigraphic sections. Prerequisite: ENG 111 and instructor's permission. Corequisite: GEOS 220. Field trips required. Offered fall semester.

320 - Optical Mineralogy and Petrology (4 S.H.)

Theory of optical mineralogy. Optical properties of minerals determined by petrographic microscope. Introduction to major sedimentary, igneous, and

metamorphic rocks; mineral equilibria and stability, mineralogic phase rule and metamorphic facies. Rock identification by megascopic and petrographic techniques. Lecture and laboratory combined in studio format. Prerequisite: GEOS 220. Field trips required. Offered alternate years in the spring semester.

325 - Environmental Geoscience (3 S.H.)

Study of the environmental implications of human interactions with natural geological systems. An emphasis is placed on understanding environmental science concepts and how scientific findings ultimately shape public policy and political decisions. Topics typically include climate change, water resources, alternative energy resources, soils and weathering, and coastal processes. Course is taught from an Earth systems perspective. Discussion-oriented lecture format. Lecture only. Prerequisite: Any University Studies Natural Science laboratory course or instructor's permission. Offered alternate years, usually spring semester.

330 - Structural Geology (4 S.H.)

Study of faulting, folding, mechanics of rock deformation and structural techniques. Principles of plate tectonics and mountain building. Lecture and laboratory combined in studio format. Prerequisite: GEOS 220. Field trips required. Offered spring semester.

340 - Sedimentology and Stratigraphy (4 S.H.)

Physical, chemical, and biological processes that affect sedimentation and depositional systems. Study of stratigraphic nomenclature and correlation, facies models and depositional sequences, eustatic changes of sea level, and plate tectonics. Lecture, laboratory and required field trips. Prerequisites: GEOS 220 and ENG 111. Offered fall semester.

370 - GIS and Imaging Techniques (3 S.H.)

Techniques of using aerial photographs, remote sensing, and GIS for geological applications. Prerequisites: CMST 191, GEOS 130, and instructor's permission. Offered alternate years in the spring semester.

385 - Geology of North America (3 S.H.)

Study of the physiographic provinces of the North American continent with emphasis on geomorphology, structural history, stratigraphy and mineral deposits of each province. Lecture and discussion. Prerequisite: GEOS 220. Offered with sufficient demand.

399 - Internship (1-3 S.H.)

Supervised governmental agency, business, industrial or research institution experience designed by Geoscience faculty advisor, work supervisor, and student. Open only to Geoscience students with junior or senior standing, math/science GPA 2.5 or better, and approval by the Geoscience Department. Offered each semester.

400 - Directed Research-Geoscience (1-3 S.H.)

Independent study of selected geologic field and/or laboratory problem with subsequent preparation of written report and oral seminar. May be repeated up to 6 credits. Prerequisite: Department chairperson's permission. Offered each semester.

405 - Current Topics in Geoscience (1-3 S.H.)

Analysis of current topics and issues relevant to Geosciences. Subject matter and prerequisites will be announced in advance by the department. May be repeated as topics change. Offered with sufficient demand.

415 - Advanced Geomorphology (4 S.H.)

Study of the nature and evolution of land forms and materials at or near Earth's surface. Analysis of land forms using topographic maps and aerial photographs. Soil-forming processes and soil classification. Lecture and laboratory. Prerequisite: GEOS 130. Offered alternate years in the fall semester. Field trips required.

420 - Applied Hydrogeology (4 S.H.)

Application of hydrologic principles to ground-water flow problems, aqueous geochemistry, and contaminant studies. Techniques of water-well development, aquifer tests, determination of ground-water chemistry. Use of computer models and other analytical tools. Lecture and laboratory. Prerequisites: GEOS 240 and MATH 155 or MATH 160. Field trips required. Offered alternate years in the spring semester.

425 - Global Climate Change (3 S.H.)

Exploration of the Earth's most recent glacial/interglacial cycles: geological and faunal evidence, the sequence of historical events, potential causative factors, environmental responses and rates of change, and pertinence to contemporary global change. An emphasis will be placed on understanding the mechanisms of climate change in relation to geological processes.

Prerequisite: GEOS 325 or the instructor's permission. Offered in alternate years, usually spring semester.

450 - Travel Study in Costa Rica (3 S.H.)

Focuses on student-based field research to assist the municipalities of Playa Dominical and Playa Uvita in developing their natural resources, tourism products, and associated services. Students will inventory natural resources, gather tourism demand and supply data, and participate in constructing a database to help local officials make better tourism-related decisions. Prior to the research study, students will be exposed to basic tourism and natural resources development concepts that have applications in Playa Dominical and Playa Uvita. Post-study work will focus on report development and the assessment of other tourism products and services in Costa Rica.

Prerequisites: Instructor's permission and concurrent enrollment in MKTG 450 and RTTR 450. Offered most May terms subject to student demand.

470 - Geological Research Strategies (2 S.H.)

Instruction in designing, planning, and conducting geological research. Students will gain experience in background research using scientific literature, writing a research proposal, planning a research budget, project management, data quality control and assurance procedures, conducting field and laboratory research, and setting realistic goals and deadlines for project completion. Course activities and lectures will be adapted to specific student projects. Includes some lecturing; however, the course delivery style will emphasize the value and importance of peer-to-peer review, discussion, and collaboration in completing scientific research. Usually taken before or concurrently with GEOS 400. Prerequisite: Instructor's permission. Offered each semester, subject to sufficient student interest.

475 - Geoscience Seminar (1 S.H.)

Critical reading, discussion, and oral presentation of current topics and controversies in geosciences. Focus on professional journals and other scientific media. Prerequisite: Senior standing in department or instructor's permission. Offered spring semester.

SCIENCE EDUCATION (SCIE)

201 - Investigative Science I: Earth—The Water Planet (4 S.H.)

A field-based integrated experience designed specifically for elementary education majors. Inquiry-based exploration of biological, chemical, geological, and physical characteristics of water in the community. Focus on development of pre-service student pedagogical content knowledge and connections to state and national science education standards as relates to teaching science in elementary schools. Field trips required. Enrollment limited to elementary education majors. Lecture and laboratory combined. Prerequisites: None. Offered yearly.

203 - Investigative Science III: Scientific Investigation of your Environment (4 S.H.)

A field-based, integrated experience designed specifically for elementary education majors. Inquiry-based exploration of biological, chemical, geological, and physical characteristics of environmental problems facing the local community. Focus on development of pre-service student pedagogical content knowledge and connections to state and national science education standards as relates to teaching science in elementary schools. Field trips required. Enrollment limited to elementary education majors. Lecture and laboratory combined. Prerequisites: SCIE 201, EDUC 335, and admission to teacher education program. Offered yearly.

GLOBAL STUDIES

Minné Hall, Room 120 (507-457-5500; fax 507-457-2621)

www.winona.edu/globalstudies

Yogesh Grover (Director)

FACULTY

Michael Bowler, Assistant Professor; B.A. University of Notre Dame; M.A., M.Sc., Ph.D., Syracuse University; 2004 –

Linda D'Amico, Associate Professor; B.S., M.A., Ph.D., Indiana University- Bloomington; 2000 –

Yogesh Grover, Professor; B.A., M.A., University of Delhi (India); Ph.D., University of Missouri-Columbia; 1988 –

Matthew Strecher, Assistant Professor; B.A., M.A., University of Texas; Ph.D., University of Washington; 2007 –

Weidong Zhang, Assistant Professor; B.A., M.A., Nanjing University (China); M.A., Ph.D., University of Iowa; 2007 –

GLOBAL STUDIES: DEFINITION AND RATIONALE

The Global Studies program takes a multidisciplinary approach to understanding the growing interconnectedness and interdependence among people and countries of the world. Global Studies explores the causes and consequences of this multi-faceted phenomenon and examines the various responses to it. Global Studies examines change at the global and local level. In this program, humanities, social, and natural science courses provide a foundation for understanding global change, the varied human reactions to it, and the possibility that this change can have a positive impact on humanity as a whole. Thus, Global Studies encompasses a field of study that cannot be adequately captured by one discipline or field of knowledge. Students majoring or minoring in Global Studies gain a sound understanding of the forces shaping our world so that they are prepared to participate effectively in the world they encounter after graduation, whether they decide to work in the United States or abroad.

WSU offers both a B.A. Major and a B.A. Minor in Global Studies. Because Global Studies contains many courses that are drawn from different disciplines, students will find that it is a major can be taken independently or combined with another major or minor. Several University Studies Program (general education) courses also fulfill the requirements of this major; thus students may complement Global Studies with another major or minor. Alternatively, students with a strong preference for other majors will find it useful to have Global Studies as a minor that can provide a global context for the area of knowledge they have acquired. For a list of University Studies courses, see page 19, or visit www.winona.edu/registrar/university_studies_requirements.htm for the most up-to-date list.

PROGRAM REQUIREMENTS

Students intending to major in Global Studies must complete all the university graduation requirements (page 23). Courses fulfilling the major requirements must be taken for credit only. At least 21 of the 58 major semester hours must be met with 300-400 level courses.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in their major, minor, options, concentrations and licensures on a grade-only basis. Students testing out of language courses may use a passing grade to satisfy the language requirements of the major. The P/NC option is available to non-majors and non-minors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Global Studies program offers the following flag course in the University Studies Program:

FLAG

Oral I	GS 400	Global Studies Seminar (3)
Writing P	GS 360	Contemporary Asian Issues (3)
	GS 355	Asian International Relations (3)

B.A. MAJOR - GLOBAL STUDIES

58 S.H. (No Minor Required)

This major has two parts:

- Part I (Global Perspectives) provides students a general framework that organizes the different aspects of globalization.
- Part II (Regional Perspectives) offers students an opportunity to gain in-depth knowledge about one of the following regions of the world: Asia, Europe, Latin America, or North America.

Students can examine the impact of global developments on the region they choose to study, and conversely, the impact of regions in influencing global forces. The emphasis upon global-regional interaction is the distinguishing feature of this program.

PART I: GLOBAL PERSPECTIVES (18 S.H.)

REQUIRED COURSES (6 S.H.)

GS 200	Introduction to Global Studies (3)
P GS 400	Global Studies Seminar (3)

MAJOR ELECTIVES (12 S.H.)

Electives (for majors and minors) are organized in the following four categories:

- **Global Environment:** Courses in this category consider the wholeness of the physical environment of the globe, the potential of its resources to meet human needs, the effects of human activity on the global environment, and the ways in which its resources can be responsibly managed.
- **Global Governance:** Courses in this category examine whether current international organizations can adequately cope with contemporary problems caused by globalization. These courses also examine efforts by

various groups and countries to develop rules, norms, and institutions that can respond consistent with universal standards of human dignity and responsibility.

- **Global Society and Culture:** Courses in this category explore the emergence of common norms, values, and behavior around the world as a result of globalization and the spread of technology. They also examine expression and culture in different parts of the world and the dynamic of conflict and cooperation between local and global cultures.
- **Global Economy:** Courses in this category deal with the emergence of the global market economy, the way in which it operates, and the reaction of governments and non-governmental groups.

Students may not count more than 9 credits from any one of these categories as credit toward the major.

GLOBAL ENVIRONMENT

Biology – BIOL

104 Environment, Society, and Conservation (3)

Chemistry – CHEM

320 Environmental Chemistry (4) (prerequisite: one year of general chemistry or instructor's permission)

Geography – GEOG

370 The Geography of Tourism - Advanced Study (3)

Geoscience – GEOS

102 Resources of the Earth (3)

103 Natural Disasters (3)

325 Environmental Geoscience (3) (prerequisite: GEOS 120 or instructor's permission)

I 370 GIS and Imaging Techniques (3)

Recreation, Tourism, and Therapeutic Recreation – RTTR

302 Adventure Travel and Tourism Development (3)

GLOBAL GOVERNANCE**Political Science – POLS**

- * 130 Introduction to International Relations (3)
 135 Comparative Political Systems (3)
 205 United Nations in World Affairs (3)
 225 Ethnic Conflict and Nationalism (3)
 346 International Law (3) (prerequisite: *POLS 130)
 P 347 International Organization (3) (prerequisite: *POLS 130)
 P 475 Democratization & Its Challenges (3)
 (prerequisite: *POLS 135)

GLOBAL SOCIETY AND CULTURE**Communication Studies – CMST**

- 381 Advanced Intercultural and International Communication
 (3) (prerequisite: CMST 281 or instructor's permission)

Computer Science – CS

- 110 Computers in a Global Society (3)

Education – EDUC

- 450 Comparative Education (3) (no prerequisite)

English – ENG

- 221 Topics in World Literature (only sections with following
 topics: World Mythology, Families across Cultures, Beyond
 Europe & America, Postcolonial Literature)
 225 Topics in Literature: Meeting of East and West in
 Literature (1-2)
 327 Genres of Literature: Reading Sacred Texts (1-2)

Mass Communication – MCOM

- 356 Media and Society International (3)
 P 450 International Broadcasting (3) (prerequisite: MCOM 100)

Music – MUS

- 114 World Music (3)

Recreation, Tourism, and Therapeutic Recreation – RTTR

- 265 Leisure in Different Cultures (3)

Philosophy – PHIL

- 330 Biomedical Ethics (3)

Social Work – SOCW

- 445 Globalization of Social Welfare (3)
 (prerequisite: SOCW 340)

Sociology – SOC

- 340 Social-Cultural Anthropology (3) (prerequisite: *SOC 150)
 421 Urban Sociology (3) (prerequisite: *SOC 150)

GLOBAL ECONOMY**Accounting – ACCT**

- 424 International Taxation (3) (prerequisite: *ECON 202)

Business Administration – BUSA

- 411 International Business Law (3)
 (prerequisite: BUSA 291 or 301)

Economics (ECON) and Finance (FIN)

- ECON 404 International Economics (3)
 (prerequisite: ECON *201 and *202)
 ECON 415 International Economic Development (3)
 (prerequisite: ECON *201 and *202)
 FIN 440 International Finance (3) (prerequisite: FIN 360)

Geography – GEOG

- 211 Economic Geography (3)

Management – MGMT

- 455 International Business (3)
 (prerequisite: MGMT 315 or instructor's permission)
 475 Seminar in International Management (3) (prerequisite:
 MGMT 315 or instructor's permission)
 477 International Human Resources Management (3)
 (prerequisite: MGMT 315 or 325 and 317, or instructor's
 permission)

Political Science – POLS

- 342 International Political Economy (3)
 (prerequisite: *POLS 130)

GENERAL ELECTIVES

- GS 205 Cultural Encounters (3 S.H.)
 GS 350 Cross-Cultural Field Experience (1-9 S.H.)
 GS 460 Independent Study (1-9 S.H.)

**PART II: REGIONAL PERSPECTIVES
(40 S.H.)**

Students must choose one of the following areas of concentration: Asian Studies, European Studies, Latin American Studies, or North American Studies.

ASIAN OPTION (GSAS)

40 S.H.

REQUIRED COURSE (3 S.H.)

- GS 250 Introduction to Asia (3)

FOREIGN LANGUAGE AND CULTURAL IMMERSION (16 S.H.)**Chinese – CHIN**

- 101 Beginning Chinese I (4)
 102 Beginning Chinese II (4)
 201 Advanced Beginning Chinese I (4)
 202 Advanced Beginning Chinese II (4)

Japanese – JPN

- 101 Beginning Japanese I (4)
 102 Beginning Japanese II (4)
 201 Advanced Beginning Japanese I (4)
 202 Advanced Beginning Japanese II (4)

A minimum of 12 credits in Chinese or Japanese is required. The remaining 4 credits can be fulfilled by taking additional courses in these languages or by taking an equivalent number of credits in one or more of the following ways (see Note below):

- Cultural Encounters (GS 205)
- Cross Cultural Field Experience (GS 350)
- Approved programs (Study Abroad, Internships, etc.)
- Regional Perspectives electives beyond the requirements

Students who test out of lower-division language courses must complete the remaining credits in one or more of the ways listed above. Foreign language requirements can be waived for students if an Asian language is their first language and if they take an equivalent number of credits as listed above with the permission of the program director.

Note: Students who received a high school diploma from a Chinese- or Japanese-speaking country cannot register for CHIN/JPN 101 or 102.

ELECTIVES – REGIONAL PERSPECTIVES (21 S.H.)

Elective courses in Regional Perspectives are classified in these categories:

- **Societies in Transition:** Courses in this category relate to the geography of the region, the history of its peoples, and various aspects of its evolving societies.
- **Power, Wealth, and the Environment:** Courses in this category pertain to the general political and economic institutions, policies and processes in selected region. They also explore the impact of economic development on the physical environment and examine the policies proposed/adopted to deal with this phenomenon.
- **Cultural Identity and Expressions:** Courses in this category pertain to the heterogeneity of societies in the selected region, the richness of its social and cultural group life including the pursuit by these groups to express themselves in different ways

Students must take at least three courses from one of the categories and at least one course from each of the remaining categories. Courses listed in more than one category can satisfy the requirements of only one category. Some courses for this requirement will be available at Akita International University (AIU) in Japan and the Hebei University of Technology in China.

SOCIETIES IN TRANSITION**English – ENG**

- 225 Topics in Literature (1-2)

Geography – GEOG

- 223 Geography of the Orient (3)

Global Studies – GS

- 215 Introduction to Japanese Culture (3-4)
 300 Contemporary China (3-4)
 I 360 Contemporary Asian Issues (3)

History – HIST

- 123 East Asian Civilization (3)
 341 Modern Japan (3) (prerequisites: HIST 123, ENG 111)
 343 Modern China (3)
 447 America in the Vietnam War Era (3)
 (prerequisite: *HIST 151 or instructor's permission)

POWER, WEALTH, AND THE ENVIRONMENT**Economics – ECON**

- 430 Asian Economies in Transition (3)
 (prerequisites: ECON *201 and *202)

Global Studies – GS

- 355 Asian International Relations (3)

Political Science – POLS

337 Asian Political Systems (3) (prerequisite: POLS 135)

CULTURAL IDENTITY AND EXPRESSIONS**English – ENG**

221 Topics in World Literature [Women in Chinese Literature] (3)

327 Genres of Literature [Modern Japanese Novel] (1-2)

Global Studies – GS

255 Peoples and Cultures of South and Southeast Asia (3)

Music – MUS

115 Music of the East and Southeast Asia (3)

Theatre and Dance – THAD

312 Japanese Classical Theatre (3)

EUROPEAN STUDIES (GSEU)

40 S.H.

REQUIRED COURSE (3 S.H.)

FLAN 218 The New Europeans: Understanding the EU (3) OR

HIST 122 Western Civilization 1815-Present (3)

FOREIGN LANGUAGE AND CULTURAL IMMERSION (16 S.H.)

Intermediate proficiency (FLAN 202 or equivalent) in one of the following Spanish, French or German:

SPAN 101 OR FREN 101 OR GERM 101

SPAN 102 FREN 102 GERM 102

SPAN 201 FREN 201 GERM 201

SPAN 202 FREN 202 GERM 202

With the approval of the program director foreign language requirements can be waived if a European language is the student's native language and if the student takes an equivalent number of credits from the following electives.

ELECTIVES – REGIONAL PERSPECTIVES (21 S.H.)

Elective courses in Regional Perspectives are classified in these categories: Societies in Transition; Power, Wealth, and the Environment; and Cultural Identity and Expressions. These categories are defined on page 125. Students must take at least three courses from one of the categories and at least one course from each of the remaining categories. Courses listed in more than one category can satisfy the requirements of only one category.

SOCIETIES IN TRANSITION**Foreign Languages – FLAN**

218 The New Europeans: Understanding the EU (3)

History – HIST

122 Western Civilization 1815-Present (3)

335 The Holocaust (3)

340 History of Christianity (3)

355 European Intellectual and Cultural History (3)

397 Topics in History (3) (World War I and Modern Memory or Environmental History of Europe)

398 Topics in History with Oral Communication Emphasis (3) (Reading Modern History or Classical Greece only)

401 Ancient Rome (3) (Prerequisite: HIST 120 or instructor's permission)

403 Middle Ages (3) (Prerequisite: HIST 120 or instructor's permission)

408 Renaissance (3) (Prerequisites: HIST 120 and HIST 121 or instructor's permission)

409 Reformation (3) (Prerequisite: HIST 120 and HIST 121 or instructor's permission)

412 French Revolution and Napoleon (3) (Prerequisite: HIST 121 or instructor's permission)

417 Hitler and Nazi Germany (3) (Prerequisite: HIST 122 or instructor's permission)

421 Tudor and Stuart England (3) (Prerequisite: HIST 121 or instructor's permission)

423 Modern England (3)

434 Soviet Russia (1905-Present) (3) (Prerequisites: HIST 122 and HIST 151 or instructor's permission)

440 World War II (3) (Prerequisites: HIST 122 and HIST 151 or instructor's permission)

POWER, WEALTH, AND ENVIRONMENT

GEOG 326 Geography of Europe (3)

POLS 332 European Political Systems (3)

CULTURAL IDENTITY AND EXPRESSIONS**French – FREN**

204 Special Topics in French Literature (2)

205 Special Topics in French Culture (2)

301 French Composition (4)

302 French Civilization and Culture (4)

401 Phonetics and Pronunciation (3)

402 French Literature I (3)

403 French Literature II (3)

404 French Literature III (3)

German – GERM

204 Special Topics: German Literature (2)

205 Special Topics: German Culture and Language (2)

301 Advanced Reading and Structural Analysis (3)

302 German Conversation and Composition (4)

303 German Culture and Civilization (4)

401 Medieval to Baroque Literature (3)

402 18th and 19th Century Literature (3)

403 20th Century Literature (3)

Spanish – SPAN

300 Spanish Linguistics (2)

301 Spanish Composition and Conversation (4)

I 302 The Culture of Spain (3)

401 Spanish Peninsular Literature I (3)

402 Spanish Peninsular Literature II (3)

LATIN AMERICAN STUDIES (GSLA)

40 S.H.

REQUIRED COURSES (3 S.H.)

GS 232 Introduction to Latin America (3) OR

HIST 165 Latin American History (3)

FOREIGN LANGUAGE AND CULTURAL IMMERSION (16 S.H.)

Intermediate proficiency (FLAN 202 or equivalent) in the following:

Spanish – SPAN

101 Elementary Spanish I (4)

102 Elementary Spanish II (4)

201 Intermediate Spanish I (4)

202 Intermediate Spanish II (4)

With the approval of the program director foreign language requirements can be waived for students if Spanish is their second language, provided they take an equivalent number of credits from the following electives.

ELECTIVES – REGIONAL PERSPECTIVES (21 S.H.)

Elective courses in Regional Perspectives are classified in the following categories: Societies in Transition; Power, Wealth, and the Environment; and Cultural Identity and Expressions. These categories are defined on page 124. Students must take at least three courses from one of the categories and at least one course from each of the remaining categories. Courses listed in more than one category can satisfy the requirements of only one category.

SOCIETIES IN TRANSITION**Global Studies – GS**

232 Introduction to Latin America (3)

233 Latin American and Caribbean Immigrants in the U.S. (3)

History – HIST

165 Latin American History (3)

461 Latin American Social Revolution (3)

463 History of Mexico (3)

467 Foreign Travelers in "Exotic" Lands (3)

468 History of the Andean Nations (3)

469 History of Brazil (3)

Women's and Gender Studies – WAGS

235 Interdisciplinary Approach to Women and Social Justice Issues in Latin America (3)

POWER, WEALTH, AND ENVIRONMENT

GEOG 225 Geography of Latin America (3)

POLS 335 Latin American Political Systems (3)

WAGS 235 Interdisciplinary Approach to Women and Social Justice Issues in Latin America (3)

CULTURAL IDENTITY AND EXPRESSIONS

SPAN 204 Special Topics in Hispanic Literature and Culture (2)

SPAN 303 The Culture of Latin America (3)

SPAN 403 Latin American Literature (4)

WAGS 234 Interdisciplinary Approach to Gender and Latin American Society Through 20th Century Literature (3)

NORTH AMERICAN OPTION (GSNA)

40 S.H.

REQUIRED COURSE (3 S.H.)

GS 210 Introduction to North America (3)

FOREIGN LANGUAGE AND CULTURAL IMMERSION (16 S.H.)

Students must demonstrate intermediate proficiency (FLAN 202 or equivalent) in either Spanish or French.

With the approval of the program director, foreign language requirements can be waived for students if English is their second language, provided they take an equivalent number of credits from the Regional Perspectives Electives.

ELECTIVES – REGIONAL PERSPECTIVES (21 S.H.)

Elective courses in Regional Perspectives are classified in the three categories: Societies in Transition; Power, Wealth, and the Environment; and Cultural Identity and Expressions. These categories are defined on page 125. Students must take at least three courses from one of the categories and at least one course from each of the remaining categories. Courses listed in more than one category can satisfy the requirements of only one category.

SOCIETIES IN TRANSITION**Communication Studies – CMST**

281 Intercultural Communication (3)

Geography – GEOG

270 Introduction to the Geography of Tourism (3)

320 Geography of the United States (3)

332 Geography of Canada (3)

Global Studies – GS

233 Latin American and Caribbean Immigrants in the U.S. (3)

History – HIST

* 150 United States History to 1865 (3)

* 151 United States History since 1865 (3)

233 History of Mexico (3)

I 315 Women in US History (4) (prerequisite: 150 or 151 and ENG 111)

336 History of North American Sports (3)

365 American Legal History (3) (prerequisite: HIST 150 and 151 or instructor's permission)

485 Contemporary America 1945–Present (3) (prerequisite: HIST 151)

486 American Intellectual and Cultural History (3)

488 American Constitutional History (3)

Mass Communication – MCOM

100 Mass Media and Society (3)

Music – MUS

* 110 History of American Jazz (3)

* 122 History of Rock Music (3)

Philosophy – PHIL

335 Constitutional Philosophy (3)

Sociology – SOC

440 Sociology of Dying and Death (3) (prerequisite: *SOC 150)

450 Sociology of Aging (3) (prerequisite: *SOC 150)

POWER, WEALTH, AND THE ENVIRONMENT**Economics – ECON**

P 304 Money and Banking (3) (prerequisites: ECON *201 and *202)

315 Environmental and National Resources Economics (3) (prerequisite: *ECON 201)

320 Business-Government Relations (3) (prerequisite: *ECON 201)

435 The North American Economies (3) (prerequisites: ECON *201 and *202)

Geoscience – GEOS

* 130 Earth and Life through Time (4) (North American Focus)

385 Geology of North America (3) (prerequisite: GEOS 220)

Political Science – POLS

* 120 Introduction to American Politics (3)

315 American Political Thought (3) (prerequisite: POLS 120 or instructor's permission)

320 Constitutional Law (3) (prerequisite: POLS 120)

321 The American Presidency (3) (prerequisite: POLS 120)

340 Environmental Policy (3)

360 The American Congress (3) (prerequisite: POLS 120)

422 American Foreign Policy (3) (prerequisite: POLS 130)

I 460 North American Relations (3) (prerequisite: POLS 130)

CULTURAL IDENTITY AND EXPRESSIONS**Art – ART**

* 224 American Art (3)

252 Survey of Women Artists (3)

Communication Studies – CMST

289 Gender and Communication (3)

English – ENG

220 Multicultural American Literatures (3)

History – HIST

220 Introduction to African American History (3)

235 History of the American Indian (3) (prerequisite: ENG 111)

I 315 Women in US History (4) (prerequisite: HIST *150 or *151 and ENG 111)

320 North American Indian Civilization (3) (prerequisite: HIST 235)

Music – MUS

440 American Art Music (3) (prerequisite: MUS 109)

Political Science – POLS

330 Race and American Politics (3) (prerequisite: *POLS 120)

Sociology – SOC

412 Sexuality in American Society (3) (prerequisite: *SOC 150)

423 Race Relations and Minority Groups (3) (prerequisite: *SOC 150)

B.A. MINOR - GLOBAL STUDIES (GLST)

24 Credits (Minimum of 12 credits at 300-400 level)

REQUIRED COURSES (6 S.H.)

GS 200 Introduction to Global Studies (3)

P GS 400 Global Studies Seminar (3)

MINOR ELECTIVES (18 S.H.)

The electives for the minor are organized in the following four categories: Global Environment, Global Governance, Global Society & Culture, and Global Economy. These categories are defined on page 124.

Students must take at least 3 credits from each of the categories, but may not count more than 9 credits from any one of the categories as credit toward the minor. With the approval of the program director, students may use up to 9 credits from the General Electives (page 128) to fulfill minor requirements.

Global Environment**Biology – BIOL**

104 Environment, Society, and Conservation (3)

Chemistry – CHEM

320 Environmental Chemistry (4) (prerequisite: one year of general chemistry or instructor's permission)

Geography – GEOG

370 The Geography of Tourism – Advanced Study (3)

Geoscience – GEOS

102 Resources of the Earth (3)

103 Natural Disasters (3)

325 Environmental Geoscience (3) (prerequisite: GEOS 120 or instructor's permission)

I 370 GIS and Imaging Techniques (3)

Recreation, Tourism, and Therapeutic Recreation – RTTR

302 Adventure Travel and Tourism Development (3)

GLOBAL GOVERNANCE**Political Science – POLS**

* 130 Introduction to International Relations (3)

135 Comparative Political Systems (3)

205 United Nations in World Affairs (3)

225 Ethnic Conflict and Nationalism (3)

343 Human Rights in Theory and Practice (3)

346 International Law (3) (prerequisite: *POLS 130)

P 347 International Organization (3) (prerequisite: *POLS 130)

P 475 Democratization and Its Challenges (3) (prerequisite: *POLS 135)

GLOBAL SOCIETY & CULTURE**Communication Studies – CMST**

381 Advanced Intercultural and International Communication (3) (prerequisite: CMST 281)

Computer Science – CS

110 Computers in a Global Society (3)

Education – EDUC

450 Comparative Education (3) (no prerequisite)

English – ENG

- 221 Topics in World Literature [only sections with following topics: World Mythology, Families across Cultures, Beyond Europe & America, Post-Colonial Literature]
- 225 Topics in Literature [Meeting of East and West in Literature] (1-2)
- 327 Genres of Literature [Reading Sacred Texts] (1-2)

Mass Communication – MCOM

- 356 Media and Society International (3)
- P 450 International Broadcasting (3) (prerequisite: MCOM 100)

Music – MUS

- 114 World Music (3)

Recreation, Tourism, and Therapeutic Recreation – RTTR

- 265 Leisure in Different Cultures (3)

Philosophy – PHIL

- 330 Biomedical Ethics (3)

Social Work – SOCW

- 445 Globalization of Social Welfare (3) (prerequisite: SOCW 340)

Sociology – SOC

- 340 Social-Cultural Anthropology (3) (prerequisite: *SOC 150)
- 421 Urban Sociology (3) (prerequisite: *SOC 150)

GLOBAL ECONOMY

Accounting – ACCT

- 424 International Taxation (3) (prerequisite: *ECON 202)

Business Administration – BUSA

- 411 International Business Law (3) (prerequisite: BUSA 291 or 301)

Economics (ECON) and Finance (FIN)

- ECON 404 International Economics (3) (prerequisite: ECON *201 and *202)
- ECON 415 International Economic Development (3) (prerequisite: ECON *201 and *202)
- FIN 440 International Finance (3) (prerequisite: FIN 360 Corporate Finance)

Geography – GEOG

- 211 Economic Geography (3)

Management – MGMT

- 455 International Business (3) (prerequisite: MGMT 315 or instructor's permission)
- 475 Seminar in International Management (3) (prerequisite: MGMT 315 or instructor's permission)
- 477 International Human Resources Management (3) (prerequisite: MGMT 315 or 325, and 317, or instructor's permission)

Political Science – POLS

- 342 International Political Economy (3) (prerequisite: *POLS 130)

GENERAL ELECTIVES

- GS 205 Cultural Encounters (3 S.H.)
- GS 350 Cross-Cultural Field Experience (1-9 S.H.)
- GS 460 Independent Study (1-9 S.H.)

COURSE DESCRIPTIONS

GLOBAL STUDIES (GS)

200 - Introduction to Global Studies (3 S.H.)

This course introduces students to a framework for viewing the world as a unit and explores a variety of contemporary global issues such as economic development, environmental problems, status of women, world population and its implications, ethnic conflicts, etc. Offered each semester.

205 - Cultural Encounters (3 S.H.)

This course is conducted as a learning community. It seeks to bring together linguistically, ethnically, and culturally diverse students in an effort to achieve academic and social cross-fertilization of their backgrounds and academic concentrations and, thereby, promote cultural understanding and enrichment. Offered every other year.

210 - Introduction to North America (3 S.H.)

This course is an introduction to the physical, historical, social, political, literary, and cultural aspects of the three primary North American countries of Canada, the United States and Mexico with emphasis on the interrelationships among them and the human experience throughout them, especially that of peoples who have been marginalized in the past.

215 - Introduction to Japanese Culture (3-4 S.H.)

This course explores Japanese culture and civilization from its prehistoric roots to the present. Beginning with physical conditions such as geography and climate, this course will examine how such realities have affected religious, historical, political, and regional social structures. From these,

the course will proceed to cultural productions, including both “high” and “popular” culture. The goal of the course is not merely to show students how Japan is, but to encourage them to think about why Japan has emerged as it has during the past 2,500 years and to develop an informed perspective on where Japan and its people may be headed in the future.

232 - Introduction to Latin America (3 S.H.)

The Latin America-Caribbean region is one of the world's most misunderstood regions. Geographically, this region is very complex and culturally diverse; historically, it has been the scene of constant abuse and violent changes. In this introductory course, a global explanation of the processes that link the three major cultural groups (indigenous peoples, Afro-American, and Iberian or Portuguese settlers) will be explored. The interactions will be examined within social, historical, and ethnographic contexts. Grade only. Offered every other year.

233 - Latin American and Caribbean Immigrants in the U.S. (3 S.H.)

This course focuses on immigration as a process, not an event, and on the diversity of the Hispanic experience in the U.S. It integrates historical, economic, and cultural sources to achieve a broad perspective in understanding the fastest-growing ethnic group in the 21st Century. Grade only. Offered every other year.

250 - Introduction to Asia (3 S.H.)

This course provides an interdisciplinary overview of the areas that make up the Global Studies Asian Regional Perspective: East, Southeast, and South Asia. An introduction to this region, its societies, political economies, geography, religions, arts, and history will be provided. Offered yearly.

255 - Peoples and Cultures of South and Southeast Asia (3 S.H.)

This course focuses on the particular peoples and cultures of South and Southeast Asia—two of the most populous regions of the world, the issues that their cultural diversity raise, and their contribution to understanding of similar diversity issues globally. Offered once every two years.

300 - Contemporary China (3-4 S.H.)

This course provides an overview of the changes occurring in China. Building upon a description of its culture, history and people; the course will enable students to understand contemporary China by emphasizing the changes affecting its economy, educational system, environment, evolving value system, and international relations.

350 - Cross-Cultural Field Experience (1-9 S.H.)

The cross-cultural field experience is typically part of a WSU-approved Study Abroad Program. The field experience gives students an opportunity to explore cultural issues through experiences outside the classroom situation and to integrate direct cultural experiences with theoretical understanding of cultural issues. May be repeated for up to 9 semester hours. This course cannot be used to fulfill University Studies credit. Prerequisite: Permission of the instructor and the GSP Director.

355 - Asian International Relations (3 S.H.)

This course provides an introduction to international relations in Asia, including East, Southeast, and South Asia. The course will focus both upon inter-Asian relations well as the role of Asia in shaping international and global affairs. Offered once every two years.

360 - Contemporary Asian Issues (3 S.H.)

This course provides an interdisciplinary analysis of current issues in Asia including globalization, regional cooperation, immigration, development, the environment, conflict, and human rights. Offered every other year.

400 - Global Studies Seminar (3 S.H.)

This course allows students to engage in an in-depth examination of global issues, using a cross-disciplinary approach. Prerequisite: GS 200. Offered yearly.

435 - Indigenous Social Movements in Latin America (3 S.H.)

This course allows student to engage in an in-depth analysis and research of indigenous social movements in Latin America. In addition to exploring diverse ethnic traditions, the course will analyze and compare how indigenous groups are transforming cultural, economic, and political life in the region. Prerequisites: GS 200 and GS 232.

460 - Independent Study (1-9 S.H.)

Directed independent work on specific topics of interest to the student. The course topics, requirements, meeting times and number of semester hours are to be determined through consultation with the instructor. Repeatable for credit up to a total of 9 semester hours. Prerequisite: Permission of the instructor and GSP Director.

CHINESE LANGUAGE (CHIN)

101 - Beginning Chinese I (4 S.H.)

Beginning Chinese 101 is designed to acquaint students with grammatical structures and vocabulary appropriate for beginning learners. Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

102 - Beginning Chinese II (4 S.H.)

Continuation of CHIN 101. CHIN 102 is designed to acquaint students with grammatical structures and vocabulary appropriate for beginning learners. Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge. Prerequisite: CHIN 101 or equivalent.

201 - Advanced Beginning Chinese I (4 S.H.)

CHIN 201 introduces students to more advanced beginning Mandarin pronunciation, grammar, and orthography (in both Pinyin and characters). Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

202 - Advanced Beginning Chinese II (4 S.H.)

CHIN 202 continues to introduce students to more advanced beginning Mandarin pronunciation, grammar, and orthography (in both Pinyin and characters). Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

JAPANESE LANGUAGE (JPN)**101 - Beginning Japanese I (4 S.H.)**

JPN 101 is designed to acquaint students with grammatical structures and vocabulary appropriate for beginning learners. Instruction focuses on

development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

102 - Beginning Japanese II (4 S.H.)

Continuation of JPN 101. JPN 102 is designed to acquaint students with grammatical structures and vocabulary appropriate for beginning learners. Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge. Prerequisite: JPN 101 or equivalent.

201 - Advanced Beginning Japanese I (4 S.H.)

JPN 201 is designed as a continuation of JPN 102 to acquaint students with grammatical structures and vocabulary appropriate for advanced beginning learners. Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

202 - Advanced Beginning Japanese II (4 S.H.)

JPN 202 is designed as a continuation of JPN 201 to acquaint students with grammatical structures and vocabulary appropriate for advanced beginning learners. Instruction focuses on development of all four skills (speaking, listening, reading, and writing) and cultural knowledge.

HEALTH, EXERCISE AND REHABILITATIVE SCIENCES

Maxwell Hall, Room 361 (507-457-2600)

www.winona.edu/hers/

Shellie Nelson (Chairperson)

FACULTY

Dawn Anderson, Professor; B.A., University of Minnesota-Morris; M.S., Iowa State University; Ph.D., Ball State University, Muncie (IN); 1992 –

Phillip Appicelli, Associate Professor; B.A., College of St. Scholastica; M.A., Ph.D., Kent State University; 1998 –

Gail Grimm, Professor; B.S., University of Wisconsin-Platteville; M.S., University of Wisconsin-Madison; Ph.D., University of Arkansas -

Fayetteville; 1989 –

Gary Kastello, Professor; B.S., University of Wisconsin-La Crosse; M.A., Ball State University; Ph.D., University of Wisconsin-Milwaukee; 1997 –

Sang-Min Kim, Assistant Professor; B.A., M.A., Ed.D., University of Northern Iowa; 2005 –

Jason LaSuzzo, Assistant Professor; B.S., University of Louisiana-Monroe; M.Ed., University of Louisiana-Monroe; Ph.D., University of Alabama,

Tuscaloosa; 2007 –

Connie Mettelle, Assistant Professor; B.S., Winona State University; M.S., University of Wyoming; 2001 –

Shellie Nelson, Professor; B.S., Winona State University; M.S., University of Wisconsin-La Crosse; Ed.D., Saint Mary's University of Minnesota; 1988 –

Kyle Poock, Assistant Professor; Baseball Coach; B.S., M.S., Winona State University; 1995 –

Peter Sternberg, Associate Professor; B.A., University of Kent at Canterbury (UK); RGN, London Hospital, UK; Post-Graduate Diploma Health Ed.,

University of London; Ph.D., Leeds Metropolitan University, UK; 2002 –

Brian Zeller, Associate Professor; B.S., University of Wisconsin-La Crosse; M.S., Indiana State University; Ph.D., University of Kentucky; 2000 –

PURPOSE

The Department of Health, Exercise and Rehabilitative Sciences is committed to preparing competent, entry-level exercise physiologists, health educators, athletic trainers, and students well-prepared for graduate study. Our goal is to prepare graduates who can serve the needs of Minnesota and the global community. In order to fill this fundamental mission, the faculty:

- Provide instruction in health promotion, exercise science, and clinical sciences.
- Facilitate the professional development of the students through sound instruction, scholarly activity, and demonstrated service.

The department fosters the development of physical, social, emotional, recreational, clinical, and culturally diverse skills to enhance the human behavior and well-being of all populations. The department is committed to the Seven Principles for Good Practice in Undergraduate Education: student-faculty contact, cooperation among students, active learning, prompt feedback, time on task, high expectations, diverse talents and ways of learning.

The Department of Health, Exercise and Rehabilitative Sciences (HERS) offers programs leading to the following degrees:

- B.S. Major - Health Promotion
 - Community Health
 - School Health
- B.S. Major - Exercise and Rehabilitative Science
 - Cardiopulmonary Rehabilitation
 - Exercise Science
 - Movement Science
- B.S. Major - Athletic Training

PRE-PROFESSIONAL SEQUENCES

Pre-professional programs are preparatory for graduate degrees at another college or university. Students interested in pursuing graduate degrees in physical therapy, occupational therapy, physician's assistant, or chiropractic medicine typically choose the Athletic Training major or the Exercise and Rehabilitative Science: Movement Science major. The Movement Science major also prepares students for entry into graduate schools in a movement science field such as biomechanics, kinesiology, exercise physiology, or motor control.

The Department of Health, Exercise and Rehabilitative Sciences (HERS) offers pre-physical therapy advising. Dr. Gary Kastello is responsible for advising students interested in these pre-professional programs or graduate study in a movement science field. Students may contact Dr. Kastello at 507-457-5219 (gkastello@winona.edu).

Students majoring in athletic training and interested in pursuing graduate study through completion of pre-professional course sequences should contact Dr. Shellie Nelson at 507-457-5214 (snelson@winona.edu) or Dr. Brian Zeller at 507-457-5575 (bzeller@winona.edu). See page 187 for more information about the pre-professional sequences.

SCHOLARSHIPS

A number of scholarships are available for majors in the Department of Health, Exercise and Rehabilitative Sciences. Students should inquire about scholarships early in the academic year. A complete listing explaining the criteria for each scholarship is available in the HERS Department office.

INSURANCE

In academic courses, practica, and internships, HERS majors will be exposed to a wide array of school, clinical, and community experiences that enhance their education. Students participating in these experiences will be assessed a nominal fee each academic year for professional liability insurance. Yearly coverage is secured by an insurance provider determined by the Minnesota Office of Risk Management in cooperation with Minnesota State Colleges and Universities annually on an incident/occurrence and aggregate rate basis.

In addition, student teachers may purchase liability insurance directly from the student chapter of the Education Minnesota Student Program (EMSP). Such policies are available to other majors through their professional organizations. Students should contact their advisor for more information.

PASS/NO CREDIT (P/NC) COURSES

Except for internships, students must take all courses in the major, minor, or options on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit only or grade only basis are so designated in the course descriptions.

INTERNSHIPS AND PRACTICA

The department utilizes variable credits for practica (1-5 credit hours) and internships (1-12 credit hours). Each HERS program has minimal credit hour requirements for each internship and/or practicum.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Health, Exercise and Rehabilitative Sciences offers the following flag courses in the University Studies Program:

FLAG

Oral I

- HERS 328 Behavioral Interventions (3)
- HERS 380 Laboratory Methods in Exercise Science (3)

Math/Critical Analysis O

- HERS 403 Epidemiology (3)

Writing P

- HERS 340 Physiology of Exercise (4)
- HERS 350 Program Planning in Health Promotion (3)
- HERS 430 Public Health (3)
- HERS 445 Medical Aspects of Exercise (3)

Flag courses that can be used to satisfy HERS major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - HEALTH PROMOTION

A student majoring in Health Promotion may choose either School Health or Community Health. Each program leads to a Bachelor of Science degree and can be completed in four years, if the student begins the program during the freshman year. Students completing these degrees will be able to meet the competencies of entry-level health educators and be prepared to pass the exam for Certified Health Education Specialist (CHES) certification.

- Upon completion of Health Promotion: School Health, students have the skills and experience necessary to obtain a Minnesota teaching licensure. Students are required to pass the Minnesota PRAXIS test for teaching licensure. Students who complete this degree and pass the PRAXIS test are qualified to teach in the Minnesota public school system grades 5-12.
- Health Promotion: Community Health gives students a thorough grounding in the theory and skills involved in the promotion of public and community health. The degree is designed to provide students with the experience and background they need to be eligible for entry-level jobs as health educators and health promoters in governmental agencies and non-governmental organizations including hospitals, businesses and other health-related organizations such as the American Red Cross, the American Cancer Society, American Heart Association, and the American Diabetic Society. The degree may also be used as a foundation for post-graduate study and is particularly useful for Master's degree programs in public health, health promotion, or health education.

The HERS Department encourages its health promotion majors to become members of its academic club, Health Organization for Promotion and Education (HOPE).

B.S. MAJOR - HEALTH PROMOTION - COMMUNITY HEALTH (HPCH)

57 S.H. (Minor Recommended)

Students majoring in Health Promotion: Community Health must complete all requirements of the HERS Department and all the requirements for graduation specified in the academic policies section of this catalog (page 23). It is recommended that all students completing this degree also complete a minor in a health-related field or double major in an area that will complement the health promotion degree. Suggested minors include biology, business administration, chemistry, communication studies, computer science, gerontology, global studies, intercultural communication, management, management information systems, marketing, mass communication, operational management, philosophy, physics, political science, psychology, sociology, Spanish, training and development, or women's and gender studies. Students must have a 2.50 major GPA to intern and graduate with this degree.

REQUIRED COURSES 57 S.H.

Health, Exercise and Rehabilitative Sciences - HERS (46 S.H.)

- 204 Personal & Community Health (3)
- 288 Health Perspectives (3)
- 311 Comprehensive School Health Program (3)
- 312 Community Health (3)
- 315 Health Promotion Skills (3)
- 326 Educational Topics/Issues (2)
- I 328 Behavioral Interventions (3)
- P 350 Programming Planning in Health Promotion (3)
- 395 Practicum in Health Promotion (3)
- O 403 Epidemiology (3)
- 415 Grant Writing (3)
- P 430 Public Health (3)
- 433 Senior Health Seminar (1)
- 496 Health Education Internship (10)

Biology - BIOL (8 S.H.)

- * 211 Anatomy and Physiology I (4)
- * 212 Anatomy and Physiology II (4)

Statistics - STAT (3 S.H.)

- 110 Fundamentals of Statistics (3)

B.S. MAJOR - HEALTH PROMOTION: SCHOOL HEALTH (HPST)

86 S.H.

Students majoring in Health Promotion: School Health must complete all requirements of the HERS Department, the Education (EDUC) Department, and all the requirements for graduation specified in the academic policies section of this catalog (page 23). Teaching majors must successfully complete all the courses in the Professional Education Sequence in addition to the school health content area. For admission into the Professional Education Sequence, students majoring in health promotion-school health must have both a 2.75 overall GPA and a 2.50 major GPA. For more information about these requirements, refer to the *WSU Teacher Education Student Handbook*.

REQUIRED COURSES (44 S.H.)

Health, Exercise and Rehabilitative Sciences - HERS (36 S.H.)

- 204 Personal & Community Health (3)
- 288 Health Perspectives (3)
- 311 Comprehensive School Health Program (3)
- 312 Community Health (3)
- 320 Health Education in the Elementary School (3)
- 321 Health Education in the Middle & Secondary Schools (3)
- 326 Educational Topics/Issues (2)

- I 328 Behavioral Interventions (3)
 P 350 Program Planning in Health Promotion (3)
 O 403 Epidemiology (3)
 415 Grant Writing (3)
 425 Organization and Administration of School Health (3)
 433 Senior Health Seminar (1)

Biology - BIOL (8 S.H.)

- * 211 Anatomy and Physiology I (4)
 * 212 Anatomy and Physiology II (4)

ELECTIVES (9 S.H.)

Biology (BIOL): 104, 206, 269
 Communication Studies (CMST): 281
 Counselor Education (CE): 220, 432
 Health, Exercise and Rehabilitative Sciences (HERS): 205, 354, 431, 490, 496
 Nursing (NURS): 260
 Physical Education & Sport Science (PESS): 214, 422
 Psychology (PSY): 298
 Sociology (SOC): 212, 216
 Special Education (SPED): 405

PROFESSIONAL EDUCATION SEQUENCE

(32-36 S.H.)

Notes:

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- † EDUC 305 Human Development and Learning: Secondary (4)
 EDUC 308 Human Relations and Student Diversity (3)
 † EDUC 312 Instructional Planning and Assessment: Secondary (3)
 ‡ EDUC 429 Secondary Reading and Teaching Strategies (4)
 EDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
 ‡ EDUC 459 The Professional Educator (3)
 EDST 465 Student Teaching [Health (5-12) 12 credits]
 [Health/PE (K-12) 16 credits]

† Courses must be taken together.

‡ Courses must be taken together and the last semester prior to student teaching.

B.S. MAJOR - EXERCISE AND REHABILITATIVE SCIENCE

72 - 81 S.H. (No Minor Required)

A student choosing to major in Exercise and Rehabilitative Science may choose Cardiopulmonary Rehabilitation, Exercise Science, or Movement Science. Each of these programs leads to a Bachelor of Science degree. The programs in Exercise and Rehabilitative Science have been designed in accordance with the requirements of the leading national organizations: American College of Sports Medicine (ACSM) and the National Strength and Conditioning Association (NSCA).

- Students interested in working with cardiac or pulmonary patients in a clinical setting should choose Cardiopulmonary Rehabilitation.
- Students interested in exercise and health programming in a variety of settings such as fitness centers, worksite settings, or athletic programs should choose Exercise Science.
- Students interested in pursuing graduate studies in exercise or rehabilitative sciences (such as kinesiology, biomechanics, exercise physiology, physical therapy, occupational therapy, physician's assistant, chiropractic medicine) should choose Movement Science. Additional information on exercise science career opportunities can be found at www.acsm.org, www.nsca-lift.org, and www.asep.org.

ACADEMIC REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific academic requirements for Exercise and Rehabilitative Science majors are described within each major.

CORE REQUIREMENTS (50 S.H.)**Health, Exercise and Rehabilitative Sciences - HERS (32 S.H.)**

- 235 Professional Issues in Exercise Science (3)

- 280 Techniques of Fitness Programming (2)
 291 Prevention and Care of Athletic Injuries (2)
 314 Anatomical Kinesiology (3)
 O 340 Physiology of Exercise (4)
 360 Nutrition for the Physically Active (3)
 (Prerequisite: HERS 205)
 370 Mechanical Kinesiology (3)
 I 380 Laboratory Methods in Exercise Science (3)
 389 Strength and Conditioning Principles and Programming (3)
 O 403 Epidemiology (3)
 P 445 Medical Aspects of Exercise (3)
Physical Education and Sport Science - PESS (3 S.H.)
 300 Motor Learning and Development (3)

Biology - BIOL (8 S.H.)

- * 211 Anatomy and Physiology I (4)
 * 212 Anatomy and Physiology II (4)

Nursing - NURS (4 S.H.)

- 360 Pharmacology (1)
 366 Pathophysiology (3)

Statistics - STAT (3 S.H.)

- * 110 Fundamentals of Statistics (3) OR
 210 Statistics (3)

EXERCISE AND REHABILITATIVE SCIENCE: CARDIOPULMONARY REHABILITATION (ERCR)

77 S.H.

This clinically focused exercise physiology major has several career-related tracks. Its primary purpose is to prepare students to care for individuals who suffer from cardiovascular and/or pulmonary disease utilizing a therapeutic program of exercise, risk factor reduction and education in a structured rehabilitation setting. A hospital and/or clinic are the primary employers. The curriculum is structured around the American College of Sports Medicine (ACSM) knowledge, skill, and ability learner outcomes; students are encouraged to sit for the ACSM (Exercise Specialist) certification exam after graduation. Practical clinical experiences in our on-campus cardiopulmonary rehabilitation program and at Community Memorial Hospital (Winona, MN) are required. A 600-hour "capstone" clinical internship is also required when all coursework is complete. The internship site locations are national in scope of placement.

Many students who enter this field choose related allied health tracks for employment as a result of their practical and internship experience. Some further their education in a special clinical field (ultrasonography is one example). Our students are also satisfactorily employed in Stress Testing (nuclear included) labs, catheter labs, patient education positions, community rehabilitation programs, ECG fields, and other cardiovascular related specialties. More information can be obtained from www.acsm.org or www.asep.org/.

Academic graduation requirements include:

- Attain a "C" or better in all major courses.
- Attain a 2.5 or better overall GPA.

CORE REQUIREMENTS (50 S.H.)

See the list of Core Requirements above.

REQUIRED COURSES (27 S.H.)**Health, Exercise and Rehabilitative Sciences - HERS (21 S.H.)**

- 344 Electrocardiography (3)
 361 Practicum in Cardiopulmonary Rehabilitation (3)
 385 Senior Seminar: Cardiopulmonary Rehabilitation (3)
 420 Clinical Exercise Testing and Prescription (4)
 497 Internship in Cardiopulmonary Rehabilitation (8)

Nursing - NURS (3 S.H.)

- 392 Cardiac Risk Prevention (3)

Counselor Education - CE (3 S.H.)

- 432 Stress Management (3)

EXERCISE AND REHABILITATIVE SCIENCE: EXERCISE SCIENCE (ERES)

76 S.H.

This major prepares students to administer comprehensive health and fitness programs to a variety of clients. Through coursework and other experiences, students learn how to design and administer appropriate strength, power, flexibility, agility, and cardiorespiratory programs based on clients' goals, needs, and abilities. Students also learn how to administer health appraisals, assess client needs, design and administer appropriate programs such as: smoking cessation, low back, blood pressure, weight control, and nutrition counseling. Employment opportunities include

* "Additional Requirements" course as defined in Item 3, page 18

corporate facilities, fitness centers, hospital wellness programs, community centers, or athletic programs.

Students may choose to specialize in areas such as strength training, personal training, nutrition, strength and conditioning with athletes, or working with unique populations through practicum and internship experiences. Upon completion of the degree, students are prepared to sit for American College of Sports Medicine (ACSM) certification as a Health Fitness Instructor and/or National Strength & Conditioning Association (NSCA) certification as a Certified Strength and Conditioning Specialist or Certified Personal Trainer.

Academic graduation requirements include:

- Attain a "C" or better in all major courses.
- Attain a 2.5 or better overall GPA.

CORE REQUIREMENTS (50 S.H.)

See page 131 for a list of Core Requirements.

REQUIRED COURSES (26 S.H.)

Health, Exercise and Rehabilitative Sciences - HERS (23 S.H.)

- 204 Personal and Community Health (3)
- 288 Health Perspectives (3)
- 328 Behavioral Interventions (3)
- P 350 Program Planning in Health Promotion (3)
- 363 Practicum in Exercise Science (3)
- 499 Internship in Exercise Science (8)

Psychology - PSY (3 S.H.)

- * 210 Introduction to Psychological Science (3)

SUGGESTED ELECTIVES

Accounting - ACCT

- * 211 Financial Accounting Principles (3)

Biology - BIOL

- 171 Medical Terminology (1)
- 172 Medical Terminology (1)

Business Administration - BUSA

- 291 Legal Environment of Business (3)

Counselor Education - CE

- 432 Stress Management (3)

Economics and Finance - ECON

- * ECON 201 Principles of Microeconomics (3)

Health, Exercise and Rehabilitative Science - HERS

- 344 Electrocardiography (3)
- 420 Clinical Exercise Testing and Prescription (4)

Management - MGMT

- 315 Principles of Management (3)

Psychology - PSY

- * 250 Developmental Psychology (3)
- * 298 Health Psychology (3)
- 420 Abnormal Psychology (3)

EXERCISE AND REHABILITATIVE SCIENCE: MOVEMENT SCIENCE (ERMS)

96-98 S.H.

This major is designed to meet graduate school entrance requirements in a Movement Science field including biomechanics, exercise physiology, kinesiology, motor learning, physical therapy, occupational therapy, physician's assistant, or chiropractic medicine. Students should meet early with the advisor to plan their program of study. The course of study provides students with a thorough understanding of areas related to both natural and movement science. Each student is required to develop an appropriate research project; perform data collection; and present the results as a poster presentation, journal article, or research paper.

Students enrolled in the Exercise and Rehabilitative Science: Movement Science major must maintain a minimum 3.0 GPA in the Exercise Science core and the Movement Science coursework. If students fail to meet these requirements, they will be put on academic probation and be given one semester to attain the 3.0 GPA. If, after one semester, the student fails to meet the 3.0 GPA, she/he will be dismissed from Movement Science program of study.

CORE REQUIREMENTS (50 S.H.)

See page 131 for a list of Core Requirements.

REQUIRED COURSES (46-48 S.H.)

Health, Exercise and Rehabilitative Sciences — HERS (7-9 S.H.)

- 364 Practicum in Movement Science (1-3)
- 390 Movement Science Research Design (3)
- 412 Movement Science Research Data Collection (3)

Mathematics and Statistics – MATH (4 S.H.)

- * 120 Precalculus (4)

Psychology – PSY (9 S.H.)

- * 210 Introduction to Psychological Science (3)
- * 250 Developmental Psychology (3)
- 420 Abnormal Psychology (3)

Physics – PHYS (8 S.H.)

- * 201 General Physics I (4)
- * 202 General Physics II (4)

Chemistry – CHEM (8 S.H.)

- * 212 Principles of Chemistry I (4) AND
- * 213 Principles of Chemistry II (4)

Sociology – SOC (3 S.H.)

- * 150 Human Society (3)

Biology – BIOL (4 S.H.)

- * 241 Basics of Life (4) OR
- * 242 Organismal Diversity (4)

Computer Science – CS (3 S.H.)

- * 130 Introduction to Basic Programming (3) OR
- * 116 Web Technology (3)

SUGGESTED ELECTIVES

Biology – BIOL

- 209 Microbiology (3)
- I 307 Cell Biology Laboratory (1)
- P 308 Cell Biology (3)
- I 309 Developmental Biology (3)
- O 310 Genetics (3)
- 340 Virology (3)
- 430 Molecular Biology (3)
- 431 Molecular Biology/Lab (4)
- 470 Histology (4)

Chemistry – CHEM

- 340 Organic Chemistry Survey (4)

Health, Exercise and Rehabilitative Sciences – HERS

- 344 Electrocardiography (3)
- 420 Clinical Exercise Testing and Prescription (4)

Mathematics – MATH

- 160 Calculus I (4)
- 161 Calculus Companion (1)

B.S. MAJOR – ATHLETIC TRAINING (AT)

85 S.H.

The Athletic Training major is nationally accredited by the Commission on Accreditation of Athletic Training Education (CAATE). In addition to the academic coursework requirements, students must complete a clinical education experience and fieldwork experiences as assigned by the Director of Athletic Training Education. Students who complete the clinical education and academic requirements of the major are eligible for national certification from the Board of Certification.

Students interested in majoring in Athletic Training must apply to the program, participate in a competitive selection process, and adhere to published retention guidelines. Additional information about the program can be found at www.winona.edu/athletictraining.

CAREER OPPORTUNITIES

Winona State University has a long-standing tradition of graduates who become certified athletic trainers and make positive contributions to the allied health profession of athletic training. While some WSU graduates have secured positions with professional, semi-professional, and Olympic teams, others have qualified for positions as university head athletic trainers, athletic training clinical directors, and clinic-high school athletic trainers. Other graduates have pursued post-graduate study in athletic training, human performance, exercise physiology, physical therapy, physician's assistant, and chiropractic programs.

CORE REQUIREMENTS (54 S.H.)

Health, Exercise and Rehabilitative Sciences - HERS (33 S.H.)

- 204 Personal & Community Health (3)
- 235 Professional Issues in Exercise Science (3)
- 280 Techniques of Fitness Programming (2)
- 314 Anatomical Kinesiology (3)
- O 340 Physiology of Exercise (4)
- 360 Nutrition for the Physically Active (3)
(Prerequisite: HERS 205)
- 370 Mechanical Kinesiology (3)
- I 380 Laboratory Methods in Exercise Science (3)
- 389 Strength and Conditioning Principles and Programming (3)
- O 403 Epidemiology (3)

P 445 Medical Aspects of Exercise (3)

Physical Education & Sport Science - PESS (3 S.H.)

300 Motor Learning and Development (3)

Biology - BIOL (8 S.H.)

* 211 Anatomy and Physiology I (4)

* 212 Anatomy and Physiology II (4)

Nursing - NURS (4 S.H.)

360 Pharmacology (1)

366 Pathophysiology (3)

Statistics - STAT (3 S.H.)

* 110 Fundamentals of Statistics (3) OR

210 Statistics (3)

Psychology - PSY (3 S.H.)

210 Introduction to Psychological Science (3)

REQUIRED ATHLETIC TRAINING COURSES (31 S.H.)

Health, Exercise and Rehabilitative Sciences - HERS 31 S.H.

191 Introduction to Athletic Training (1)

291 Prevention and Care of Athletic Injuries (2)

345 Emergency Response for the Professional Rescuer (3)

362 Practicum in Athletic Training (5)

391 Injury Recognition of the Upper Body (3)

392 Injury Recognition of the Lower Body (3)

393 Therapeutic Modalities (3)

491 Therapeutic Treatment and Rehabilitation (3)

492 Administration of Athletic Training (3)

494 Therapeutic Interventions (3)

495 Capstone Clinical Skill Proficiency Lab (2)

SUGGESTED ELECTIVES

Biology - BIOL

171 Medical Terminology (1)

172 Medical Terminology (1)

ATHLETIC TRAINING EDUCATION PROGRAM

Students accepted in the Athletic Training Program must acquire clinical experiences over a minimum of two and a half academic years as assigned by the Director of Athletic Training Education. These experiences will be on a rotation as described in the *WSU Athletic Training Education Handbook*. Clinical experiences may be acquired at a variety of settings that include experiences with upper extremity intensive sports, lower extremity intensive sports, equipment intensive sports, and general medical rotations. These experiences will be under the direct supervision of a variety of Approved Clinical Instructors (ACIs), as well as experiences with other types of health care providers. However, the majority of the student's clinical experiences will be at WSU in a traditional athletic training setting.

Students obtain traditional clinical education experiences with football, hockey, gymnastics, soccer, basketball, volleyball, baseball, softball, track, and wrestling. Students have many opportunities to attend team practices and events, travel with teams, attend NCAA Division II post-season competitions, attend orthopedic surgeries, and learn from our team physician on campus and at the clinic or hospital.

Athletic Training majors build on the foundation courses of anatomy, physiology, kinesiology, exercise physiology, nutrition, and mechanical kinesiology with specific athletic training education courses. These courses expose the student to CAATE competencies and proficiencies in injury prevention, recognition, evaluation, treatment, and rehabilitation.

Clinical sites include the athletic training facilities at WSU, Saint Mary's University, Winona Senior High School, and other area high schools. Students also gain valuable community-based medical experience at Sports and Orthopaedic Specialists; Sport & Spine Physical Therapy Clinic; Rushford Medical Clinic; Winona Area Ambulance Service; Ping Chiropractic and Wellness Center; and Community Memorial Hospital's Physical Therapy, Emergency, Surgery, and Urgent Care departments.

APPLICATION AND SELECTION INFORMATION

Students who are interested in majoring in Athletic Training should meet with the Director of Athletic Training Education and enroll in HERS 191 (Introduction to Athletic Training), BIOL 211, and BIOL 212 during their first year at WSU. Students enroll in HERS 291 and HERS 314 and begin clinical education experiences during the fall semester of the second year. Applications are due late November each year.

Special Admission

If space is available, a special admission may be held during the summer. Students that have met all academic and clinical learning outcomes should notify the Director of Athletic Training Education that they wish to apply for special admission. Applications and interviews will be due during the

last week of July. (Dates and requirements are posted and emailed to all majors.) Students admitted during the summer are expected to participate in all in-service and clinical education opportunities available in August. When the academic year begins, students will join the previous year's sophomore class to progress through the Athletic Training Education Program.

Application Process

Applications will be rated and ranked, and students will be selected for interview. The selection committee determines the number of students selected from each academic class. This number directly correlates with the number of clinical educators available each year. Each applicant must provide the following:

- 1. Official Documentation (10 points)** should be sent from the following institutions or agencies to the Program Director.
 - Winona State University Transcripts: To be considered, students must have a cumulative 2.75 GPA and a 2.75 GPA in the major. Students must have completed HERS 191, BIOL 211, and BIOL 212. When they apply, students should be enrolled in HERS 291 and HERS 314 and be progressing appropriately. Other exercise and rehabilitative science and biology courses will also be evaluated independent of the overall GPA.
 - Transfer students must provide official transcripts from all other institutions attended. Transfer students must take HERS 191 at WSU and participate in all application and selection procedures at WSU. Transfer students must meet all University guidelines given in the catalog for transfer students and must take HERS 291, 345, 362, 389, 391, 392, 393, 491, 492, 494, and 495 at WSU.
 - Proof of First Aid, CPR Certification, or First Responder Certification.
 - Completed Medical Physical (form available from the Director of Athletic Training Education).
 - Completed Technical Standards (form available from Athletic Training Program Director).
 - Hepatitis B vaccinations (or declination).
- 2. Winona State University Observation Hours and Reflective Journal (10 points).** Each student will complete observation hours in the WSU Athletic Training Room as required for HERS 191. Each student will compile a typed journal documenting dates, times of field experience, sequence of events, elaboration of significant experiences, and an analysis of the experiences. Students will be given the opportunity to continue their observation hours throughout the first year for a total of no more than 70 hours per year. Students will continue their Reflective Journal in HERS 291.
- 3. Letters of Recommendation (13 points).** Each student is required to provide a total of five letters of recommendation. Two of these letters will be from a Senior Athletic Training Student reflecting the student's daily interaction in the athletic training room. Three of these letters will be professional letters of recommendation. These letters should be from professionals in the medical, health, or allied health field with whom the student has worked directly through observation hours such that they can reflect the student's potential to succeed in an allied health profession. These professional letters may also be from professors or instructors reflecting the student's academic success and potential. Finally, these letters may be from employers reflecting the student's maturity, interpersonal skills, and other qualities of a successful allied health care professional.
- 4. Cover letter and résumé (4 points).** The completed application should include a single-spaced essay or cover letter stating the student's qualifications to be part of the program, why the student wishes to become an athletic trainer, and a summary of what the student can add to the program. A simple one-page résumé should also be included.

WSU Athletic Training Student Retention Competencies

The following academic, clinical, and program compliance requirements apply for athletic training students who have successfully completed the application process and who have been selected to the Athletic Training Education Program. Detailed retention information can be found at <http://www.winona.edu/athletictraining>.

Academic Requirements

The Director of Athletic Training Education reviews transcripts at the beginning of each semester. Students must:

- Meet WSU graduation standards (page 23)
- Maintain a cumulative WSU GPA not less than 2.75
- Maintain a 2.75 overall GPA in the Athletic Training major
- Attain a "B" or better in all athletic training courses: HERS 191, 291, 345, 362, 391, 392, 393, 491, 492, 494, and 495

Clinical Education Requirements

- Compliance with all objectives, policies and procedures established in the *WSU Athletic Training Education Handbook*.
- Compliance with the NATA's Code of Ethics (*Athletic Training Education Handbook*).
- Compliance with the *WSU Student Handbook* (Student Rights and Responsibilities published in semester class schedules).
- Compliance with assignments/directions given by the athletic training Approved Clinical Instructors (ACI).
- Demonstration of appropriate clinical skill acquisition paralleling clinical and academic experience level.
- Positive monthly and annual evaluations.
- Satisfactory completion of "Assessment Day" activities.

Detailed requirements are posted on the program's website at: www.winona.edu/athletictraining.

Program Compliance

Athletic training students are expected to comply with all academic and clinical guidelines. Athletic training students must act in a mature, responsible manner that will reflect positively on themselves, the Athletic Training Education Program, and the University while performing academic and clinical education. These expectations, due process rights, sanctions, dismissal, appeals, and assistance procedures are clearly outlined in the *Athletic Training Education Handbook* (see program website www.winona.edu/athletictraining) and covered extensively in HERS 191, Introduction to Athletic Training.

COURSE DESCRIPTIONS (HERS)

HEALTH PROMOTION

204 - Personal & Community Health (3 S.H.)

Addresses individual and community health issues. Investigates the dimensions of personal wellness that influence health behavior. Course material covers content, self-assessments and journal entries in relationship to behavioral change. Alcohol, tobacco and/or other drugs with emphasis on prevention strategies are addressed as mandated by Minnesota state law 126.06. Upon successful completion of this course, students will (1) have knowledge of basic health content areas; (2) understand journaling and the value of nutrition, exercise and weight management; and (3) know how family history is of value. Grade only. Offered each semester.

288 - Health Perspectives (3 S.H.)

An introduction to health education and health promotion. Analyzes the foundations of the discipline of health education including theories of health education. Explores the theories of behavior change. Investigates the career opportunities in all health education/promotion settings. Introduces professional organizations and certifications for the field of health education including worksite health promotion. Upon successful completion of this course, students will (1) understand the many different theories of health, (2) know the history and philosophy of health education/health promotion, and (3) be exposed to several health working documents. Prerequisite: HERS 204. Grade only. Offered each semester.

311 - Comprehensive School Health Program (3 S.H.)

An introduction to the concepts and practice of school health promotion. This course provides students the opportunity to develop their understanding of the factors that influence the promotion of health in schools. The course is designed to help future community health educators and health teachers gain experience in the assessment of school health needs and understand the issues involved in advocating for comprehensive school health and planning school health promotion programs. Prerequisites: HERS 204 and HERS 288. Grade only. Offered fall semester only.

312 - Community Health (3 S.H.)

This course provides students with a foundation in the theory and practice of community health promotion. Students will have the opportunity to develop their understanding of the socio-cultural, political, and economic factors involved in community health. By the end of the course, students will have the theoretical and practical background necessary to enable them to play a coordinating and facilitating role in planning and implementing effective community health promotion initiatives. Prerequisites: HERS 204 and HERS 288. Grade only. Offered spring semester only.

315 - Health Promotion Skills (3 S.H.)

This course gives students the opportunity to learn and practice the skills needed to design health messages and implement health education/promotion programs. These skills include understanding the needs of diverse communities, research methodology, health promotion material design, and health promotion resource management. Prerequisites: HERS 204, HERS 288, and HERS 312. Grade only. Offered yearly.

320 - Health Education in the Elementary Schools (3 S.H.)

Designing Pre-8 educational programs consistent with specified program objectives, includes development of logical scope and sequence plan for an elementary health education program. Applying individual or group learning process methods appropriate to given early childhood, elementary and middle school level learning situations. Proper techniques and skills needed to successfully meet the National Health Education Standards and the Minnesota State Graduation Standards. Upon successful completion of this course, students will (1) know the Coordinated School Health Program, (2) apply methodology of Elementary Health Education, and (3) know and understand the process of writing lesson plans. Prerequisite: HERS 204. Grade only. Offered each semester.

321 - Health Education in the Middle & Secondary Schools (3 S.H.)

Future school health professionals will learn the best practices of health curriculum for middle school and secondary students. Students will learn to specify objectives, develop sequential learning activities, create challenging and motivating lessons, and develop a curriculum for middle and/or secondary schools. Students will learn to apply individual and group learning process methods appropriate for middle school and high school students. Students will also learn proper techniques and skills needed to successfully meet the National Health Education Standards and the Minnesota State Graduation Standards. Upon successful completion of this course, students will (1) know the Coordinated School Health Program, (2) apply methodology of Middle/Secondary Health Education, and (3) know and understand the process of writing and implementing lesson plans. Prerequisites: HERS 204, HERS 288, and HERS 320. Grade only. Offered each semester.

326 - Educational Topics/Issues (2 S.H.)

In-depth study of current and emerging health topics in health education and promotion. Study of bio-psycho-social issues related to such topics as addiction, sexuality education, and violence prevention. Students utilize computerized health information retrieval systems and access online and other database health information resources. Upon successful completion of this course, students will have an educated position on the most important current public health issues. They will also be able to argue knowledgeably and coherently in support of their position and be able to give accurate information about the issues studied. Prerequisites: HERS 204 and HERS 288. Grade only. Offered each semester.

328 - Behavioral Interventions (3 S.H.)

Application of theories of behavior change to program planning for the secondary student and adult population. Students utilize a wide range of techniques and strategies for community and secondary health education. Upon successful completion of this course, students will (1) be able to create, develop and write teaching strategies, (2) learn proper presentation skills, and (3) become advocates for the field of health education/promotion. Prerequisites: HERS 204 and 288; teaching option majors: HERS 320. Grade only. Offered fall semester.

350 - Program Planning in Health Promotion (3 S.H.)

This is a practical course in which students are responsible for undertaking needs assessment research and developing a health promotion program in collaboration with a local business or agency. The course enables students to apply the knowledge and experience gained in lower level courses to real world problems and to further develop their health promotion/health communication skills. Prerequisites: HERS 204, 288; health promotion majors: HERS 311, HERS 312. Grade only. Offered each semester.

395 - Practicum in Health Promotion (1-3 S.H.)

This course gives students practical experience in the implementation of health promotion programs. Students in the course will support the implementation and evaluation of a health promotion program in a community setting. Students may work on projects previously designed during their program planning class, or they may be involved in the implementation and evaluation of a health promotion program designed by another agency. Students are expected to clear their site choice with their onsite supervisor and the course instructor of HERS 350 (Program Planning in Health Promotion) before registering for HERS 395. Prerequisites: HERS 204, 288, 312, 321, 326, 328, 350. Grade only. Offered each semester.

403 - Epidemiology (3 S.H.)

An introduction to basic concepts of epidemiology. Students will study the ways in which disease is transmitted and distributed within populations and develop a working knowledge of basic biostatistics and epidemiological methodology. The course also provides students with an introduction to EPI Info statistical software. Prerequisites for Health Promotion majors: HERS 204, 288; BIOL 211, 212; STAT 110. Prerequisites for non-Health Promotion majors: HERS 204, STAT 110, or instructor's permission. Grade only. Offered each semester.

415 - Grant Writing (3 S.H.)

An examination of the skills required to locate funding opportunities and write and submit grant applications and reports for health promotion and education programs. This course is designed to help students to gain experience and practice in finding grant money and applying for grants to undertake community health projects. Prerequisites: Students must have senior standing. Grade only. Offered yearly.

425 - Organization and Administration of School Health (3 S.H.)

Organization and administrative aspects of an effective school health education/promotion program pertaining to budgets, personnel, facilities, legal responsibilities, home/school/community communications, and the formulation of practical modes of collaboration among educational settings. Includes the creation and development of scope and sequence as applied to the Minnesota State Graduation Standards and the National Health Standards. Upon successful completion of this course, students will (1) understand the policy and procedures required to be an administrator in the area of health education; (2) become knowledgeable regarding curriculum development; and (3) become both an advocate and a resource person for health education, upholding state standards and recommendations. Prerequisites: HERS 204, 288, and 311. Grade Only. Offered yearly.

430 - Public Health (3 S.H.)

This course explores the foundations of public health practices, including health organization/agency structures and specific health concerns of target populations. The course places particular emphasis on the social influences on individual and community health. It examines the reasons for health disparities and explores the problems and the challenges faced by modern public health workers and health promoters. The main goal of the course is to increase students' understanding and knowledge of public health to inform their future practice as health promoters. Prerequisites: HERS 204, 288, 311, 312, 328, and 403. Grade only. Offered yearly.

431 - Health Issues Workshop (1-3 S.H.)

Explores recent and relevant issues, trends and programming developments in health education/promotion. Designed for teachers, school nurses, school administrators, undergraduates and/or graduate students. Junior or senior standing. May be repeated for credit. Upon successful completion of this course, students will (1) create, develop, and oversee the workings of health conferences; (2) professionally represent Winona State University; and (3) be able to work through the evaluation process of conferences and conventions. Offered upon demand.

433 - Senior Health Seminar (1 S.H.)

In-depth school and community health analysis. Review of responsibilities and competencies for entry-level health educators, for Certified Health Education Specialist (CHES) credentials and ethical considerations and standards, as outlined by the Society of Public Health Educators. Completion of professional files: resume, the development of a letter of application, professional presentation for interviews, professional portfolios and skills needed to make one marketable. Upon successful completion of this course, students will (1) complete all professional papers (resume, cover letter, references, etc.) that are required by the career and placement center on campus; (2) secure credible references for their file; and (3) develop their working professional portfolio. Prerequisites: HERS 204, 288, 311, 410; BIOL 211 and 212. Recommended prerequisites: HERS 403 and STAT 110. Senior standing. Grade only. Offered yearly.

490 - Independent Study in Health (1-3 S.H.)

Opportunities for undergraduates to work on an advanced health issue, research or with technology/presentation methods. Prerequisites: Junior or senior standing, preparation of proposed outline, permission of the major advisor and Department chairperson. Grade only. Offered upon demand.

496 - Internship in Community Health (10-12 S.H.)

A capstone experience in Community Health to foster the culmination of skills and abilities necessary for the entry level Community Health Educator in a Health agency or organization. Prerequisites: Senior standing, all major coursework completed and approved by the Health Promotion faculty, and instructor's permission. P/NC.

EXERCISE AND REHABILITATIVE SCIENCE**191 - Introduction to Athletic Training (1 S.H.)**

In-depth view of the certification requirements, WSU Program Handbook, policies, procedures, selection and retention requirements, as well as athletic training room observation and journal. Prerequisite: Department approval. Grade only. Offered each semester.

205 - Nutrition for Lifetime Wellness (3 S.H.)

Introduction of basic nutritional concepts and their application to lifetime wellness. Topics of study will include nutrition standards, nutrients, weight management, eating disorders, life cycle nutrition, and disease prevention. A personal dietary analysis is also included. Offered each semester.

235 - Professional Issues in Exercise Science (3 S.H.)

Introductory course for professional socialization and role development, including communication and assessment skills. Ethical issues and professionalism also are discussed. Grade only. Offered each semester.

280 - Techniques of Fitness Programming (2 S.H.)

Practical experiences in the assessment of health-related fitness components and the knowledge to design training programs for improvement of these factors. Grade only. Offered each semester.

291 - Prevention and Care of Athletic Injuries (2 S.H.)

Prevention, evaluation, treatment and taping of athletic injuries. Lectures, demonstrations, and laboratory experience. Prerequisites: Current first aid certification and either BIOL 211 (for HERS and PESS majors) or PESS 251 (for coaching minors). Grade only. Offered each semester: fall semester for athletic training major only; spring semester for all other majors or minors.

305 - Health, Exercise and Medicine: An International Perspective (3 S.H.)

This course is an interdisciplinary travel program designed to expose students to medicine, health, and exercise in a society outside of the United States. Students will engage in different learning opportunities, including peer group presentations, lectures/discussions from specialists in their field, placement in clinical sites to interact with peers and mentors from the United Kingdom, and hands-on learning experiences in various settings.

314 - Anatomical Kinesiology (3 S.H.)

The structure and function of the human body will be systematically studied as it applies to human movement, exercise and sport. Prerequisites: BIOL 211 and 212 or equivalent. Grade only. Offered each semester.

340 - Physiology of Exercise (4 S.H.)

Major physiological systems of the human body and their responses to acute and chronic exercise. Energy systems of exercise, physiological support systems, exercise prescription, and methods of physical training are addressed. Lecture and lab. Prerequisites: BIOL 212 with grade of "C" or higher. Grade only. Offered each semester.

344 - Electrocardiography (3 S.H.)

Theory and practice in the interpretation of the electrocardiogram, cardiovascular physiology, and special characteristics of ECGs for certain cardiovascular diseases. Lecture, Lab, ECG case study review. Prerequisites: HERS 340 for HERS majors; BIOL 212 for non-HERS majors. Grade only. Offered fall semester only.

345 - Emergency Response for the Professional Rescuer (3 S.H.)

This course is designed to teach emergency care skills and the accompanying knowledge, which are needed by emergency caregivers such as policemen, fire department members, park rangers, and other first-line caregivers. Upon successful completion of the class, students will be issued American Red Cross "Emergency Care" and "CPR for the professional rescuer" cards. This course will not prepare the student to become an Emergency Medical Technician. Prerequisites: PER 214 or First Aid and CPR certification. Offered yearly.

360 - Nutrition for the Physically Active (3 S.H.)

Nutritional requirements for the active individual and athletes. Topics of study will include carbohydrate, protein, fat, vitamin, mineral and water requirements of active populations, as well as the use of nutritional ergogenic aids for performance enhancement. Prerequisites: HERS 205 and 340. Grade only. Offered each semester.

361 - Practicum in Cardiopulmonary Rehabilitation (3 S.H.)

Students will be required to complete three semesters of practicum for one credit hour each semester for a total of 3 S.H. The first practicum will be either second semester of the sophomore year or first semester of the junior year and will be at WSU's Phase III Cardiopulmonary Laboratory. The second practicum will be completed with Phase II & III patients at Winona Health's Cardiopulmonary Laboratory. The last practicum will be completed at WSU and provide the student with the opportunity to interpret, apply, and assist in daily operations and client care. Students must possess current American Heart CPR, AED, and First Aid certification.

362 - Athletic Training Practicum (1-5 S.H.)

Upon successful completion of the application procedure, students will enroll in one semester hour each semester for five semesters in HERS 362. Students will obtain clinical education experience with certified athletic trainers in traditional athletic training settings (university and high school athletic training facilities) and in hospital or clinic settings as scheduled by the Athletic Training Program Director. Students will be evaluated each month and will accomplish designated clinical proficiencies each semester enrolled. Prerequisites: program acceptance, liability insurance, current certification in First Aid and CPR, and instructor's permission.

363 - Practicum in Exercise Science (3 S.H.)

Student will register for 1 credit hour in three separate semesters. The focus will be practical experience as a pre-professional in exercise science, with a

variety of in-class and self-directed programming experiences. Prerequisites: HERS 280, instructor's permission, and current certification in First Aid and CPR. Grade only. Offered each semester.

364 - Practicum in Movement Science (1-3 S.H.)

Practicum experience is designed for student site visits to either a research-oriented university, hospital or clinic, or a private business that performs movement science related measurements. On-site visits may involve shadowing a movement science professional. Additionally, students are required to attend at least one movement science professional meeting or workshop. Specific goals and objectives of the practicum experience will be in writing and agreed upon by the student, faculty advisor, and the contact at the organization where site visits are to be made. The variable credit is determined by the student and advisor based on the requirements of the graduate school to which they intend to apply. Prerequisites: HERS 314, HERS 340, HERS 370, and junior academic standing. Grade only. Offered each semester.

370 - Mechanical Kinesiology (3 S.H.)

Mechanical principles will be systematically studied as they apply to human movement. Application of these principles will be used to understand and improve the efficiency, efficacy, and safety of movement. Prerequisite: HERS 235 and 314. Grade only. Offered each semester.

380 - Laboratory Methods in Exercise Science (3 S.H.)

A series of experiments designed to achieve competency in research methods, procedures and instruments typically used in human performance laboratories. Lecture and lab. Prerequisites: HERS 235, 340 and STAT 110 or STAT 210. Grade only. Offered each semester.

385 - Senior Seminar: Cardiopulmonary Rehabilitation (3 S.H.)

Focuses on the analysis of the relationships between concepts in cardiopulmonary rehabilitation. Emphasis is placed upon helping students integrate these concepts into their professional procedure via major paper, case studies and special presentations. Prerequisites: Senior standing and instructor's permission. Offered yearly.

389 - Strength and Conditioning Principles and Programming (3 S.H./lab)

This course is designed for students preparing for the National Strength and Condition Association's (NSCA) Certified Strength and Conditioning Specialist (CSCS) certification or for students wishing to gain additional practical application of exercise science, strength training and programming. The major focus of the course will be on exercise techniques, designing strength and conditioning programs, application of exercise prescription principles and facility management, organization and administrative procedures. Prerequisites: HERS 205, 280, 314, 340, BIOL 211 and BIOL 212. Grade only. Offered each semester.

390 - Movement Science Research Design (3 S.H.)

A detailed overview of the research process including discussion of research in movement science, literature review development, statement of the research problem, formulating the methods, writing the results and discussion. Completion of human subjects review committee application forms if needed, and completion of subject informed consent. Additionally, application of frequently used statistical tests including correlation, regression analysis, t-tests, analysis of variance, analysis of covariance, and post-hoc comparisons will be covered. Prerequisites: HERS 314, HERS 340, HERS 370, HERS 380, STAT 210. Grade only. Offered spring semester only.

391 - Injury Recognition of the Upper Body (3 S.H.)

Advanced course in the evaluation and recognition of athletic injuries from the lumbar spine upward. Lecture and lab. Prerequisites: Athletic training program acceptance; HERS 191 and HERS 291. Grade only. Offered yearly.

392 - Injury Recognition of the Lower Body (3 S.H.)

Advanced course in the evaluation and recognition of athletic injuries from the lumbar spine down. Lecture and lab. Prerequisites: Athletic training program acceptance; HERS 391. Grade only. Offered yearly.

393 - Therapeutic Modalities (3 S.H.)

Exploration of pain theories, inflammation and the injury cycle. Physiological and mechanical theories of therapeutic modalities are defined and the effects of therapeutic modalities on athletic injuries throughout the injury cycle are applied. Lecture and lab. Prerequisites: Athletic training program acceptance; BIOL 211 and BIOL 212. Offered yearly.

412 - Movement Science Research Data Collection (3 S.H.)

The student will complete data collection and statistical analysis on a movement science related research topic. The project will be under the direct supervision of an HERS faculty mentor. Students will use their collected data to write one of the following: poster presentation, research paper, or a journal article. Prerequisites: HERS 314, HERS 340, HERS 370,

HERS 380, STAT 210, HERS 390. Grade only. Offered fall semester only.

420 - Clinical Exercise Testing and Prescription (4 S.H.)

Methods, procedures and techniques of functional and diagnostic exercise stress testing will be emphasized. For normal, cardiopulmonary, and other special populations, special consideration is given for contraindications, pharmacological intervention, protocol selection, equipment selection, data interpretation, follow-up procedures and exercise prescription. Lecture and lab. Prerequisites: HERS 344 and 380. Grade only. Offered spring semester only.

445 - Medical Aspects of Exercise (3 S.H.)

Selected topics regarding the science and medicine of sports and exercise participation. Areas to be covered include pharmacological aspects, overtraining and overreaching, the effect of exercise on reproductive function, and particularly exercise for special populations. Prerequisites: HERS 340 and NURS 366. Grade only. Offered each semester.

490 - Independent Study in Exercise Science (1-4 S.H.)

Opportunity for undergraduates to work independently. Prerequisites: Junior or senior standing, preparation of proposed outline and major advisor's permission. Grade only. Offered each semester.

491 - Therapeutic Treatment and Rehabilitation of Athletic

Injuries (3 S.H.) Indications and applications of therapeutic modalities and rehabilitation exercises will be investigated and developed into comprehensive rehabilitation programs. Lecture and lab. Prerequisites: Athletic training program acceptance; HERS 340, HERS 370, HERS 389, HERS 392 and HERS 393. Grade only. Offered yearly.

492 - Administration of Athletic Training (3 S.H.)

Designed to prepare athletic training students for the behind-the-scenes duties that are required to ensure that an athletic program is functioning efficiently and properly. Areas covered include liability, budgeting, record-keeping, and other administrative areas. Prerequisites: Athletic training program acceptance; HERS 392. Grade only. Offered yearly.

494 - Therapeutic Interventions (3 S.H.)

Anatomical review and discussion of mechanisms, specific injuries, their acute treatment and referral process for conditions relating to the head, face, ear, eye, nose, throat/thorax, abdomen, and skin. Intervention techniques for athletes suffering physical, emotional, or psychological illnesses will be discussed. Commonly used drugs, their actions, side effects and action for abuse and testing will also be included. Prerequisites: Athletic training program acceptance; HERS 391, PSY 210.

495 - Capstone Clinical Skill Proficiencies Lab (2 S.H.)

This is a capstone clinical skill acquisition lab course. Students who have successfully completed the academic and clinical requirements of the Exercise and Rehabilitative Science: Athletic Training major will take this course in the final semester. This course will serve as the final assessment of clinical skill learning over time. Prerequisites: Final semester of Exercise and Rehabilitative Science: Athletic Training major with successful completion of all academic, clinical, and program requirements.

497 - Internship in Cardiopulmonary Rehabilitation (8 S.H.)

A capstone experience to foster the culmination of skills and abilities necessary for the entry-level cardiopulmonary clinical experience physiologist. Six hundred hours of clinical experience are required in the ACSM certified exercise specialist learner outcomes. Internship clinical sites are nationally located and an internship handbook details application, registration, and evaluation procedures. Prerequisites: Senior standing, liability insurance, current CPR and First Aid certification, all major coursework completed, and instructor's permission. P/NC.

498 - Internship in Athletic Training (4 S.H.)

A capstone experience to foster the culmination of skills and abilities necessary for the entry-level athletic training professional. With an in-depth view of an athletic trainer's role in the sports medicine clinic with opportunities to interact with physicians, physician assistants, physical therapists, other personnel and a diverse patient population under the direct supervision of a BOC-Certified Athletic Trainer. Opportunities for special projects, presentations and viewing surgeries may also be available. An internship handbook details admission, registration, and evaluation procedures. Prerequisites: Senior standing, liability insurance, current CPR and First Aid certification, all major coursework must be completed, and instructor's permission. P/NC.

499 - Internship in Exercise Science (8 S.H.)

A capstone experience in exercise science to foster the culmination of skills and abilities necessary for the entry-level exercise science professional. ACSM and AWHP standards require a full semester of field experience. Prerequisites: Senior standing, liability insurance, current CPR and First Aid certification, all major coursework must be completed, and instructor's permission. P/NC.

HISTORY

Minné Hall, Room 212 (507-457-5400)

Chairperson's email: mbyman@winona.edu

Department's email: lhessel@winona.edu

Marianna Byman (Chairperson)

FACULTY

Marianna Westbrook Byman, Professor; B.A., Baylor University; M.S., Winona State University; D.A., University of North Dakota; 1988 –

Seymour Byman, Professor; B.A., University of Illinois; M.A., Roosevelt University; Ph.D., Northwestern University, 1970 –

John Campbell, Professor; B.A., Wesleyan University; M.A., Ph.D., University of Minnesota-Twin Cities; 1996 –

Peter V. N. Henderson, Professor, B.A., J.D., Vanderbilt University; M.A., Ph.D., University of Nebraska-Lincoln; 1989 –

Kurt Hobenstein, Assistant Professor, B.A., J.D., M.A., University of Nebraska; Ph.D., University of Virginia, 2005 –

Colette A. Hyman, Professor; B.A., Brown University; M.A., Ph.D., University of Minnesota-Twin Cities; 1990 –

Matthew Lindaman, Associate Professor; B.A., M.A., University of Northern Iowa; Ph.D., University of Kansas, 2002 –

Matthew Lungerhausen, Assistant Professor; B.A., University of California, Santa Cruz; M.A., Binghamton University SUNY; Ph.D., University of Minnesota, 2004 –

Gregory G. Schmidt, Professor; B.A., M.A., Ph.D., University of Illinois-Urbana; 1984 –

Tomas Tolvoais, Assistant Professor; B.A., Wake Forest University; M.A., Purdue University; Ph.D., Rutgers University, 2007 –

DEGREES AND PROGRAMS

The History Department offers a B.A. major and a B.A. minor in history. In addition, the department administers the B.S. Paralegal Program, advises pre-law students, and directs the Law and Society Program. The department also coordinates the Social Science/History Program for secondary-level social studies teachers.

HISTORY PROGRAM

History programs enable students to study diverse societies and cultures while enhancing their abilities to read critically, think clearly, and write effectively. Both the major and minor programs require students to take courses in the histories of Europe and the United States and to select among courses in the histories of Africa, Asia, and Latin America. Majors and minors take courses at both the introductory and advanced levels, as well as the course in Historical Research Methods and Historiography, which instructs them in methods of historical research, interpretation and writing. As a capstone experience, majors complete their course of study in a two-course Senior Seminar sequence, which requires them to produce an original research project (a Senior Thesis) and enables them to practice, reinforce and expand upon what they learned in the program. History programs, providing a broad range of academic experiences, enhance students' intellectual skills and understanding of the present, while promoting informed citizenship in a rapidly changing world.

History programs provide reliable preparation for any career prizing analytical ability, clear thinking, and strong communication skills. The programs also form a solid basis for graduate study in law, history, and other liberal arts fields. The department strongly recommends study of foreign languages to students who are interested in studying history at the graduate level.

PARALEGAL PROGRAM

The Paralegal program enables students to develop both intellectual and professional skills in the law. It is designed to meet the needs of students wishing to enter a career that demands knowledge and experience with legal systems and institutions. This includes careers working for law firms, government agencies, insurance companies, banking institutions, and more. It also serves as an excellent preparation for law school.

The program is an interdisciplinary program within the College of Liberal Arts that develops skills in legal research; writing and investigation; and a deeper understanding of the substance, politics and history of the law. The American Bar Association approves the WSU Paralegal Program. For more information about the Paralegal Program, see page 173.

SECONDARY-LEVEL SOCIAL STUDIES AND HISTORY TEACHING

Students interested in teaching history at the high school and middle level need to complete a broad field program in history and the social sciences in preparation for licensure as a "social studies" teacher. There is no license in Minnesota for teaching only history. The Minnesota Board of Teaching, not Winona State University, defines the scope of teaching licenses. For the broad field program for social studies teachers, refer to B.S. Social Science/History (Teaching) on page 199. The education component of the program, called the Professional Education Sequence, is described in the Education Department section of this catalog (page 90).

LAW AND SOCIETY PROGRAM

The Law and Society Program is an interdisciplinary major that enables students to study law and legal culture from many different disciplinary, conceptual, historical, theoretical, and empirical perspectives. For more information about the Law and Society Program, see page 142.

DEPARTMENT SCHOLARSHIPS AND AWARDS

The History Department offers four scholarships each year. Contact the department office for further information.

- Junior and senior history majors with a strong interest in historical research may apply for the Jederman Scholarship established in the memory of Frederick A. Jederman who taught history at WSU from 1924 to 1964.
- Junior history majors may apply for the Norman and Clare Sobiesk Scholarship, honoring Dr. Norman Sobiesk, who taught history at WSU from 1970 to 2005.
- History and paralegal majors are eligible for the Marvin and Muriel Palecek Scholarship, honoring Dr. Marvin Palecek, who taught history at WSU from 1964 to 1985.
- Paralegal students may apply for the Association of Paralegal Students Alumni Scholarship established by graduates of the Paralegal Program.

MUSEUM INTERNSHIP OPPORTUNITIES

The department offers for-credit internship opportunities in the Winona County Historical Society Museum and other historical museums for students interested in exploring careers in the field of public history. Contact the department office for further information.

PROGRAM RESULTS AND ASSESSMENT

The department believes that the history major should produce the following educational results for students:

Skills

- Enhance students' ability to critically read and evaluate historical scholarship.
- Develop students' ability to understand the main lines of historiographic debate concerning a topic and frame new questions.
- Develop students' ability to engage in historical research focused on primary sources.

- Develop students' ability to express their ideas clearly in written form.
- Develop students' ability to express their ideas in oral presentations.
- Develop students' capacity for independent, critical thought.
- Develop in students the understanding that history is actually an ongoing interpretive debate and not a series of short answers.
- Provide training that is sufficiently rigorous to permit qualified and motivated students to succeed in graduate programs in history.

Knowledge

- Develop students' understanding of both long-term trends and discrete events in the history of the United States, Europe, and at least two other cultural groups.
- Develop students' ability to consider the past in terms of both change and continuity.
- Develop students' ability to identify and explain change over time.
- Develop students' understanding of the ways in which change affects different groups in different ways.

Values

- Enhance students' ability to use the skills promoted by the history program in their life and career plans.
- Enhance students' toleration of diverse peoples and cultures.
- Enhance students' ability to act as responsible citizens who make informed, reasoned judgments.
- Develop students' commitment to a life-long search for learning and truth.
- Promote among students a collaborative work and learning ethic.

The department has adopted a plan to use samples of student work to assess the program's effectiveness and need for change.

ADDITIONAL REQUIREMENTS

Coursework below a grade of "C" in 300- and 400-level courses does not count toward completion of the history major or minor program.

PASS/NO CREDIT (P/NC) COURSES

No history course can be taken on a P/NC basis, with the exceptions of internships and institutes.

TRANSFER STUDENTS

For the B.A. history major, transfer students must complete at least 18 semester hours of WSU history coursework in addition to the Senior Seminar. Transfer coursework completed on a P/NC basis is not accepted for the WSU history major or minor. Transfer students who wish to complete the B.A. history minor must complete at least 12 semester hours in WSU history coursework.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The History Department offers the following flag courses in the University Studies Program:

FLAG

Oral I	HIST 315 Women in U. S. History (3)	HIST 370 Legal Research and Writing I (3)
	HIST 385 Trial Advocacy (1) (may be repeated up to a maximum of 3 credits)	HIST 428 The History of Biography (3)
	HIST 398 Topics in History with Oral Communication Emphasis (3)	HIST 463 History of Mexico (3)
Math/Critical Analysis O		HIST 467 Foreign Travelers in "Exotic" Lands (3)
	HIST 372 Legal Research and Writing II (3)	HIST 484 Depression, New Deal, and War (3)
	HIST 495 Senior Research Seminar I (3)	HIST 485 Contemporary America (3)
Writing P		HIST 488 American Constitutional History (3)
	HIST 365 American Legal History (3)	HIST 496 Senior Research Seminar II (3)

Flag courses that can be used to satisfy History major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - HISTORY (HIST)

48 S.H. (No Minor Required)

REQUIRED COURSES (28 S.H.)

Western Civilization Sequence - HIST (6 S.H.)

Two of the following:

- 120 Western Civilization to 1500 (3)
- 121 Western Civilization, 1500 to 1815 (3)
- 122 Western Civilization, 1815 to Present (3)

Note: Students can substitute HIST 125 (Classical History) for HIST 120 (Western Civilization to 1500)

United States History Sequence - HIST (6 S.H.)

Two of the following:

- 150 United States History to 1865 (3)
- 151 United States History Since 1865 (3)
- 214 The Mississippi River in U.S. History (3)

Developing Societies and Different Cultures Sequence - HIST (6 S.H.)

Two of the following:

- 123 East Asian Civilization (3)
- 165 Latin American History (3)
- 170 African Civilization (3)
- 220 Introduction to African-American History (3)
- 235 History of the American Indian (3)

Other Required History Courses - HIST (9 S.H.)

- O 495 Senior Research Seminar I (3)
- P 496 Senior Research Seminar II (3)

ELECTIVES (21 S.H. 300- and 400-level courses)

Electives are subject to an advisor's approval.

- Students must take at least 3 S.H. in each of the three sequence areas: European, United States, and Developing Societies and Different Cultures.

- The courses, Topics in History (HIST 397) and Independent Readings in History (HIST 499), are counted in the sequence area the department deems appropriate.
- History majors cannot count Paralegal Sequence courses (HIST 370, HIST 381, HIST 372, HIST 373, HIST 374, HIST 375, HIST 376, HIST 377, HIST 380 and HIST 383) and the Historical Museum Internship (HIST 390) as electives in the history major program.

B.A. MINOR - HISTORY (HIST)

27 S.H.

REQUIRED COURSES (18 S.H.)

Western Civilization Sequence - HIST (6 S.H.)

Two of the following:

- 120 Western Civilization to 1500 (3)
- 121 Western Civilization, 1500 to 1815 (3)
- 122 Western Civilization, 1815 to Present (3)

Note: Students can substitute HIST 125 (Classical History) for HIST 120 (Western Civilization to 1500)

United States Sequence - HIST (6 S.H.)

Two of the following:

- 150 United States History to 1865 (3)
- 151 United States History Since 1865 (3)
- 214 The Mississippi River in U.S. History (3)

Developing Societies and Different Cultures Sequence - HIST (3 S.H.)

One of the following:

- 123 East Asian Civilization (3)
- 165 Latin American History (3)
- 170 African Civilization (3)
- 220 Introduction to African-American History (3)
- 235 History of the American Indian (3)

Research Requirement - HIST (3 S.H.)

- 298 Historical Research Methods and Historiography (3)

ELECTIVES (9 S.H.)

Students must select 9 S.H. in coursework at the 300- and 400- levels with the approval of a History Department advisor.

- The department suggests students consider taking all the elective courses in one sequence area.
- History minors may not count Paralegal Sequence courses (HIST 370, HIST 371, HIST 372, HIST 373, HIST 374, HIST 375, HIST 376, HIST 377, HIST 380, and HIST 383) and the Historical Museum Internship (HIST 390) as electives in the history minor program.

COURSE DESCRIPTIONS (HIST)**101 - Introduction to Law and Society (1 S.H.)**

An introduction to interdisciplinary studies as it relates to the law and society major. Students will examine a series of historical and contemporary legal issues from a variety of disciplinary perspectives. This course is required of all law and society majors. Grade only.

120 - Western Civilization to 1500 (3 S.H.)

A survey of Western traditions and institutions from their beginnings in Egypt and Mesopotamia through Greece, Rome and the Middle Ages. Grade only. Offered each semester.

121 - Western Civilization 1500-1815 (3 S.H.)

A survey of the European Renaissance, Protestant Reformation, development of the nation state, the Enlightenment, Commercial and Industrial Revolution, the French Revolution and the Napoleonic era. Grade only. Offered each semester.

122 - Western Civilization 1815 to Present (3 S.H.)

A survey of European traditions and institutions from the fall of Napoleon to the present, stressing the Industrial Revolution, nationalism, imperialism, the rise of totalitarianism, World War II, the Cold War and post-Cold War problems. Grade only. Offered each semester.

123 - East Asian Civilization (3 S.H.)

A survey of China, Korea, and Japan from the pre-modern era to the present. The course analyzes traditional institutions and values and responses to Western imperialism. Topics include Japan's Meiji Restoration and expansionism, Japanese colonial rule in Korea, traditional China's collapse and revolutionary movements, World War II, the Korean War, China's Communist reconstruction and post-communist economy, the continued partition of the Korean Peninsula, North Korean nuclear ambitions, and Japan's re-emergence as a world power. Grade only.

125 - Classical History (3 S.H.)

The history of Greece from the Homeric time of Plato to the Roman Republic. Grade only.

150 - United States History to 1865 (3 S.H.)

A survey of United States history from prehistoric times to the American Civil War. Special emphasis is placed on political developments and public policy as well as the origins and consequences of slavery and ethnic, cultural, and regional diversity and conflict. Also emphasized is the transformation of social and economic systems. Grade only. Offered each semester.

151 - United States History Since 1865 (3 S.H.)

A survey of United States history since the American Civil War with special emphasis on post-Civil War Reconstruction, late 19th-century economic and social developments and 20th-century reform movements. Additionally, foreign policy and the overseas expansion of the U.S. economy receive attention, as do Cold War and post-Cold War developments. Grade only. Offered each semester.

165 - Latin American History (3 S.H.)

A survey of Latin American history from pre-Columbian times to present including the colonial period, the struggle for independence and the rise of modern Latin American nations. Special emphasis is placed on Argentina, Brazil, Chile and Mexico. Grade only.

170 - African Civilization (3 S.H.)

A survey of African history from prehistoric times to the present. The emphasis is on African social, cultural, and political history. The periods of study include Africa in the ancient world, medieval Africa, the slave trade, the era of European colonialism, the rise of nationalism, and independence movements and contemporary Africa. Grade only.

214 - The Mississippi River in U.S. History (3 S.H.)

A survey of the significance of the Mississippi River in U.S. history. The course emphasizes the role of the river in Native-American life and early European exploration of the Midwest, and the efforts of European powers and the newly created U.S. to control the river. The course also studies the role of the river in economic change, slavery, pre-Civil War immigration, and federal policy. The course will also consider the western theater of the Civil War; the post-war bridging of the river and industrial development along it; and its 20th century flooding, damming, and related controversies. Grade only.

215 - Minnesota History (3 S.H.)

History of the land and people of Minnesota. Emphasis is on social, cultural, economic, and political history of indigenous and immigrant groups in Minnesota during the 19th and 20th centuries. Grade only.

220 - Introduction to African American History (3 S.H.)

This course will introduce students to African American history. It examines the full breadth of African American history, starting with Africa in the years before the international slave trade and concluding with the Civil Rights movement and more recent developments in the United States. History majors and minors may count this class among their history electives. Grade only.

235 - History of the American Indian (3 S.H.)

This course traces the history of Native Americans from pre-Columbian times forward to the present day. It emphasizes both the broad, shared experience of natives, regardless of tribal identity, and the more particular experience of individual tribal groups, especially those of the Upper Midwest and Plains regions. Prerequisites: ENG 111 or instructor's permission. Grade only.

298 - Historical Research Methods and Historiography (3 S.H.)

An introduction to historical research and criticism that exposes students to the sources, resources and techniques of research and evaluation of research as well as divergent historiography traditions. Prerequisites: History major or minor standing, law and society major standing, or social science/history major standing and ENG 111. Limited to 20 students. Instructor's permission required. Grade only.

360 - Introduction to Historical Museums (3 S.H.)

This course provides students with an overview of the field of historical museums and public history. It will examine the history of museums, museum management, collections care, management of historical libraries and archives, fundraising and budgeting, and the development of exhibits and public programming. It will also survey opportunities available in public history. Required student projects will make use of the resources of the Winona County Historical Society. Prerequisites: HIST 150 and 151. Grade only.

390 - Historical Museum Internship (3-15 S.H.)

Placement in the Winona County Historical Society Museum or other historical museum for the purpose of experience and training in the field of public history. Prerequisite: HIST 360 and permission of the department. Internship credits may not be counted toward completion of the history major or minor.

397 - Topics in History (1-3 S.H.)

In-depth study of current topics in society and the historical profession. With different topics, can be repeated. Grade only.

398 - Topics in History with Oral Communication Emphasis (3 S.H.)

In-depth study of topics of current concern to historians including newer areas of research, emerging themes, and recent interpretive debates. The assignments will include an emphasis on discussion and oral presentations.

428 - The History of Biography (3 S.H.)

This course provides an examination of the history of the literary form known as biography and autobiography. The course examines five different types of biographies that have evolved from the time of Plutarch to the present. Students will examine texts and determine what makes the biography effective (or not) as an illustration of the human condition. Grade only.

495 - Senior Research Seminar I (3 S.H.)

This course, offered in the fall semester, is the first of a two-course sequence in which students develop their Senior Thesis topic that will be intensively researched and written in HIST 496 the following spring semester. While the work in this class builds on all the coursework done by students as History or Law and Society majors at Winona State University, it also develops students' understanding of primary/secondary sources and historiographic thinking as taught in HIST 298. Prerequisite: Major status in history or social science/history or law and society, senior standing, and HIST 298. Students must be carrying no Incompletes at time of registration. Instructor's permission required. Grade only.

496 Senior Research Seminar II (3 S.H.)

The central and overriding focus of this course is the research and writing of the student's Senior Thesis, the topic that students developed in HIST 495 Senior Seminar I. Students, in constructing and writing their thesis, will do research into primary, original source materials. Historiographic analysis and writing is also an important component of the thesis. Prerequisites: History, Law and Society, or Social Science/History Major status, senior standing, HIST 298, HIST 495, and instructor's permission. Grade only.

499 - Independent Readings in History (1-3 S.H.)

The exact nature of this course will be determined by the needs of the student. May be repeated to a maximum of nine credit hours. The student must have written consent of the instructor. Offered each semester.

Histories of Developing Societies and Different Cultures Sequence

320 - North American Indian Civilization (3 S.H.)

This course examines important issues in the history of North American Natives: prehistoric interactions among Native groups, Native reaction and interaction with early Europeans, cultural issues such as the outlawing of Native languages and Native customs, the American Indian Movement, the First Nations Movement, and the anti-Columbus protests. It discusses both Canada and the United States in an effort to include all North American Native groups. Prerequisite: HIST 235. Grade only.

341 - Modern Japan (3 S.H.)

The course traces and analyzes the principal developments that shaped modern Japan. Beginning with examination of 17th- and 18th-century Tokugawa culture and institutions, the course will then explore the sources and consequences of the revolution Meiji "Restoration." The course will then consider Japan's march toward the Pacific War, and the post-World War II revival. Prerequisites: HIST 123 and ENG 111 or instructor's permission. Grade only.

343 - Modern China (3 S.H.)

This course permits in-depth study of the major events and issues in China's dynamic transformation from the world's oldest and largest bureaucracy to a revolutionary state and its subsequent evolution to the contemporary political and economic phenomenon we know today. Tracing pre-modern legacies that have helped shape China, the course covers the decline and fall of the Qing dynasty through the creation of Communist China and the unfolding of the post-Mao, so-called "reform era." The course will also address the lesser-known areas of Tibet and Xinjiang Uyghur Autonomous Region, as well as Hong Kong and Taiwan. Grade only.

461 - Latin American Social Revolution (3 S.H.)

An analysis of Latin American's major revolutionary movements of the 20th century and their differing ideologies. Special emphasis on revolutionary movements in Mexico, Bolivia, Cuba, and Central America. Grade only.

463 - History of Mexico (3 S.H.)

This course provides an in-depth examination of the history of the Mexican nation from pre-historic times to the present. Themes discussed include the Native American and Spanish roots of Mexican culture, the coming of independence and the construction of the nation state, the liberal-conservative conflict, the Mexican Revolution of 1910, the continuing Mexican Revolution, and the rise of the neo-Porfirian state in recent decades. Grade only.

467 - Foreign Travelers in "Exotic" Lands (3 S.H.)

This course is designed to provide students with an opportunity to study select British and American travelers in the nineteenth and twentieth centuries who visited and wrote about "Exotic" places such as South America, Mexico, Africa, or the South Sea Islands. The course explores what happens to these writers at the "point of contact" and will critique their subsequent evaluations of the different cultures that they visited. Grade only.

468 - History of the Andean Nations (3 S.H.)

This course provides students with an in-depth examination of the history of the Andean nations of Colombia, Ecuador, Peru, and Bolivia from pre-Hispanic times to the present. Emphasis will be placed on the development of an indigenous culture's adaptation to their environment; the emergence of sophisticated urban traditions and cultures; the growth of the Inca empire; the encounter with the Spanish in the 16th century; the evolution of a unique Andean culture; the growing conflicts within the imperial system that led to independence; the quest for nationhood and modernization in the 19th century; and the rise of populism, social reformers, militarism, drug trafficking, and other current challenges. Grade only.

469 - History of Brazil (3 S.H.)

Brazilian history from European discovery to the present. The course emphasizes Portuguese exploration and colonization, the development of slavery and its abolition, and Brazil's experience with industrialization and world power status. Grade only.

United States History Sequence

315 - Women in U.S. History (3 S.H.)

A survey of the history of women in the United States, from the colonial period to the present. Topics to be covered include changing ideas about women and the changing nature of the family, sexuality, women's political activity, and paid and unpaid work. The course also examines the way in which gender has combined with other social definitions—such as race, ethnicity and age—to shape the experiences of both men and women in U.S. history. Prerequisites: HIST 150 or HIST 151 and ENG 111. Grade only.

325 - American Diplomatic History (3 S.H.)

Traces and analyzes the major developments in modern American diplomacy. The course will examine 19th-century traditions, but will focus on the impact of domestic concerns and overseas wars and revolutions on the 20th century

global expansion of American interests, ideology, and power. Prerequisites: HIST 150 or HIST 151 or instructor's permission. Grade only.

345 - History of American Sports (3 S.H.)

An historical look at the place and value of sport in American culture. Grade only.

365 - American Legal History (3 S.H.)

An overview of Anglo-American legal history from pre-colonial England to the present. Emphasis will be placed on the evolution of substantive law, including real property law, business law, family law, and personal injury law. The class emphasizes legal development in social, political, and economic contexts. Prerequisites: HIST 150 and HIST 151 or instructor's permission. Grade only.

385 - Trial Advocacy 1 (3 S.H.)

This course is designed to be an intensive introduction to United States trial law and techniques. Over three semesters, students will have the opportunity to prepare opening statements; direct examinations, cross-examinations, and closing arguments; and to practice those skills in the environment of the American Mock Trial Association intercollegiate competition. Students will earn one credit for each semester they successfully participate in the course, up to a maximum of three credits. Prerequisite: Junior standing.

447 - America in the Vietnam War Era (3 S.H.)

An historical survey of the Vietnamese War with the growing American involvement and the subsequent American effort to disengage without loss of prestige. The course will include the study of American objectives in this war and the subsequent impact upon American society. Prerequisite: HIST 151 or instructor's permission. Grade only.

476 - The American Revolution (3 S.H.)

This course examines the origins of the Revolution; the War for Independence; social, economic, and cultural change during the Revolution; and the origins, and creation, and ratification of the Constitution of 1787. Prerequisites: HIST 150 or instructor's permission. Grade only.

477 - The Age of Jackson (3 S.H.)

Traces the political, social, intellectual, and cultural development of the United States from the 1820s through the 1840s. Topics include Jacksonian politics, Manifest Destiny and the Mexican War, northern society, the South and slavery, ante-bellum reform movements and Romanticism. Prerequisite: HIST 150. Grade only.

478 - The Old South (3 S.H.)

This course examines many issues, topics, and themes central to the history of the American South (ca. 1800 to 1860). Among the key topics that we look at are the colonial origins, the origins and evolution of planter culture, the nature of yeomen society, the diverse lives of southern women, the economics of slavery, slave life and culture, the politics of slavery and the coming of the Civil War, and the rise and fall of the Confederacy. Grade only.

479 - The Civil War and Reconstruction (3 S.H.)

Explores the culture and society of ante-bellum America, origins of the war, and political and military development of the war. The course will then explore Reconstruction of the Southern political, social and economic orders and the southern counter-revolution of the 1870s. Prerequisite: HIST 150 or instructor's permission. Grade only.

480 - Gilded Age of America (1877-1900) (3 S.H.)

Explores late 19th-century corporate, industrial development and its social, cultural and political consequences. The course pays special attention to both old-fashioned, communitarian counter-attacks and progressive, radical opposition to the new economic order in rural and urban settings. It also explores the mass immigration and new urban political and social structures that economic change generated. The course concludes with consideration of the emergence of the New Empire amidst the Spanish-American War. Prerequisites: HIST 151 and ENG 111 or instructor's permission. Grade only.

481 - American Westward Expansion (3 S.H.)

Examines the historical West versus the mythical West. Compares stereotypes and popular images of the West and its inhabitants to the cultural, political, and social diversity of the American West. Traces the development of Western history from first contact to the present. Prerequisites: HIST 150 and HIST 151 or instructor's permission. Grade only.

483 - The Progressive Era and the "New Era" Twenties (1901-1929) (3 S.H.)

Consideration will be given to the cultural and economic crisis of the 1890s, the progressive impulse, varieties of progressive reform, progressive foreign policy and World War I, postwar adjustment problems and select social phenomena of the Twenties. The course will conclude with study of Herbert Hoover's economic and political vision. Prerequisite: HIST 151 or instructor's permission. Grade only.

484 - Depression, New Deal and War (1929-1945) (3 S.H.)

The course explores the Great Depression, which began in 1929 with emphasis on the economic, social and psychological causes and consequences, Herbert Hoover's responses to it and FDR's New Deal Revolution, and the role of the United States in World War II and developments on the home front. Prerequisite: HIST 151 or instructor's permission. Grade only.

485 - Contemporary America 1945-Present (3 S.H.)

The course explores the causes and consequences of the Cold War including McCarthyism, U.S. involvement in the Korean War, and selected post-war problems in foreign policy, mass society and social alienation. It also explores the reforms and social movements of the Great Society era and the development of contemporary conservatism and consumer-oriented neo-liberalism. Prerequisite: HIST 151 or instructor's permission. Grade only.

486 - American Intellectual and Cultural History (3 S.H.)

The course focuses on the development of basic concepts in American political, religious, philosophical, scientific and social thought, and on their impact on American culture from the colonial period to the present. Prerequisite: HIST 150 or HIST 151 or instructor's permission. Grade only.

488 - American Constitutional History (3 S.H.)

A study of the origins, growth, and development of the United States Constitution in the context of American social and political history. Prerequisite: HIST 150 or HIST 151 or instructor's permission. Grade only.

European History Sequence**330 - Psycho-history (3 S.H.)**

The application of psychoanalytical theory to history. Part of the course will focus on the study of psychoanalytic theory. The rest of the course will focus on the application of theory to history. Grade only.

335 - The Holocaust (3 S.H.)

An historical study and analysis of the Nazi Holocaust from 1933 to 1945.

340 - History of Christianity (3 S.H.)

The development of Christianity from the time of Christ to the present, with emphasis on the interplay between Christianity and the political, economic, social, and cultural structures of various historical ages. Grade only.

350 - The History of Attitudes Toward Death (3 S.H.)

A look at the attitudes toward death in various societies. Prerequisites: ENG 111 or instructor's permission. Grade only.

355 - European Intellectual and Cultural History (3 S.H.)

A study of the history of the development and basic concepts in European religious, philosophical, political, legal, scientific, and social thought and their impact on Western culture. Grade only.

401 - Ancient Rome (3 S.H.)

The rise of Rome from a small republic to empire; the decline and fall of the empire. The Roman contribution to Western civilization. Prerequisite: HIST 120 or instructor's permission. Grade only.

403 - Middle Ages (3 S.H.)

The decline of the Roman Empire, the Germanic kingdoms, the early Christian Church, the development of feudalism and manorialism, the economic recovery of Europe, civilization of the High Middle Ages, rise of the national monarchies. Prerequisite: HIST 120 or instructor's permission. Grade only.

408 - Renaissance (3 S.H.)

The rise of commerce, development of the national monarchies, growth of the Italian city-states, secularization of society, humanism, and art in Italy and in Northern Europe, new scientific discoveries, and expansion of Europe. Prerequisites: HIST 120 and HIST 121 or instructor's permission. Grade only.

409 - Reformation (3 S.H.)

A study of the religious background of 16th-century Europe. The rise of Lutheranism, Calvinism, Anabaptism, and Anglicanism. The Catholic Counter-Reformation. Prerequisite: HIST 120 and HIST 121 or instructor's permission. Grade only.

412 - French Revolution and Napoleon (3 S.H.)

Intellectual, cultural, economic, and political origins of the French Revolution; a decade of revolution; the Napoleon Era; and the legacy of the revolution. Prerequisite: HIST 121 or instructor's permission. Grade only.

417 - Hitler and Nazi Germany (3 S.H.)

Emphasis will be given to the factors which led to Nazism, the personality of Hitler, his drive for world domination, and the Nuremberg trials. Prerequisite: HIST 122 or instructor's permission. Grade only.

421 - Tudor and Stuart England (3 S.H.)

The transition from medieval to modern England, the Reformation, the Age of Elizabeth, and the constitutional and social conflicts of the 17th century. Prerequisite: HIST 121 or instructor's permission. Grade only.

423 - Modern England (3 S.H.)

England in the modern era from the height of imperial power to the present. Grade only.

434 - Soviet Russia (1905-Present) (3 S.H.)

The history of the Soviet Union and Russia during the 20th century. Topics include the 1905 and 1917 Revolutions, the development of the Soviet command economy, Stalin's political purges and cultural revolution, World War II, and the Cold War. The course will also discuss the collapse of Soviet

Communism and the Yeltsin era. Prerequisites: HIST 122 and HIST 151 or instructor's permission. Grade only.

440 - World War II (3 S.H.)

An examination of the origins of both the European and Asian phases of the war and of the relationship between political leadership and military strategy. The course will also examine the political, social, and economic developments on the home fronts of the principal belligerents. Prerequisites: HIST 122 and HIST 151 or instructor's permission. Grade only.

Paralegal Sequence**370 - Legal Research and Writing I (3 S.H.)**

The student will become acquainted with commonly used terminology, the need for precision in meaning, and how courts interpret documents; and techniques of legal research, the process of judicial review, the extent of legal reporting, and methods of researching court decisions. Students will draft legal briefs and legal memoranda. Prerequisites: Admission to the paralegal major and advanced sophomore standing. Grade only. Offered yearly.

371 - Substantive Law and Ethics I (2 S.H.)

Students will learn the basic rules of contract law, real property law, torts, including workers' compensation, and legal ethics, and will be expected to practice their skills in legal research and writing. Grade only. Offered yearly.

372 - Legal Research and Writing II (3 S.H.)

Students will expand use of research and writing techniques gained in Legal Research and Writing I (HIST 370) by drafting deeds, leases, negotiable instruments, business agreements, corporate minutes and by-laws, and wills and by researching issues that are relevant to these topics. Students will continue to draft legal briefs and memoranda reflecting their research findings. Prerequisite: HIST 370. Grade only. Offered yearly.

373 - Adversary System: Civil Procedure (2 S.H.)

Basic civil court procedures, such as pleadings; pre-trial discovery; trials and appeals; background of the adversary system; the role of the advocate, judge and jury in the search for justice. Prerequisite: HIST 370. Grade only. Offered yearly.

374 - Evidentiary Rules (2 S.H.)

Acquaints the student with logic of evidentiary rules, value of first-hand evidence, burden of proof, qualification of witnesses, impeachment of witnesses, differentiation between proof and argument, order of proof. Prerequisite: HIST 370. Grade only. Offered yearly.

375 - Substantive Law and Ethics II (3 S.H.)

Students will study the basic elements of probate law, negotiable instruments, bankruptcy, landlord-tenant law with extensive coverage of family law (divorce, separation, and paternity), including the study of motion practice and the Minnesota Rules of Family Court Procedure, pre-trial discovery and conflict resolution techniques as well as ethical issues associated with each. Prerequisite: HIST 372. Grade only. Offered yearly.

376 - Adversary System: Criminal Procedure (2 S.H.)

Supplements HIST 373 (Adversary System: Civil Procedure) and covers criminal pleadings, the grand jury system, criminal pretrial discovery, jury instructions, post-trial sentencing, requirements of a fair hearing, and constitutional legal defenses. Prerequisite: HIST 372. Grade only. Offered yearly.

377 - Practical Legal Investigation Techniques (3 S.H.)

Students will learn the practical techniques used in investigating cases involving traffic, aircraft, personal negligence, employer negligence, product liability, professional malpractice, and criminal investigation. Students also will become acquainted with the technique of working with witnesses. Prerequisites: Admission to the paralegal major. Grade only. Offered yearly.

380 - Paralegal Internship (12 S.H.)

Field placement in a selected organization for the purpose of experience and training as a professional paralegal. Prerequisites: HIST 370, HIST 371, HIST 372, HIST 373, HIST 374, HIST 375, HIST 376 and completion of portfolio. P/NC only.

381 - Paralegal Topics and Issues (3 S.H.)

This course is an approved elective for paralegal majors taken in conjunction with the program-required internship. In addition to selected readings on some aspect of law in contemporary American society, students will engage in a weekly discussion via e-mail with the instructor and fellow students on topics relating to the readings and their internship experience. Students will be evaluated both by the quality of their contribution to these discussions and a final paper that grows out of the readings, internship, and e-mail discussions.

383 - Paralegal Institute (1-3 S.H.)

The Paralegal Institute will cover various specialized topics, which directly relate to areas of the paralegal profession. The specialized institutes will be offered for 1-3 credits and may be repeated to a maximum of 3 credits toward the WSU paralegal degree. P/NC only.

LAW AND SOCIETY

Minné Hall, Room 212 (History Dept) (507-457-5400)

Co-Directors: *Kurt Hohenstein* (History) and *John Campbell* (History)

FACULTY

John Campbell, Professor; B.A., Wesleyan University; M.A., Ph.D., University of Minnesota; 1996 –

Kurt Hohenstein, Assistant Professor, B.A., J.D., M.A., University of Nebraska; Ph.D., University of Virginia; 2005 –

PROGRAM AND ITS BENEFITS TO STUDENTS

As one of the central forces, processes, and institutions in modern life, the law (in all of its guises) merits the liberal-arts-based examination offered by the Law and Society Program. Law and Society is a richly interdisciplinary major that enables interested students to study law and legal culture from many different disciplinary, conceptual, historical, theoretical, and empirical perspectives. The Law and Society program offers numerous benefits for students as they pursue their post-collegiate life:

- Because of their broad-based, multidisciplinary background, graduates of the Law and Society program will be able to participate more effectively and intelligently as citizens in an ever-changing world.
- Successful participation in this program will provide a sound basis and preparation for students hoping to attend law or graduate school. Although law schools are quick to point out that many undergraduate majors in the liberal arts stand as good preparation, the law and society major, with its focus on the law in the context of an interdisciplinary and liberal arts education, will be especially attractive to law schools. Once in law school, knowledge acquired as a law and society major may give students an added advantage in their law school studies.
- Even if law or graduate school is not the ultimate goal for students majoring in this program, the law and society major will endow any Winona State University student with the intellectual interests and abilities to achieve success (and satisfaction) in other post-collegiate endeavors.
- For students pursuing employment after college, successfully majoring in law and society provides graduates with many valuable intellectual skills—thinking analytically, writing and speaking persuasively, reading and listening critically, and researching and organizing data systematically—desired by many employers. Such versatility is all the more desirable in a world where work and careers continually change.
- By having examined the law from many different disciplines, law and society graduates will have valuable expertise to sell when seeking post-collegiate employment. Given the centrality of the law in contemporary American society, there are many potential employers—corporate, governmental, and nonprofit to name a few—who are eager to hire successful law and society majors for their understanding of how the law influences the work-a-day world of employers.

REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for the law and society major include:

1. Being admitted to the program
2. Successfully completing the required courses with a minimum 2.50 GPA.
3. Successfully writing a capstone senior thesis on some topic involving the law. Although there is considerable flexibility in the choice of topic, the actual coursework for the thesis will be done in the history major sequence of Historical Methods (HIST 298) and the Senior Seminar I and II (HIST 495 and 496).

The senior thesis gives students the opportunity to showcase much of their knowledge and understanding by doing their own in-depth research, analysis, and writing.

B.A. MAJOR - LAW AND SOCIETY (LWSO)

75 S.H.

English (2 S.H.)

ENG 225 Topics in Literature (2)

Note: This course should be selected when the topic relates to law and literature. See your advisor for further clarification.

Geoscience (3 S.H.)

** GEOS 325 Environmental Geoscience (3)

History (16 S.H.)

HIST 101 Introduction to Law & Society (1) (Usually offered fall semester.)

One of the following:

* HIST 120 Western Civilization: Beginning-1500 (3)

* HIST 121 Western Civilization: 1500-1815 (3)

* HIST 122 Western Civilization: 1815-Present (3)

One of the following:

* HIST 150 U.S. History to the Civil War (3)

* HIST 151 U.S. History Since the Civil War (3)

All of the following:

HIST 355 European Intellectual & Cultural History (3)

P HIST 365 American Legal History (3)

P HIST 488 Constitutional History (3)

Mass Communication (6 S.H.)

MCOM 100 Mass Media & Society (3)

I MCOM 405 Issues and Ethics (3)

Philosophy (6 S.H.)

PHIL 210 Inductive Reasoning (3)

PHIL 332 Philosophy of Law (3)

Political Science (9 S.H.)

* POLS 120 Introduction to American Politics (3)

POLS 227 Judicial Process and Politics (3)

POLS 320 Constitutional Law (3)

Psychology (6 S.H.)

* PSY 210 Introduction to Psychological Science (3)

PSY 330 Psychology and the Law (3)

Sociology (6 S.H.)

* SOC 150 Introduction to Sociology (3)

SOC 210 Introduction to Criminal Justice (3)

Senior Writing & Research Requirement (9 S.H.)

HIST 298 History - Historical Methods (3)

O HIST 495 History - Senior Seminar I (3)

P HIST 496 History - Senior Seminar II (3)

Note: If another department within the College of Liberal Arts develops a senior writing project similar to that required in the History

Department's methods and seminar courses, it may be substituted for HIST 298, 495, and 496. It is important that the research and writing project focus on some aspect of legal culture.

APPROVED ELECTIVES (12 S.H.)

History - HIST

486 American Intellectual & Cultural History (3)

Mass Communication - MCOM

O 300 Mass Media Law (3)

Political Science - POLS

220 Civil Rights: Civil Liberties (3)

**P 260 Development of Political Thought (3)

**P 358 Contemporary Political Thought (3)

I 421 The First Amendment (3)

**P 450 Feminist Political Theory (3)

Psychology - PSY

430 Forensic Psychology (3)

Social Work - SOCW

425 Law and Social Work (3)

Sociology/Criminal Justice - SOC

315 Criminology (3)

425 Social Change and Social Movements (3)

431 Social Class and Power (3)

** These courses have specific prerequisites. Students must either satisfy these prerequisites or get permission from the instructor.

LIBRARY SCIENCE

Darrell W. Krueger Library, Room 110 (507-457-5151)
General Inquiries: Refdesk@winona.edu
Vernon Leighton (Chairperson)

FACULTY

Russell Dennison, Instruction Librarian, Professor; B.A., Central College; M.A.L.S., University of Wisconsin-Madison; 1980 –
Mark J. Eriksen, Coordinator of Access Services, Assistant Professor; B.A., Ohio State University; M.L.S., Kent State University; M.S., South Dakota State University; 1998 –
Joe Jackson, Systems and Cataloging Librarian, Associate Professor; B.A., University of Minnesota; B.A., University of Lyon; M.S., Simmons College; M.A., Arizona State University; 1997 –
Kendall Larson, Information Gallery Librarian and Coordinator of Public Service, Associate Professor; B.A., Gustavus Adolphus College; M.A., University of Wisconsin-Madison; 2001 –
H. Vernon Leighton, Coordinator of Liaison Services and Government Documents Librarian, Professor; B.A., Bucknell University; M.S., University of Illinois; 1990 –
Joe Mount, Collection Development Librarian, Assistant Professor; B.A., Wake Forest University; M.A., Ohio University; M.L.S., Indiana University-Bloomington; 1994 –
Allison Quam, Reference and Liaison Librarian, Assistant Professor; B.A., University of Wisconsin-La Crosse; M.F.A., M.L.S., University of Maryland; 2006 –
Kathryn Sullivan, Coordinator of Non-Print Resources and Distance Education, Professor; B.A., M.A., Northern Illinois University; D.Sc., Nova University; 1978 –

PURPOSE

The Library Department does not have a major/minor program per se; however, the department offers courses in computerized information retrieval to help researchers become more effective at using modern information technology to locate relevant material. Students who wish to make library science a professional career are encouraged to pursue a broad-based program of study with courses from many different fields.

LIBRARY SCIENCE (LIBS) COURSE DESCRIPTIONS

100 - Introduction to Online Information Searching (1 S.H.)

An introduction to tools and strategies for locating information in cyberspace. Emphasis is on using online public access catalogs, databases, Web search engines, subject-specific resources, and search strategies for these specific resources.

200 - Topics in Library/Information Science (1-2 S.H.)

A variable content course examining different topics in library and information science. Can be repeated as topics change.

MANAGEMENT OF INFORMATION SYSTEMS AND OPERATIONS

Somsen Hall, Room 324 (507-457-5170)
<http://www.winona.edu/business/miso>
Sobail Subhani (Chairperson)

FACULTY

Marzie Astani, Professor, B.A., Tehran University; M.S., Ph.D., Iowa State University of Science and Technology; M.B.A., Central Michigan University; 1987 –
Edward A. Duplaga, Professor; B.S., Bowling Green State University; M.B.A., Ph.D., University of Iowa; 2001 –
Patrick Paulson, Associate Professor; B.S., M.S., Illinois Institute of Technology; J.D., Indiana University; 2000 –
Kihyun Kim, Assistant Professor; B.B.A, M.B.A, Korea University; M.A., Ph.D., University of Nebraska, Lincoln; 2004 –
Kimberlee Snyder, Professor; B.S., Kansas State University; M.B.A., Ph.D., New Mexico State University; 2000 –
Sobail Subhani, Associate Professor; B.S., University of Karachi; M.B.A., Ph.D., University of Texas, Arlington; 2002 –

PURPOSE

The Management of Information Systems and Operations (MISO) Department is committed to fostering excellence in both the management information systems (MIS) and operations management (OM) disciplines through a progressive curriculum and the application of state-of-art technology. Students who pursue an education in MIS will develop an understanding of the integration of information systems technologies into various business areas. Students who pursue an education in OM will develop an understanding of the process of managing products and services throughout the supply chain.

GRADUATION REQUIREMENTS

1. Complete all course work required for the major.
2. Achieve a grade of "C" or better in all courses that count toward the major.
3. Complete a minimum of 15 credit hours of 300/400 level courses from the MISO Department at WSU.
4. None of the courses required for a major or minor may be taken on a P/NC basis.
5. Complete a minimum of 50% of the business courses in the major at WSU.
6. Sixty-four non-business credits are required for the MIS major. Of the math, statistics, and economics courses required for the major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.
7. Meet all WSU graduation requirements. For a checklist of the University's graduation requirements, see page 23.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The MISO Department offers the following flag course in the University Studies Program:

FLAG

Writing P

MIS 482 Management of Information Technology (3)

Flag courses that can be used to satisfy MIS and OM major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - MANAGEMENT INFORMATION SYSTEMS (MIS)

76 S.H. (No Minor Required)

UNIVERSITY STUDIES REQUIREMENTS

Mathematics (3 S.H.)

MATH 140 Applied Calculus (3)

REQUIRED COURSES (67 S.H.)

Accounting (6 S.H.)

ACCT 211 Financial Accounting Principles (3)

ACCT 212 Managerial Accounting Principles (3)

Business Administration (15 S.H.)

O BUSA 220 Business Statistics (3)

BUSA 291 Legal Environment of Business (3)

BUSA 320 Intermediate Business Statistics (3)

P MGMT 325 Organizational Dynamics (3)

I MGMT 495 Strategic Management (3)

Economics and Finance (9 S.H.)

* ECON 201 Principles of Microeconomics (3)

* ECON 202 Principles of Macroeconomics (3)

FIN 360 Corporate Finance (3)

Marketing (3 S.H.)

MKTG 300 Principles of Marketing (3)

Mathematics (4 S.H.)

MATH 210 Foundations of Mathematics (4)

MANAGEMENT OF INFORMATION SYSTEMS & OPERATIONS

Management Information System (24 S.H.)

MIS 202 Microcomputers in Business (3)

MIS 312 Business Computer Programming (3)

MIS 342 Advanced Business Computer Applications (3)

MIS 362 Management Information Systems (3)

MIS 372 Management of Business Systems Development (3)

MIS 412 Management of E-Commerce (3)

MIS 452 Management of Telecommunication Systems (3)

P MIS 482 Management of Information Technology (3)

Operations Management (6 S.H.)

OM 334 Operations Management (3)

OM 464 Project Management (3)

ELECTIVES (6 S.H.)

ACCT 330 Accounting Information Systems (3)

ACCT 361 Intermediate Managerial/Cost Accounting (3)

BUSA 340 Management Science (3)

FIN 335 Forecasting Methods (3)

FIN 440 International Finance (3)

MGMT 435 Managing for Quality (3)

MIS 332 Business Programming Tools (3)

MIS 399 Internship Problems (3)

MIS 462 Decision Support Systems (3)

MIS 472 Management of LANs and WANs (3)

MIS 492 Topics in MIS (3)

OM 414 Operations Planning and Control (3)

OM 434 Quality and Productivity Management (3)

B.S. MINOR - MANAGEMENT INFORMATION SYSTEMS (MIS)

21 S.H.

REQUIRED COURSES (12 S.H.)

MIS 202 Microcomputers in Business (3)

MIS 312 Business Computer Programming (3)

MIS 342 Advanced Business Computer Applications (3)

MIS 362 Management Information Systems (3)

ELECTIVES (9 S.H.)

ACCT 330 Accounting Information Systems (3)

BUSA 340 Management Science (3)

FIN 335 Forecasting Methods (3)

MIS 332 Business Programming Tools (3)

MIS 372 Management of Business Systems Development (3)

MIS 412 Management of E-Commerce (3)

MIS 452 Management of Telecommunication Systems (3)

MIS 472 Management of LANs and WANs (3)

P MIS 482 Management of Information Technology (3)

MIS 492 Topics in MIS (3)

OM 464 Project Management (3)

B.S. MINOR - OPERATIONS MANAGEMENT (OM) 24 S.H.

REQUIRED COURSES (15 S.H.)

O BUSA 220 Business Statistics OR

STAT 210 Statistics (3) OR

STAT 303 Introduction to Engineering Statistics (3)

OM 334 Operations Management (3)

OM 414 Operations Planning and Control (3)

OM 434 Quality and Productivity Management (3)

OM 464 Project Management (3)

ELECTIVES (9 S.H.)

ACCT 361 Intermediate Managerial/Cost Accounting (3)

ACCT 462 Advanced Managerial/Cost Accounting (3)

BUSA 340 Management Science (3)

ENGR 390 Composites Manufacturing (3)

ENGR 420 Computer Integrated Manufacturing (3)

MIS 342 Advanced Business Computer Applications (3)

MIS 412 Management of E-Commerce (3)

MIS 462 Decision Support Systems (3)

OM 344 Purchasing (3)

OM 399 Internship Problems (3)

OM 444 Operations Strategy (3)

OM 494 Current Topics in OM (3)

O STAT 320 Statistical Quality Control (3)

STAT 321 Industrial Design of Experiments I (3)

STAT 350 Design of Samples and Surveys (3)

COURSE DESCRIPTIONS

MANAGEMENT INFORMATION SYSTEMS (MIS)

202 - Microcomputers in Business (3 S.H.)

An introduction to some of the more commonly used software packages for business decision-making. Spreadsheet, business graphics, database, and integrated software are introduced. Grade only. Offered fall and spring semesters.

312 - Business Computer Programming (3 S.H.)

An object-oriented approach to business systems development and programming using the latest tools. Problem solving techniques with emphasis on business applications, including file and database access. Grade only. Offered fall and spring semesters.

332 - Business Programming Tools (3 S.H.)

Introduction to advanced programming tools. The student will document, compile, test, and debug business application problems using new application development tools and techniques. Prerequisite: MIS 312. Grade only.

342 - Advanced Business Computer Applications (3 S.H.)

The focus of this course is on the development and management of business database systems. It provides the theoretical concepts as well as practical approaches to planning, development, testing, and documentation of business database systems. Project planning and control approach are used to relate database administration to information systems management. Students are required to develop, implement, and evaluate a business database system. Prerequisite: MIS 202. Grade only. Offered fall and spring semesters.

362 - Management Information Systems (3 S.H.)

An introduction to basic concepts of management information system design, implementation, and control. Application of computer-based MIS and decision models to business and management situations and problems. Prerequisite: MIS 202, ACCT 220, or CS 234. Grade only. Offered fall and spring semesters.

372 - Management of Business Systems Development (3 S.H.)

An introduction to business systems development concepts and methodologies from the project management approach. The course covers a variety of business systems development topics including how to view a firm as a system, IT infrastructure, project management, systems development

stages, process modeling, data modeling, object modeling, and design pattern with the latest design tools. Prerequisites: MIS 312, MIS 342, and MIS 362. Grade only. Offered fall semester.

398 - Internship (1-9 S.H.)

Allows the student opportunity for hands-on experience, applying MIS principles and methods in an organizational setting. Credits will not be counted in the MIS major, but will be counted as general elective credits. Prerequisite: Concurrent enrollment in MIS 399. P/NC only.

399 - Internship Problems (3 S.H.)

Allows the student opportunity for hands-on experience, applying MIS principles and method in an organizational setting. Prerequisite: ACCT 211 and ACCT 212, BUSA 220, MIS 312 and MIS 362, OM 334, and MGMT 325. Minimum 2.5 GPA. Grade only.

412 - Management of E-Commerce (3 S.H.)

This course presents E-commerce from managerial and technological perspectives. The course covers a variety of advanced e-business topics including e-business model, plan and strategies, systems and development, infrastructure, and the latest technology tools. The influence of technology on e-collaboration and new business methods is discussed. Prerequisite: MIS 362. Grade only. Offered spring semester.

452 - Management of Telecommunication Systems (3 S.H.)

This course provides an understanding of basic concepts involved in management of data communications, teleprocessing, and networks. Topics covered in this course include a review of the history of data communications and communications networks, fundamental principles of managing data and voice communications, and network security. Various commercial products are surveyed. The necessity of managing telecommunications in business is emphasized and issues in applying telecommunications in corporate environments are discussed. Also, the effects of regulatory environment in the telecommunications industry are covered. Prerequisite: MIS 362. Grade only. Offered fall semester.

462 - Decision Support Systems (3 S.H.)

This course focuses on complex management decision activities, which require extensive use of information and modeling. It explores the application of computer-based management decision support systems (DSS) not only to operational and control decisions, but also to strategic and planning managerial decision-making activities. The conceptual framework as well as practical application of DSS is discussed. Prerequisite: MIS 362. Grade only.

472 - Management of LANs and WANs (3 S.H.)

This course provides an understanding of how Local Area Networks (LAN) and Wide Area Networks (WAN) are managed and prepares students for the challenges of dealing with the issues in the dynamic networking industry. Among the topics covered are LAN/WAN connectivity, physical transmission methods and options, transmission equipments, integration of voice and data, WAN transport methods, ATM technologies, and present and future technologies and services. This course is intended for those who would like to specialize in managing networks. Prerequisite: MIS 362 and MIS 452. Grade only.

482 - Management of Information Technology (3 S.H.)

This course introduces students to the current issues in information technologies mainly through case analysis. Different methods of dealing with the issues involved are discussed. Various systems in information technology are presented. The importance of management control is emphasized and multinational IT is covered also. Prerequisites: MIS 342, MIS 362, MIS 372, and MIS 452. Grade only. Offered spring semester.

486 - Independent Studies in MIS (1-3 S.H.)

Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest regarding management information systems. Prerequisites: Instructor's permission and senior standing. Grade only.

492 - Topics in MIS (3 S.H.)

The major focus of this course is on the advanced and complex concepts of information systems technology. The objective is to provide perspectives for adapting to information systems technology. Key conceptual frameworks of MIS, as well as cutting-edge business application development technologies, are presented. Prerequisite: MIS 362. Grade only.

OPERATIONS MANAGEMENT (OM)

334 - Operations Management (3 S.H.)

An analytical approach to manufacturing and service organizations covering such topics as competitive priorities, total quality management, operations strategy, inventory management, production and project planning and control, partnership, total productive maintenance, and logistics. Prerequisite: For College of Business majors, BUSA 220, MIS 202 strongly recommended; for non-College of Business majors, BUSA 220 or its equivalent.

344 - Purchasing (3 S.H.)

A study of purchasing management. Includes objectives, procedures, organization, ordering techniques, inventory control, vendor selection, price, equipment procurement, legal aspects, make or buy, and purchasing department reports. Prerequisite: OM 334. Grade only.

398 - Internship (1-9 S.H.)

Credits will not be counted in the Operations Management minor, but will be counted as general elective credits. Prerequisite: Concurrent enrollment in OM 399. P/NC only.

399 - Internship Problems (3 S.H.)

Prerequisite: Courses that must be completed prior to an internship vary by program. See department for list of requirements. Minimum 2.5 GPA. Grade only.

414 - Operations Planning and Control (3 S.H.)

Study of computer-based systems and procedures for production planning and control in operations management. Primary emphasis is on developing a general model for manufacturing planning and control systems, with secondary emphasis on advanced topics in the following areas: material requirements planning, Just-in-Time, theory of constraints, and scheduling. Prerequisite: OM 334. Grade only.

434 - Quality and Productivity Management (3 S.H.)

Study of the principles of quality and productivity management is the main subject of this course. Emphasis is placed on new and advanced concepts found in the U.S. and abroad, including such topics as systems thinking, reducing complexity, ISO 9000, and activity-based costing. Prerequisite: OM 334. Grade only.

444 - Operations Strategy (3 S.H.)

This course is an application of production and operations management principles in real life situations. This is done through analysis of cases, with particular emphasis on linking operations strategy to marketing strategy. Prerequisite: OM 414. Grade only.

464 - Project Management (3 S.H.)

The questions of efficiency and effectiveness are addressed through analysis of the project management process and installation of project management methodologies. Different types of projects are presented that can best be attacked by different kinds of project management methodologies. Implementation risks of large-scale project processes are discussed in reference to various application areas, e.g., manufacturing and service operations, information system design, or engineering. Prerequisite: BUSA 220. Grade only.

494 - Current Topics in OM (3 S.H.)

This course will explore some of the latest techniques and concepts in OM. The objective of this course is to relate these techniques and concepts to a systems view of the operations function. Prerequisite: OM 334. Grade only.

MARKETING

Somsen Hall, Room 102 (507-457-5860)

<http://winona.edu/marketing>

Russell Smith (Chairperson)

FACULTY

James William Murphy, Dean, College of Business; B.S.Ed, M.S.Ed., Arkansas State University; Ed.D., University of Memphis; 1989 – C. Robert Newberry, Professor; B.S., M.B.A., University of Wisconsin-La Crosse; Ph.D., University of Wisconsin-Milwaukee; 1992 – Russell K. Smith, Jr., Professor; B.A., Drake University; Ph.D., University of Tennessee-Knoxville; 1993 – Mark Young, Professor; B.S., M.B.A., University of Wisconsin-La Crosse; D.B.A., University of Kentucky; 1980 –

PURPOSE

The Marketing Department is committed to fostering excellence in marketing education through progressive curriculum development and the application of state-of-the-art technology. Students who pursue an education in marketing will develop an understanding of the processes for creating, communicating, and delivering value to customers and for managing customer relationships in ways that benefit the organization and its stakeholders. Graduates are prepared for a professional career in marketing or advanced graduate studies.

MARKETING DEPARTMENT POLICIES

Academic Integrity: In complying with WSU's academic integrity policy, the Marketing Department requires that students represent themselves and their work honestly. Violations of this policy, which include cheating, fabrication of information, multiple submissions and plagiarism, shall be sanctioned by the individual faculty member through the lowering of the student's grade and/or failing the student in the course. Serious or second violations may carry the additional sanction of dismissal from the Marketing Program. This policy is enforced in accordance with "due process" as set forth on page 28 of this catalog.

Policy Regarding Course Prerequisites: If a course is taken prior to the successful completion of prerequisite courses, then successful completion of an additional marketing course will be required for graduation.

PASS/NO CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in the marketing major and minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Marketing Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

MKTG 344 Buyer Behavior (3)

Math/Critical Analysis O

MKTG 334 Marketing Research (3)

Writing P

MKTG 346 Marketing Plans (3)

MKTG 420 Marketing Management (3)

Flag courses that can be used to satisfy marketing major/minor requirements are identified in the lists of required courses and electives.

B.S. MAJOR - MARKETING (MKTG)

57 S.H. (No Minor Required)

GRADUATION REQUIREMENTS – MARKETING MAJOR

1. Achieve a grade of "C" or better in all marketing major required and elective courses. A marketing course taken with a grade of "D," "F" or "W" can be repeated only one time.
2. Complete an experiential marketing practicum (MKTG 399 or MKTG 429).
3. Complete a minimum of 50% of the marketing major requirements at WSU.
4. Meet all other WSU graduation requirements (page 23).
5. Sixty-four non-business credits are required for the Marketing major. Of the math, statistics, and economics courses required for the major, 6 credits of math and statistics and 9 credits of economics can be counted toward the requirement for 64 non-business credits.

REQUIRED COURSES (48 S.H.)

Accounting (3 S.H.)

ACCT 211 Financial Accounting Principles (3)

Business Administration (9 S.H.)

BUSA 291 Legal Environment of Business (3)

P MGMT 325 Organizational Dynamics (3)

OM 334 Operations Management (3)

Economics and Finance (9 S.H.)

* ECON 201 Principles of Microeconomics (3)

* ECON 202 Principles of Macroeconomics (3)

FIN 360 Corporate Finance (3)

Mathematics Requirements (3 S.H.)

MATH 140 Applied Calculus (3) OR

MATH 160 Calculus I (3)

Statistics (3 S.H.)

BUSA 220 Business Statistics (3) OR

STAT 210 Statistics (3)

Marketing Core (21 S.H.)

MKTG 300 Principles of Marketing (3)

Prerequisites for College of Business majors and minors: ECON 201, ACCT 211, and completion of the University Studies Program requirements for math and statistics, oral communications, and college reading and writing. Prerequisites for non-College of Business majors and minors: junior standing.

MKTG 332 Market Analysis (3)

Prerequisites for College of Business majors and minors: MKTG 300 and a grade of "C" or better in the mathematics and statistics requirements of the major or minor. Prerequisites for non-College of Business majors and minors: junior standing and any college-level statistics class.

O MKTG 334 Marketing Research (3)

Prerequisites for College of Business majors and minors: MKTG 300 and a grade of "C" or better in the mathematics and statistics requirements of the major or minor. Prerequisites for non-College of Business majors and minors: junior standing and any college-level statistics class.

I MKTG 344 Buyer Behavior (3)

Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: junior standing.

P MKTG 346 Marketing Plans (3)

Prerequisites for College of Business majors and minors: MKTG 300 and MKTG 332.

Marketing Major Practicum

One of the following: MKTG 399 (3) or MKTG 429 (3)

MKTG 399 Internship Experience (3) fulfills the Marketing major practicum requirement. Prerequisites: Department approval and two of the following courses: MKTG 332, MKTG 334, MKTG 344, or MKTG 346.

MKTG 429 Small Business Consulting (3) fulfills the Marketing major practicum requirement. Prerequisites: Department approval and two of the following courses: MKTG 332, MKTG 334, MKTG 344, or MKTG 346.

Capstone Course

P MKTG 420 Marketing Management (3). Prerequisites: MKTG 334, MKTG 344, and MKTG 346.

ELECTIVES - MKTG (9 S.H.)

(Prerequisite: MKTG 300)

- 325 Professional Selling (3)
- 327 Marketing and Entrepreneurship (3)
- 329 Sports Marketing (3)
- 331 International Marketing (3)
- 333 Topics in Marketing (3)
- 335 Tourism Marketing (3)
- 336 Services Marketing (3)
- 337 Qualitative Research Methods (3)
- 338 Branding (3)
- 339 Internet Marketing (3)
- 341 E-Commerce (3)
- 345 Sales Management (3)
- 349 Independent Study (3)
- 429 Small Business Consulting (3)

B.S. MINOR - MARKETING (MKTG)

27 S.H.

GRADUATION REQUIREMENTS — MARKETING MINOR

1. Achieve a grade of “C” or better in all marketing minor required and elective courses. A marketing course taken with a grade of “D,” “F” or “W” can be repeated only one time.
2. Complete a minimum of 50% of the marketing minor requirements at WSU.
3. Meet all other WSU graduation requirements (page 23).

REQUIRED COURSES (24 S.H.)**Accounting (3 S.H.)**

- ACCT 211 Financial Accounting Principles (3)

Economics (3 S.H.)

- * ECON 201 Principles of Microeconomics (3)

Statistics (3 S.H.)

Completion of statistics course as required in major. If none is required, choose any college-level statistics course.

Marketing Core - MKTG (15 S.H.)

- MKTG 300 Principles of Marketing (3)
Prerequisites for College of Business majors and minors: ECON 201, ACCT 211, and completion of the University Studies Program requirements for math and statistics, oral communications, and college reading & writing. Prerequisites for non-College of Business majors and minors: junior standing.
- MKTG 332 Market Analysis (3)
Prerequisites for College of Business majors and minors: MKTG 300 and a grade of “C” or better in the mathematics and statistics requirements of the major or minor. Prerequisites for non-College of Business majors and minors: junior standing and any college-level statistics class.
- O MKTG 334 Marketing Research (3)
Prerequisites for College of Business majors and minors: MKTG 300 and a grade of “C” or better in the mathematics and statistics requirements of the major or minor. Prerequisites for non-College of Business majors and minors: junior standing and any college-level statistics class.
- I MKTG 344 Buyer Behavior (3)
Prerequisites for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: junior standing.
- P MKTG 346 Marketing Plans (3)
Prerequisites for College of Business majors and minors: MKTG 300 and MKTG 332. Prerequisite for non-College of Business majors and minors: junior standing.

ELECTIVES (3 S.H.)

Any marketing elective (See marketing major.)

COURSE DESCRIPTIONS (MKTG)**100 - Marketing and Society (3 S.H.)**

This course introduces students to marketing’s role in society and compares it with marketing’s role within the organization. Ethical and moral issues pertinent to marketing are raised. These include the ethical dilemmas often

faced by marketing professionals, as well as the consequences of marketing on society as a whole.

101 - Experiential Entrepreneurship (3 S.H.)

Experiential Entrepreneurship fosters personal initiative to identify opportunities, gather the necessary resources, create a venture and take on ultimate responsibility for its success. Foundational business knowledge and entrepreneurial skills will be developed through the completion of four technology-enhanced learning models. Student teams will then create and test their entrepreneurial ideas and innovations in planning and operating several special events in the Residential College’s “MugShots” coffee house. Students will experience the excitement and challenges of turning their ideas for entertainment and food/beverage service into reality at “MugShots.” Real marketplace results will be the arbiter for either validating or rethinking their entrepreneurial knowledge and skills.

300 - Principles of Marketing (3 S.H.)

A beginning course in marketing which stresses the marketing function’s contribution to any organization. Topics include buyer behavior, products, and channels of distribution, promotion, and pricing and social issues in marketing. Standard business and non-traditional aspects of marketing are explored. The potential employment scenario is reviewed. Prerequisites for College of Business majors and minors: ECON 201, ACCT 211, and completion of the University Studies Program requirements for math and statistics, oral communications, and college reading and writing. Prerequisite for non-College of Business majors and minors: Junior standing.

325 - Professional Selling (3 S.H.)

Learning professional selling concepts and the communications skills to apply them. Topics include interpersonal communications in business, relationship building, prospecting and qualifying, determining customer wants and needs, sales presentation, and negotiation and post-sale communications. Employment opportunities in sales are examined. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

327 - Marketing and Entrepreneurship (3 S.H.)

An examination of the procedures and managerial practices of small business. Specific emphasis is given to entrepreneurial subjects such as the legal organization of the firm, financing, franchising, site selection, employee management, and buying and customer support functions. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

329 - Sports Marketing (3 S.H.)

Sports marketing focuses on the different problems presented in developing promotional programs for sports teams. Emphasis will be placed on professional and collegiate level. A survey of potential sports-related jobs is included. Student fee is required. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

331 - International Marketing (3 S.H.)

A study of the economic, political, cultural, and business environments affecting the international marketing operations of the firm. Market selection decision, entry and operating decisions, marketing mix decisions, and organizational structures are examined. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

332 - Market Analysis (3 S.H.)

This course defines relevant markets, analyzes primary and selective demand for the market, segments the market, and identifies potential target markets. This course focuses on market-oriented decision-making through the analysis of consumers, competitors, and company processes. Marketing information literacy is emphasized through the utilization of numerous information sources and computer software applications. A formal situation (SWOT) analysis is researched, written, and presented. Prerequisites for College of Business majors and minors: MKTG 300 and a grade of “C” or better in the mathematics and statistics requirement of the major or minor. Prerequisites for non-College of Business majors and minors: Junior standing and any college-level statistics class.

333 - Topics in Marketing (3 S.H.)

Various courses offered in conjunction with curriculum needs and the availability of faculty with relevant expertise. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

334 - Marketing Research (3 S.H.)

This course analyzes the roles, the functions, and the processes that surround marketing research; it emphasizes the specification, collection, and analysis of primary data. The course examines the research process, problem definition, alternative research designs, qualitative methods, survey methods, experiments, measurement and questionnaire design, data collection, and foundational techniques for data analysis, as well as hands-on experience with computer application for data analysis. Emphasis is placed on the

practical issues related to the decision maker's use of marketing information. Marketing research provides the student with substantial experience in developing critical analysis and math/statistics skills. Prerequisites for College of Business majors and minors: MKTG 300 and a grade of "C" or better in the mathematics and statistics requirements of the major or minor. Prerequisites for non-College of Business majors and minors: Junior standing and any college-level statistics class.

335 - Tourism Marketing (3 S.H.)

This course provides students with an introduction to the principles and issues associated with marketing the services and products that comprise the leisure industry. This includes examining the behavioral component of consumers who use travel, hospitality and tourism services and products, as well as the research techniques that inform marketing strategies for tourism-related organizations. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

336 - Services Marketing (3 S.H.)

This course examines how services can be developed and marketed to increase customer satisfaction and retention in order to extend an organization's sustainable competitive advantage. Topics include the measurement and management of service quality, service recovery, linking customer measurement to performance, customer and employee roles in service delivery, and how standard marketing topics such as pricing and promotion apply to services. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

337 - Qualitative Research Methods (3 S.H.)

This course will introduce the students to qualitative research as a means of inquiry into consumer behavior, marketing, and marketing-related problems. Qualitative methods for data collection such as focus groups, observation, and interviewing will be considered as well as the techniques of interpretation and reporting. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

338 - Branding (3 S.H.)

This course examines the relevant concepts involved in the management of brands both in the context of consumers and in organizations. A distinguishing characteristic of modern marketing has been its focus on the creation of differentiated brands. Topics will include identifying and developing bases of brand differentiation; researching and establishing unique brand associations using product attributes, brand marks, names, packages, distribution strategies, and promotional strategies; understanding brand equity and its value to an organization; designing marketing programs to build brand equity; turning around brands in crisis; managing brands over time; and understanding the issues involved with international branding. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

339 - Internet Marketing (3 S.H.)

This course examines website design tools and techniques using core marketing concepts as the framework for successful website design. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

341 - E-Commerce (3 S.H.)

Through a business application, this course directly applies marketing strategies and concepts to a practical commerce-based website. It prepares future business decision makers for the rapidly changing world of web business practices. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

344 - Buyer Behavior (3 S.H.)

This course takes a strategic perspective to examine the impact of the nature and scope of consumer and business buyer behavior on planning the marketing mix. The course includes the study of marketing management theory in the experience of consumer and business markets. Course implementation will involve detailed analysis of psychology, sociology, and social psychology theories in the development of marketing strategy and implementation plans. Prerequisite for College of Business majors and

minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

345 - Sales Management (3 S.H.)

An in-depth coverage of determining the types of sales positions, the recruiting and hiring process, training, determining sales territories, methods of compensation and motivation, and control over the sales force. Prerequisite for College of Business majors and minors: MKTG 300. Prerequisite for non-College of Business majors and minors: Junior standing.

346 - Marketing Plans (3 S.H.)

This course takes a strategic perspective to examine the nature and scope of utilizing market analysis outcomes to plan the implementation of a marketing mix. Course implementation will involve detailed analysis of product development and management activities such as research and development, brand management, and product line management; promotional activities such as advertising, personal selling, public relations, and sales and trade promotions; distribution activities such as retailing and wholesaling; and pricing activities such as new product pricing, pricing strategies, and price adjustments. The course includes substantial experiential learning with written communications skills, including the creation and communication of a marketing plan. Prerequisite for College of Business majors and minors: MKTG 332.

349 - Independent Study (1-3 S.H.)

Offers the advanced student an opportunity to do additional readings and/or research papers in areas of special interest. Grade only. Prerequisites for College of Business majors and minors: MKTG 300 and department approval. Prerequisites for non-College of Business majors and minors: Junior standing and department approval.

398 - Internship (1-9 S.H.)

Credits will not be counted in marketing major, but as general elective credits. Prerequisites: Department approval and two of the following courses: MKTG 332, MKTG 334, MKTG 344, or MKTG 346. P/NC only.

399 - Internship Experience (3 S.H.)

See department chairperson for a list of requirements. Credits fulfill marketing major practicum requirement. Prerequisites: Department approval and two of the following courses: MKTG 332, MKTG 334, MKTG 344, or MKTG 346. Grade only.

420 - Marketing Management (3 S.H.)

Marketing Management is a capstone course designed to provide the student an experience in advanced decision-making. It entails a comprehensive study of the development and implementation of a marketing plan, including the plan's placement within the broader organizational plan. Students will be required to apply the principles and concepts of marketing to real-world problems in writing and presenting a marketing plan. Emphasis will be placed on analysis, decision-making, and the communication of the plan to appropriate audiences. Prerequisites: MKTG 334, MKTG 344, and MKTG 346.

429 - Small Business Consulting (3 S.H.)

This course is designed to provide students with an opportunity to integrate and apply their knowledge, skills, and abilities in a real world situation. A wide variety of projects may be considered; however, all projects must be integrative and comprehensive. Projects typically consist of working with a business on a special project or assisting the business in an area in which they are trying to improve. Alternative projects have included developing a business plan for a new business, conducting marketing research, completing a special project outside the normal responsibilities for a company where you currently work, analyzing an industry, conducting original research to extend general business knowledge, etc. Credits fulfill marketing major practicum requirement. Prerequisites: Department approval and two of the following courses: MKTG 332, MKTG 334, MKTG 344, or MKTG 346. Grade only.

MASS COMMUNICATION

Phelps Hall, Room 126 (507) 457-5474

Email: mscm@winona.edu

John Weis (Chairperson)

FACULTY

Ajit Daniel, Professor; B.A., St. Stephen's College, Delhi University, India; B.S., Southern Illinois University-Edwardville; M.S., Southern Illinois University-Carbondale; Ph.D., The Union Institute; 1982 –

Tom Griener, Assistant Professor; B.A., M.A., Winona State University; Ed.D., University of Minnesota; 1989 –

Drake Hokanson, Associate Professor; B.A., M.A., University of Iowa; 1997 –

Cindy Killion, Professor; B.J., University of Missouri-Columbia; M.A., University of Oklahoma; Ph.D., University of Oregon; 1992 –

Robin O'Callaghan, Assistant Professor; B.A., M.S., Winona State University; 2005 –

John Vivian, Professor; A.B., Gonzaga University; M.S.J., Northwestern University; 1981 –

John N. Weis, Associate Professor; B.S., Northern Illinois University; M.A., Vermont College of Norwich University; 1996 –

PURPOSE

Mass media are needed in a free society to inform, survey, protect, and enlighten. The mass communication faculty stresses developing communicators with a strong sense of their responsibility in serving the community and society. The faculty also provides practical experience in producing mass media content.

Practicing professionals are frequent guests. Mass communication students have many opportunities to apply theory to practice in laboratories, co-curricular, and extracurricular programs including:

- KQAL, a full-service, 1,800-watt departmental radio station serving an average weekly listening audience of 15,000.
- *Bravura*, a laboratory publication with a circulation of 17,000.
- Color television broadcast facilities in which students produce programs for a variety of audiences.
- Computerized reporting labs for writing projects and graphics projects.
- Campus chapters of the American Advertising Federation, International Association of Business Communicators, National Broadcasting Society (Alpha Epsilon Rho), Society for Collegiate Journalists, and National Press Photographers Association.
- Many other opportunities to work in student and professional media activities are available to students both on and off-campus.

Mass communication majors choose an option for their coursework in advertising, broadcasting, journalism, photojournalism, or public relations. The curriculum offers students opportunities to develop skills in oral, visual, and written communication; gain an understanding of media law, ethics, and theory; and receive theoretical and practical experience in an area of special interest.

To assist students in planning, the department prepares a list of planned courses for the next two semesters on an ongoing basis. Students may contact the Mass Communication department for a copy of this tentative schedule.

PASS/NO CREDIT (P/NC) COURSES

Except for internships, students must take all courses in their mass communication major or minor program on a grade-only basis. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

ADDITIONAL GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for mass communication majors/minors are as follows:

- All mass communication majors must have a cumulative GPA of 2.5 or higher to graduate.
- Students must have a GPA of 2.5 or higher to register for most mass communication courses.
- Mass communication majors and minors must earn a grade of "C" or better in all mass communication courses and all additional courses taken to satisfy the requirements of a mass communication major.
- All mass communication majors must submit an assessment portfolio prior to graduation.
- To graduate from WSU with a mass communication degree in any option, a student transferring credits must satisfy requirements from the appropriate option including 12 credit hours earned at WSU in mass communication courses at the 300-level or above.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Mass Communication Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

MCOM 405 Mass Media Issues and Ethics (3)

Math/Critical Analysis O

MCOM 300 Mass Media Law (3)

Writing P

MCOM 232 News Writing (3)

MCOM 305 Mass Media History (3)

MCOM 400 Mass Communication Theory (3)

MCOM 450 International Broadcasting (3)

Flag courses that can be used to satisfy mass communication major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR – MASS COMMUNICATION

42 S.H. (Minor Required)

Mass communication majors choose one of the five options for which the core requirements are the same.

CORE REQUIRED COURSES - MCOM (15 S.H.)

100 Mass Media and Society (3)

210 Visual Communication (3)

P 232 News Writing (3)

O 300 Mass Media Law (3)

I 405 Mass Media Issues and Ethics (3)

499 Electronic Assessment Portfolio (0)

ADVERTISING OPTION – 42 S.H. (MCAD)

CORE REQUIRED COURSES (15 S.H.)

CORE ELECTIVES – MCOM (3 S.H.)

Choose one:

305 Mass Media History (3)

P 400 Mass Communication Theory (3)

P 450 International Broadcasting (3)

ADVERTISING REQUIRED COURSES – MCOM (18 S.H.)

175 Mass Communication Computer Applications (3)

260 Advertising (3)

360 Advertising Copy Writing (3)

361 Advertising Media Selection (3)

362 Advertising Design (3)

460 Advertising Campaigns (3)

ADVERTISING ELECTIVES (6 S.H.)

Mass Communication – MCOM

- 205 Principles of Internet Communication (3)
- 215 Photocommunication (3)
- 220 Broadcast Writing (3)
- 226 Video/Multimedia Planning and Design (3)
- 240 Public Relations (3)
- 275 Publication Design (3)
- 356 Media and Society International (3)
- 408 Research in Mass Media (3)
- 461 Retail/Business Advertising (3)

Marketing – MKTG

- 300 Principles of Marketing (3)
- 323 Consumer Behavior (3)

BROADCASTING OPTION – 42 S.H. (MCB)

CORE REQUIRED COURSES (15 S.H.)

CORE ELECTIVES – MCOM (3 S.H.)

Choose one:

- 305 Mass Media History (3)
- P 400 Mass Communication Theory (3)
- P 450 International Broadcasting (3)

BROADCASTING REQUIRED COURSES – MCOM (18 S.H.)

- 120 Electronic Media (3)
- 220 Broadcast Writing (3)
- 225 Audio Production (3)
- 226 Video/Multimedia Planning and Design (3)
- 320 Television Operations (3)
- 425 Senior Seminar in Electronic Media (3)

BROADCASTING ELECTIVES – MCOM (6 S.H.)

- 175 Mass Communication Computer Applications (3)
- 205 Principles of Internet Communication (3)
- 321 Topics in Television Production (3)
- 325 Broadcast Journalism (3)
- 326 Mass Communication Multimedia Applications (3)
- 356 Media and Society International (3)
- 399 Internship (3)
- 420 Electronic Media Management (3)

JOURNALISM OPTION – 42 S.H. (MCJ)

CORE REQUIRED COURSES (15 S.H.)

CORE ELECTIVES – MCOM (3 S.H.)

Choose one:

- P 305 Mass Media History (3)
- P 400 Mass Communication Theory (3)
- P 450 International Broadcasting (3)

JOURNALISM REQUIRED COURSES – MCOM (18 S.H.)

- 175 Mass Communication Computer Applications (3)
- 275 Publication Design (3)
- 332 News Gathering (3)
- 334 Feature Writing (3)
- 336 News Editing (3)
- 437 Publication Practicum (3)

JOURNALISM ELECTIVES – MCOM (6 S.H.)

- 205 Principles of Internet Communication (3)
- 215 Photocommunication (3)
- 220 Broadcast Writing (3)
- 226 Video/Multimedia Planning and Design (3)
- 240 Public Relations (3)
- 310 Photojournalism (3)
- 345 Public Relations Writing (3)
- 356 Media and Society International (3)
- 408 Research in Mass Media (3)
- 430 Specialized Reporting (3)

PHOTOJOURNALISM OPTION – 42 S.H. (MCPJ)

CORE REQUIRED COURSES – MCOM (15 S.H.)

CORE ELECTIVES (3 S.H.)

Choose one:

- P 305 Mass Media History (3)
- P 400 Mass Communication Theory (3)
- P 450 International Broadcasting (3)

PHOTOJOURNALISM REQUIRED COURSES – MCOM (21 S.H.)

- 175 Mass Communication Computer Applications (3)
- 215 Photocommunication (3)
- 332 News Gathering (3)
- 275 Publication Design (3)
- 310 Photojournalism (3)
- 317 Photojournalism Practicum (3)
- 419 Senior Seminar in Photojournalism (3)

PHOTOJOURNALISM ELECTIVES – MCOM (3 S.H.)

- 205 Principles of Internet Communication (3)
- 226 Video/Multimedia Planning and Design (3)
- 240 Public Relations (3)
- 260 Advertising (3)
- 319 Studio Photography (3)
- 334 Feature Writing (3)
- 336 News Editing (3)
- 356 Media and Society International (3)
- 408 Research in Mass Media (3)
- 419 Senior Seminar in Photojournalism (3)
- 437 Publication Practicum (3)

PUBLIC RELATIONS OPTION – 42 S.H. (MCPR)

CORE REQUIRED COURSES (15 S.H.)

CORE ELECTIVES – MCOM (3 S.H.)

Choose one:

- P 305 Mass Media History (3)
- P 400 Mass Communication Theory (3)
- P 450 International Broadcasting (3)

PUBLIC RELATIONS REQUIRED COURSES – MCOM (21 S.H.)

- 175 Mass Communication Computer Applications (3)
- 240 Public Relations (3)
- 275 Publication Design (3)
- 332 News Gathering (3)
- 340 Public Relations Cases (3)
- 345 Public Relations Writing (3)
- 440 Public Relations Campaigns (3)

PUBLIC RELATIONS ELECTIVES – MCOM (3 S.H.)

- 120 Electronic Media (3)
- 205 Principles of Internet Communication (3)
- 215 Photocommunication (3)
- 220 Broadcast Writing (3)
- 226 Video/Multimedia Planning and Design (3)
- 260 Advertising (3)
- 334 Feature Writing (3)
- 336 News Editing (3)
- 347 Public Relations Practicum (3)
- 356 Media and Society International (3)
- 361 Advertising Media Selection (3)
- 399 Internship (3)
- 408 Research in Mass Media (3)

B. A. MINOR – MASS COMMUNICATION (MC)

21 S.H.

REQUIRED COURSES – MCOM (9 S.H.)

- 100 Mass Media and Society (3)
- 210 Visual Communication (3)
- P 232 News Writing (3)

ELECTIVES (12 S.H.)

Students must select 12 semester hours of credit from other mass communication courses.

COURSE DESCRIPTIONS (MCOM)

100 - Mass Media and Society (3 S.H.)

Sociological examination of the interrelationship of mass media and society in contemporary America.

115 - Photography Appreciation (3 S.H.)

An introduction to the art and expression of photography through lecture, photography assignments, discussion, and critique. Students complete photo assignments tied to major themes of the course using simple cameras and commercially-processed film. Emphasis on wide range of genres and important photographers and their work from 1839 to the present.

120 - Electronic Media (3 S.H.)

History, characteristics, philosophy, and impact of radio, television, cable, and the developing electronic mass media.

175 - Mass Communication Computer Applications (3 S.H.)

Basic computer skills for the mass media using page layout as well as image generation and image manipulation applications.

205 - Principles of Internet Communication (3 S.H.)

An overview of the specialized nature of communicating to mass audiences via the Internet. Students learn website development using Dreamweaver and Flash to communicate clearly and maintain interest while providing effective communication.

210 - Visual Communication (3 S.H.)

Basic visual communication theory and basic b&w photography including camera handling and darkroom experience. Students learn composition and design concepts in photography; they also learn to critically analyze visual communication pieces. Manual 35mm camera required.

215 - Photocommunication (3 S.H.)

An intermediate level course intended to provide the student with additional experience conceptualizing, producing, and talking about photographs. Prerequisite: MCOM 210.

220 - Broadcast Writing (3 S.H.)

Radio and television writing including commercial copy, feature programs, and news. Prerequisite: ENG 111.

225 - Audio Production (3 S.H.)

Design, technique, production, and presentation of audio programs. Prerequisite: MCOM 200.

226 - Video/Multimedia Planning and Design (3 S.H.)

An overview of the television/video and multimedia communication process with special attention to organizing, scripting, budgeting, equipment, and personnel. This course deals with essential pre-production planning.

232 - News Writing (3 S.H.)

Style and structure of news stories, news sources, newsroom practices and procedures, with reporting assignments for publication and broadcast. Prerequisite: ENG 111.

240 - Public Relations (3 S.H.)

Nature and role of public relations in a democratic society. Case problems and projects, including brochures/flyers; print, radio, and TV ads; newsletters; websites; and portfolios.

260 - Advertising (3 S.H.)

A survey course that serves as an introduction to advertising. The course covers the structure of the advertising industry, the process of creating and delivering an advertising message and the function advertising serves in our society. Includes a variety of practical application projects.

275 - Publication Design (3 S.H.)

Using desktop publishing software to learn layout, design principles, and processes for the print media. Prerequisite: MCOM 175.

300 - Mass Media Law (3 S.H.)

Major issues and survey of the media's current legal status. Prerequisite: MCOM 100.

305 - Mass Media History (3 S.H.)

Development of the mass media including historiography, examination of movements and current research problems.

310 - Photojournalism (3 S.H.)

The photograph as a means of visual reporting. Lab required. Weekly critique. Prerequisite: MCOM 215.

311 - Topics in Mass Communication (3 S.H.)

The content and subject matter varies, depending on current events and issues of interest to Mass Communication students and faculty. All topics will relate directly to issues of special interest to the field at that time. Prerequisites: MCOM 100 and junior standing.

317 - Photojournalism Practicum (3 S.H.)

Practical hands-on applications of photojournalism concepts and theories

in the form of news photography and photo stories for publication in print version of departmental laboratory publication and adapting print version for electronic dissemination. Prerequisite: MCOM 310.

319 - Studio Photography (3 S.H.)

Large-format camera photography with emphasis on studio techniques. Prerequisite: MCOM 215.

320 - Television Operations (3 S.H.)

Theory and practical experience in planning and creating television programs. Prerequisite: MCOM 226.

321 - Topics in Television (3 S.H.)

Advanced theory and practical experience in producing television programs. Prerequisite: MCOM 320.

325 - Broadcast Journalism (3 S.H.)

Reporting and presenting the news on radio and television. Topics include news writing, reporting, taping and editing; producing newscasts; broadcast news ethics. Prerequisites: MCOM 226 and MCOM 320.

326 - Interactive Media Production (3 S.H.)

Understanding and authoring multimedia and Internet communication messages for the mass media. Topics include equipment and software; selection, preparation, and programming of graphics, animation, sound and video; and specialized Internet communication in multimedia for the mass media. Prerequisites: MCOM 100 and MCOM 226.

332 - News Gathering (3 S.H.)

Interviewing, observation, and research as information-gathering methodologies; with reporting assignments for publication and broadcast. Prerequisite: MCOM 232.

334 - Feature Writing (3 S.H.)

Developing, writing, and marketing feature stories to a variety of media. Prerequisite: MCOM 332.

336 - News Editing (3 S.H.)

Operation of the newsroom including copy editing, gatekeeper decisions, headline writing, layout. Prerequisite: MCOM 332.

340 - Public Relations Cases (3 S.H.)

Examination of public relations as applied in business, industry, government, social services, and other organizations—for-profit and not-for-profit. The course teaches students about promotional and communications activities in the "real world." Prerequisite: MCOM 240.

345 - Public Relations Writing (3 S.H.)

Preparing news releases; internal and external promotional materials; publications; newsletters; print, radio, and TV ads; brochures; websites; and other promotional activities. Prerequisite: MCOM 332.

347 - Public Relations Practicum (3 S.H.)

Practical experience in public relations tasks including writing or designing brochures; news releases; print, radio, and TV advertising; community affairs; and strategy development. Prerequisite: MCOM 240.

356 - Media and Society International (3 S.H.)

Involves study abroad. Designed to provide students with exposure to concepts and principles involved in understanding the interrelationship between the mass media and society in a country other than the United States. The course is similar in content to MCOM 100. In this case, however, the relationship being examined is specific to the country visited during that particular term.

360 - Advertising Copy Writing (3 S.H.)

The creation of effective advertising messages for newspapers, magazines, radio, television, and other mass media. The course emphasizes the writing of advertising copy and the coordination of visual and verbal concepts to achieve advertising objectives. Prerequisite: MCOM 260.

361 - Advertising Media Selection (3 S.H.)

Theories, problems, and practices related to advertising media evaluation and selection. Prerequisite: MCOM 260.

362 - Advertising Design (3 S.H.)

Principles and practices of advertising design with an emphasis on the design of effective advertisements in newspapers, magazines, direct mail, and alternative delivery systems. Prerequisite: MCOM 360.

399 - Internship (3 S.H.)

Departmentally approved, supervised practical experience in mass communication. Prerequisite: Departmental approval.

400 - Mass Communication Theory (3 S.H.)

Theories of mass influence on society and culture. Prerequisite: MCOM 100.

405 - Mass Media Issues and Ethics (3 S.H.)

Introduction to perspectives on ethics as applied to case studies and issues in advertising, broadcasting, journalism, photojournalism, and public relations. Prerequisite: MCOM 100 and senior standing.

408 - Research in Mass Media (3 S.H.)

Investigation and interpretation of mass media research; introduction to procedures for studying media, content, audience, and effects; problems in gathering theoretical and applied research data concepts. Prerequisites: MCOM 100 and junior standing.

409 - Independent Study (3 S.H.)

To meet the needs of the individual student. By previous arrangement only. Prerequisite: Junior standing. May be repeated for a total of 6 S.H.

419 - Senior Seminar in Photojournalism (3 S.H.)

A capstone experience in photojournalism which utilizes the breadth of previous knowledge gained in identifying and researching a selected issue appropriate to the field. Prerequisites: Senior standing and MCOM 317.

420 - Electronic Media Management (3 S.H.)

Techniques and organization for management of commercial, non-commercial, and industrial television, and radio. Prerequisite: MCOM 120.

425 - Senior Seminar in Electronic Media (3 S.H.)

Capstone experience in electronic media. Students research, plan, and write a major research paper or produce a radio, television/video, or multimedia program. Students also create a resume/portfolio. Prerequisites: Senior standing, MCOM 225, MCOM 226, and MCOM 320.

430 - Specialized Reporting (3 S.H.)

Interpretative writing, investigative reporting, editorial persuasion, and other topics. May be repeated for credit on a second topic. Prerequisite: MCOM 332.

437 - Publication Practicum (3 S.H.)

Practical hands-on application of journalism concepts and skills through team leadership, story generation, copy editing, page layout, and production of the departmental printed laboratory publication as well as editing for electronic dissemination. Prerequisites: MCOM 232, MCOM 332, and MCOM 336.

440 - Public Relations Campaigns (3 S.H.)

Implementation of theory and processes of public relations into business practices by analyzing situations, planning strategies, and facilitating public relations activities based on specific objectives. Includes practical campaigns for "real world" clients in conjunction with MCOM 460. Prerequisites: MCOM 340 and MCOM 345.

450 - International Broadcasting (3 S.H.)

Examine the structures, processes, functions, and significance of various international broadcasting systems and services. Emphasis is placed on the scope and complexity of such systems and their impact upon global understanding. Prerequisites: MCOM 100.

460 - Advertising Campaigns (3 S.H.)

Consideration and implementation of advertising principles in "real world" simulation using actual clients. Development of situation analysis, marketing strategy and multimedia advertising campaigns to achieve specific objectives in conjunction with MCOM 440. Prerequisites: MCOM 360, MCOM 361, and MCOM 362.

461 - Retail and Business-to-Business Advertising (3 S.H.)

This course focuses on how the principles of effective advertising are used by retail stores and businesses selling products and services to other businesses. Prerequisites: MCOM 360 and MCOM 362.

499 - Assessment Portfolio (0 S.H.)

For this arranged class, each student completes an assessment portfolio to fulfill a graduation requirement.

MATHEMATICS AND STATISTICS

Gildemeister Hall, Room 322 (507-457-5370)

www.winona.edu/mathematics

Brant Deppa (Chairperson)

FACULTY

Jeffrey Anderson, Acting Dean, College of Science and Engineering; B.A., University of Minnesota, Morris; Ph.D., Iowa State University; 1992 –
Susan Beseler, Assistant Professor; B.S., Winona State University; M.E., University of Wisconsin-La Crosse; 2005 –
Gary Bunce, Professor; B.S., North Dakota State University; M.A., Ph.D., University of New Mexico; 1971 –
Joyati Debnath, Professor; B.Sc., M.Sc., Jadavpur University; M.S., Ph.D., Iowa State University of Science and Technology; 1989 –
Brant Deppa, Professor; B.S., M.S., University of Minnesota, Duluth; Ph.D., University of Minnesota-Twin Cities; 1992 –
Jeffrey Draskoci-Johnson, Associate Professor; B.A., Ohio Wesleyan University; M.S., Ph.D., Ohio State University-Columbus; 1996 –
Eric Errthum, Assistant Professor; B.S., University of Iowa; Ph.D., University of Maryland; 2007 –
Tisba Hooks, Assistant Professor; B.S., University of Nebraska-Kearney; M.S., Ph.D., University of Nebraska-Lincoln; 2006 –
Richard Jarvinen, Professor; B.A., St. John's University; M.A.T., Vanderbilt University; Ph.D., Syracuse University; 1989 –
Steven Leonhardi, Professor; B.A., Concordia College, Moorhead (MN); M.A., Ph.D., University of Wisconsin-Madison; 1996 –
Christopher Malone, Assistant Professor; B.S., Winona State University; M.S., Ph.D., Kansas State University; 2002 –
Felino G. Pascual, Professor; B.S., Ateneo de Manila, Philippines; M.Sc., Ph.D., University of Minnesota-Twin Cities; 1992 –
Barry Peratt, Associate Professor; B.S., Moravian College; M.S., Ph.D., University of Delaware; 1996 –
Terry M. Price, Associate Professor; B.S., M.S., Lamar University-Beaumont; Ph.D., Washington State University; 1998 –
Joyce Quella, Associate Professor; B.S., University of Wisconsin-Madison; M.A., University of Illinois; 1987 –
Cheryl Quinn Nelson, Associate Professor; B.A., Luther College; M.S., Winona State University; 1986 –
Daniel Rand, Associate Professor; B.S., Purdue University; M.S., Ph.D., University of Minnesota-Twin Cities; 1998 –
Kenneth A. Suman, Professor; B.S., M.S., Clemson University; Ph.D., Pennsylvania State University; 1990 –
David K. Urion, Professor; B.A., Culver-Stockton College; M.S., Miami University; Ph.D., University of Maryland; 1982 –
Aaron Wangberg, Assistant Professor; B.A., Luther College; Ph.D., Oregon State University; 2007 –
Nicole Williams, Assistant Professor; B.S., University of Maine at Farmington; M.S., Illinois State; 2003 –

PURPOSE

The Department of Mathematics and Statistics offers major programs in mathematics, mathematics education, and statistics. The department also offers minor programs in mathematics, statistics, and mathematics education (secondary teaching). These programs are designed around a common, required departmental core of courses, which allows students to change majors within the department or to coordinate double majors with relative ease during the first two years of coursework. The best choice of courses beyond the core depends upon career plans (industry, graduate school, professional school, teaching, government, finance, insurance, etc.), and students should consult with faculty advisors as early as possible.

The mathematics major (B.A. Major - Mathematics) is specifically designed to support a wide range of student interests. Whether the goal is to complement coursework in another discipline, to obtain an education leading to a position in industry or in government, or to prepare for graduate work, students can choose elective coursework within the department to suit these needs.

The mathematics teaching major (B.S. Major - Mathematics Teaching) is designed to prepare students for a career in teaching mathematics (grades 5-12). In addition, students in the mathematics education program may choose to complete an additional major or minor program, which also grants licensure in those subjects. All these options may offer important advantages regarding employment.

The statistics option (B.S. Major - Statistics) provides students with both a solid background in mathematics as well as experiences with statistical theories, techniques, and software. The statistics faculty members have experience in the application of statistics to diverse areas such as quality control, industrial experimental design, clinical trials, and the social sciences. Because statistics is applicable in a wide variety of fields, a minor or second major in statistics is a good choice for students majoring in fields such as the biological and earth sciences, business, economics, sociology, and psychology.

CAREERS IN THE MATHEMATICAL SCIENCES

There are opportunities for graduates with a mathematics major in industry as part of a development or research team and in government service. However, graduates who complete a double major including mathematics find themselves in significantly greater demand than if they had completed either major singly. The B.A. Major - Mathematics is specifically designed to address this employment trend.

Current job placement for students with a mathematics teaching major remains strong, and projections indicate this will continue for the next decade. With a degree in mathematics education, career opportunities also exist within insurance companies, other business and industry, government, and the armed services. With appropriate choices of elective courses, students who earn a B.S. Major-Mathematics: Secondary Teaching will be qualified for graduate studies in a number of fields including mathematics, statistics, actuarial science, mathematics education, educational psychology, and business.

The job market for statistics majors is very solid with some projections indicating that the demand for statisticians will continue to increase. In statistics, opportunities for professional employment exist in industry, medical research, government agencies, and several areas of business. Students who earn a B. S. Major - Mathematics: Statistics Option can also find future careers in actuarial science, quality control, or biostatistics.

- **Actuarial Science.** Actuaries use quantitative skills to analyze and plan for future financial situations. About two-thirds of all actuaries are employed in the insurance industry. Actuaries assess risk and make sure that the insurance company charges a fair price to assume that risk. An increasing number of actuaries work in consulting where they advise companies specializing in the areas of financial services, risk management, and health care. See page 155 for suggested electives.
- **Quality Assessment and Improvement.** There is a great need today for a work force proficient in the principles and practices of quality improvement. In order to prepare for employment in this area, a student may pursue a major or minor with a statistics emphasis. Students pursuing any major who are interested in the area of quality control should consider preparing themselves for the ASQ (American Society for Quality) certification examinations. See page 155 for a list of courses that help students prepare for certification examinations.
- **Biostatistics.** Biostatistics is a rapidly expanding field combining the disciplines of statistics, biology, and the health sciences. Biostatisticians work at major medical clinics, pharmaceutical companies, and universities performing clinical trials and analyzing health-related data. Students who earn a B.S. Major - Mathematics: Statistics Option are well-prepared for either an entry-level position or admission into a graduate school in biostatistics. See page 155 for suggested electives.

HONORS IN MATHEMATICS AND STATISTICS

A departmental honors program is available to qualified majors in the Department of Mathematics and Statistics. Students completing the departmental honors program will graduate with honors in the Department of Mathematics and Statistics. Requirements of the departmental honors program include completing a thesis, which is reviewed by two departmental faculty readers, attending departmental colloquia and seminars, and presenting a summary of the thesis in a departmental seminar. For more details, contact the department chairperson.

CREDIT BY EXAM COURSES

A student may receive credit by examination for MATH 140, MATH 160 and MATH 165. A student is allowed only one attempt per course. A grade of "B" or higher is required on the examination to receive credit.

ADVANCED PLACEMENT CREDIT

Students can receive credit for MATH 160, MATH 165 and STAT 110 or STAT 210 for high school courses taken through the Advanced Placement Program. Consult with the department chairperson for specific test score requirements.

PASS/NO CREDIT (P/NC) COURSES

The pass/no credit option is available to non-majors unless otherwise noted. MATH 050 and STAT 492 must be taken for pass/no credit. Any other course not required nor elected for a major or minor may be taken on a pass/no credit basis.

Except for internships and practica, students must take all courses in their major, minor, options, concentrations and licensures on a grade-only basis. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

PREREQUISITES

The prerequisites for courses in the Department of Mathematics and Statistics must be met with a "C" grade or better or by instructor permission.

TRANSFER CREDIT

No credit will be given for a grade below a "C" for mathematics, mathematics education, or statistics courses taken at other institutions.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Mathematics and Statistics Department offers the following flag courses in the University Studies Program:

FLAGS

MATHEMATICS

Oral I

- MATH 410 History of Mathematics (3)
- MATH 430 Operations Research: Linear Programming (3)

Math/Critical Analysis O

- MATH 220 Combinatorics and Graph Theory (3)
- MATH 260 Multivariable Calculus (4)
- MATH 270 Differential Equation and Linear Algebra (4)
- MATH 310 Number Theory (3)

Writing P

- MATH 330 Advanced Calculus I (4)
- MATH 440 Abstract Algebra (4)

MATHEMATICS EDUCATION

Oral I

- MTED 420 Technology and Professional Development in the Secondary Schools (3)

Math/Critical Analysis O

- MTED 125 Mathematics for Elementary Teachers (4)

- MTED 322 Modern Geometry (4)
- Writing P
- MTED 320 Teaching Mathematics in the Secondary Schools (3)

STATISTICS

Oral I

- STAT 415 Multivariate Analysis (3)
- STAT 425 Modern Methods of Data Analysis (3)

Math/Critical Analysis O

- STAT 255 Data Management Using SAS (3)
- STAT 320 Statistical Quality Control (3)

Writing P

- STAT 450 Introduction to Mathematical Statistics I (3)
- STAT 460 Introduction to Mathematical Statistics II (3)

Flag courses that can be used to satisfy mathematics and statistics major/minor requirements are identified in the lists of required courses and electives in this section.

DEPARTMENTAL CORE (25-26 S.H.)

Techniques of Continuous Mathematics – MATH (12 S.H.)

- 160 Calculus I (4)
- 165 Calculus II (4)
- O 260 Multivariable Calculus (4)

Matrix Algebra and Applications – MATH (3-4 S.H.)

- 130 Matrix Algebra (3) OR
- O† 270 Differential Equations & Linear Algebra (4)

Introduction to Theoretical and Discrete Mathematics – MATH (7 S.H.)

- 210 Foundations of Mathematics (4)
- ‡ 305 Probability (3)

Statistics – STAT (3 S.H.)

- 210 Statistics (3) OR
- 303 Introduction to Engineering Statistics (3) OR
- 305 Biometry (3)

† MATH 270 is required for the mathematics major.

‡ With the academic advisor's approval, a different upper-division MATH or STAT course may be substituted for the mathematics major.

B.A. MAJOR - MATHEMATICS (MATH)

40-41 S.H. (Minor or Second Major Required)

The B.A. program in Mathematics provides students with instruction in the basic techniques, applications, and theories of mathematics. Consequently, all B.A. mathematics majors must complete the Departmental Core and two courses in advanced mathematical theory. Beyond this, students choose from electives, which are designed to complement another major or minor, prepare for future graduate work, or provide coursework that is specific to the needs of industry. Students must earn a grade of "C" or higher in all required departmental courses.

Students currently majoring or planning to major in other disciplines are strongly urged to consider adding a major or minor in mathematics as a useful means of preparing for professional exams, such as the MCAT; as a way of creating an undergraduate program that sets the student apart from others in that discipline when competing for future employment; and as a way of increasing options for future graduate work.

DEPARTMENTAL CORE (26 S.H.)

With the advisor's approval, students may use an additional elective course to substitute for MATH 305. Mathematics majors are required to take MATH 270 (Differential Equations and Linear Algebra).

MATHEMATICS – MATH (11 S.H.)

- O 330 Advanced Calculus I (4)
- 340 Advanced Linear Algebra (3)
- O 440 Abstract Algebra (4)

ELECTIVES (3-4 S.H.)

One upper-division elective chosen from courses numbered MATH 310 and above or STAT 320 and above.

DOUBLE MAJOR IN MATHEMATICS AND MATHEMATICS EDUCATION

A student will be classified as a major in both mathematics and mathematics education if the student completes the Departmental Core and the required courses for a mathematics education major.

DOUBLE MAJOR IN MATHEMATICS AND STATISTICS

A student will be classified as a major in both mathematics and statistics if the student completes the Departmental Core and the required courses for a statistics major in addition to the following MATH courses:

- 330 Advanced Calculus I (4) AND
- 335 Advanced Calculus II (4) OR
- 340 Advanced Linear Algebra (3) OR
- 440 Abstract Algebra (4)

B.S. MAJOR - MATHEMATICS: SECONDARY TEACHING (MHT)

54-55 S.H. (No Minor Required)

The mathematics teaching major prepares students for teaching mathematics in grades 5 to 12. This program is administered through the Department of Mathematics and Statistics and the College of Education. Therefore, majors must satisfy requirements of and be admitted to the

College of Education in addition to satisfying the requirements of the Department of Mathematics and Statistics.

The College of Education course requirements are listed under "Additional Coursework" below. Students interested in a mathematics teaching major should contact the Department of Mathematics and Statistics for an advisor.

Student Teaching Requirements

To receive departmental recommendation for student teaching, a student must:

1. Complete all courses required for the major.
2. Earn a grade of "C" or better and achieve a minimum 2.75 GPA in all MATH, MTED, and STAT courses required for the major.
3. Meet the requirements of the College of Education. MTED 320 and MTED 420 must be completed prior to student teaching.

Additional Graduation Requirements

For a checklist of the University's graduation requirements, see page 23.

DEPARTMENTAL CORE (25-26 S.H.)

REQUIRED COURSES (26 S.H.)

Mathematics – MATH (14 S.H.)

- O 310 Number Theory (3)
- P 330 Advanced Calculus I (4)
- I 410 History of Mathematics (3)
- P 440 Abstract Algebra (4)

Mathematics Education – MTED (11 S.H.)

- P 221 Middle School Methods in Mathematics (1)
- 320 Teaching Mathematics in the Secondary Schools (3)
- O 322 Modern Geometry (4)
- I 420 Technology and Professional Development in the Secondary Schools (3)

Statistics – STAT (1 S.H.)

- 115 Laboratory in Statistics (1)

ELECTIVES (3 S.H.)

In consultation with an advisor, students should choose from courses numbered MATH 310 and above or STAT 320 and above, or MTED 420 and above.

ADDITIONAL COURSEWORK (38 S.H.)

Students in the Mathematics: Secondary Teaching major must also complete the courses listed below.

Notes:

- Professional Education Sequence courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

I. Professional Education Sequence (32 S.H.) in the College of Education:

- * EDUC 305 Human Development and Learning (4)
- EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- PEDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
- P EDUC 459 The Professional Educator (3)
- I EDST 465 Student Teaching (12-16)
- II. HERS 204 Personal and Community Health (3) (Also fulfills University Studies Basic Skills, Physical Development and Wellness requirement (See page 19.))
- *III.SPED 400 Education of Exceptional Children/Youth (3) (Also partially fulfills University Studies Arts & Sciences Core, Social Science requirement (See page 19.))

B.S. MAJOR - MATHEMATICS: STATISTICS OPTION (MTST)

56-57 S.H. (No Minor Required)

The B.S. Program in Statistics provides students with instruction in the basic techniques, applications, and theories of mathematics and statistics. Students choosing statistics may complete a statistics project under the supervision of a faculty member. This provides students the opportunity to work with a faculty member on a consulting project or research problem. For students planning to attend graduate school, the research project is recommended. Internship opportunities also exist for students in the statistics major. Recent graduates have completed internships at the Mayo Clinic, insurance companies, local industry, and non-profit organizations. Both consulting projects and internships are good choices for students seeking employment upon graduation.

Students who are interested in business or industrial applications of statistics might consider the fields of actuarial science or quality control. Specific information about these two fields follows the required coursework for the statistics major.

DEPARTMENTAL CORE (25-26 S.H.)

REQUIRED COURSES (19 S.H.)

Statistics – STAT

- 115 Laboratory in Statistics (1)
- 255 Data Management Using SAS (3) OR a CS course numbered 234 or above
- 360 Regression Analysis (3)
- P 450 Introduction to Mathematical Statistics I (3)
- P 460 Introduction to Mathematical Statistics II (3)

Capstone Experience – STAT (3)

- 488 Statistics Projects (1-6) OR
- 492 Practicum in Statistics (3-6)

For each capstone experience, a project proposal must be developed in consultation with a faculty member. A written report is required for satisfactory completion of the capstone experience. The written report must summarize the work completed for the course. Students are expected to submit a poster and/or give an oral presentation at a forum approved by the designated faculty member.

ELECTIVES (12 S.H.)

In consultation with an advisor, students should choose 12 semester hours from MATH courses numbered 310 and above, STAT courses numbered 320 and above, CS courses numbered 234 and above, or FIN 335. Students may also choose other classes with a significant mathematical/statistical component offered outside the department; however, the courses must be approved by the Department of Mathematics and Statistics. At least 6 semester hours must be chosen from STAT courses.

Actuarial Science

To become a certified actuary, candidates must pass a series of examinations that are administered by the Society of Actuaries (SOA). Some of the examinations can be successfully completed while the student is still in college. In fact, some companies only hire candidates who have successfully completed at least one of the examinations.

WSU offers the following courses that will prepare students for the first exam on Probability (SOA Exam P1).

- MATH 160, 165, 260, and 305
- STAT 210 and 450

Actuaries are also required to be certified in three key subject areas through their college coursework that are not covered on the SOA examinations. This certification is called Validation through Educational Experience (VEE).

Subject areas and courses for VEE certification are listed below.

- *VEE Economics*
 - ECON 201 Principles of Microeconomics (3)
 - ECON 202 Principles of Macroeconomics (3)
- *VEE Applied Statistical Methods*
 - STAT 360 Regression Analysis (3)
 - FIN 335 Forecasting Methods (3)
- *VEE Corporate Finance*
 - FIN 360 Corporate Finance (3)
 - FIN 377 Investments (3)

Quality Assessment and Improvement

Mathematics/Statistics majors who are interested in the area of quality assessment and improvement should consider preparing themselves for

the ASQ (American Society for Quality) certification examinations. These examinations are nationally recognized and greatly enhance employment opportunities. The Department of Mathematics and Statistics offers the following courses to help students prepare for certification examinations:

Quality Inspector:	STAT 110 or 210 or 303, STAT 320
Quality Technician:	STAT 110 or 210 or 303, STAT 320
Quality Auditor:	STAT 110 or 210 or 303, STAT 320
Software Quality Engineer:	STAT 110 or 210 or 303, STAT 320
Quality Improvement Associate:	STAT 110 or 210 or 303, STAT 320, STAT 321
Quality Engineer:	STAT 110 or 210 or 303, STAT 320-321
Six Sigma Black Belt/Green Belt:	STAT 110 or 210 or 303, STAT 320-321
Manager of Quality/	
Organizational Excellence:	STAT 110 or 210 or 303, STAT 320, STAT 350
Reliability Engineer:	MATH 140 or 160, STAT 210 or 303, STAT 320-321

Biostatistics

Students interested in biostatistics are advised to take courses in biology, computer science, health sciences, and statistics, such as:

BIOL	310	Genetics
HERS	403	Epidemiology
CS	368	Introduction to Bioinformatics
STAT	405	Biostatistics

B.A. MINOR - MATHEMATICS (MATH)

22-23 S.H.

The Departmental Core (minus MATH 305) is the B.A. minor in mathematics.

B.S. MINOR - MATHEMATICS: EDUCATION OPTION (MTED)†

26 S.H.

REQUIRED COURSES (26 S.H.)

Mathematics – MATH (15 S.H.)

- 130 Matrix Algebra (3)
- 160, 165 Calculus I, II (8)
- 210 Foundations of Mathematics (4)

Mathematics Education – MTED (8 S.H.)

- 221 Middle School Methods in Mathematics (1)
- P 320 Teaching Mathematics in the Secondary Schools (3)
- O 322 Modern Geometry (4)

Statistics – STAT (3 S.H.)

- 210 Statistics (3)

†The state of Minnesota no longer issues teaching licenses for Bachelor of Science minors. However, this minor may provide the opportunity to teach mathematics outside the state of Minnesota.

B.S. MINOR - MATHEMATICS: STATISTICS OPTION (MTST)

21-23 S.H.

Either teaching or non-teaching degree candidates may take the B.S. minor in statistics option; however, this is not a certifiable minor for teaching.

REQUIRED COURSES (15-17 S.H.)

Mathematics (6-8 S.H.)

- MATH 130 Matrix Algebra (3) OR
- O MATH 270 Differential Equations and Linear Algebra (4)
- MATH 140 Applied Calculus (3) OR
- MATH 155 Calculus Based Modeling (3) OR
- MATH 160 Calculus I (4)

Statistics (3 S.H.)

- STAT 110 Fundamentals of Statistics (3) OR
- STAT 210 Statistics (3) OR
- STAT 303 Introduction to Engineering Statistics (3) OR
- STAT 305 Biometry (3) OR
- O BUSA 220 Business Statistics (3) OR
- O PSY 231 Statistics (3)

Two of the following six courses (6 S.H.):

- STAT 350 Design of Samples and Surveys (3)
- STAT 355 Nonparametric Statistics (3)
- STAT 360 Regression Analysis (3)
- STAT 365 Experimental Design and Analysis (3) OR
- STAT 321 Industrial Design of Experiments I (3)
- I STAT 415 Multivariate Analysis (3)
- I STAT 425 Modern Methods of Data Analysis (3)

*"Additional Requirements" course as defined in Item 3, page 18

ELECTIVES (6 S.H.)

Select 6 S.H. from Group I and Group II (At most, 3 S.H. from Group II.)

Group I - Statistics

O	MATH	305	Probability (3)
‡	STAT	321	Industrial Design of Experiments I (3)
‡	STAT	350	Design of Sample and Surveys (3)
‡	STAT	355	Nonparametric Statistics (3)
‡	STAT	360	Regression Analysis (3)
‡	STAT	365	Experimental Design and Analysis (3)
	STAT	405	Biostatistics (3)
‡I	STAT	415	Multivariate Analysis (3)
‡I	STAT	425	Modern Methods of Data Analysis (3)
P	STAT	450	Mathematical Statistics I (3)
P	STAT	460	Mathematical Statistics II (3)

‡ Can be used as an elective course if not used as a required course

Group II - Application Areas

Select up to 3 S.H. from the following courses:

Biology – BIOL	310 (3), 312 (3)
Computer Science – CS	231 (3), 234 (3), 298 (3)
Economics – ECON	304 (3), 450 (3)
Finance – FIN	335 (3), 360 (3), 423 (3)
Health, Exercise and Rehabilitative Sciences – HERS	403 (3)
Marketing – MKTG	334 (3)
Mathematics – MATH	340 (3), 420 (3), 430 (3), 435 (3)
Nursing – NURS	375 (3)
Physics – PHYS	345 (3)
Political Science – POLS	410 (3)
Psychology – PSY	308 (3), 350 (3)
Sociology – SOC	376 (3)
Statistics – STAT	115 (1), 255 (3), 289 (1-3), 290 (1-4), 310 (3), 320 (3), 321 (3), 322 (3), 440 (3), 488 (1-6), 489 (1-3), 490 (1-4)

COURSE DESCRIPTIONS

All courses are offered every semester unless indicated differently.

MATHEMATICS (MATH)

050 - Intermediate Algebra (3 S.H.)

A review of pre-algebra and intermediate algebra topics designed to prepare the student for college-level mathematics. MATH 050 is a non-degree credit course and will not count toward meeting minimum total credit requirements for graduation. P/NC only.

100 - Survey of Mathematics (3 S.H.)

Study of networking, probability, statistical inference, and logic designed to illustrate the connection between contemporary mathematics and modern society. Grade only. Prerequisite: Qualifying score on the mathematics placement exam or MATH 050. Note: This course fulfills certain Board of Teaching (BOT) requirements for education majors.

110 - Finite Mathematics (3 S.H.)

Applications of matrices, linear programming, probability, and the mathematics of finance to real-life problems. This course provides the non-calculus mathematics background necessary for students in business, management, and social sciences. Prerequisite: Qualifying score on the mathematics placement exam or MATH 050.

115 - College Algebra (4 S.H.)

This course will give students a rigorous preparation in algebra. Topics include review of basic algebraic concepts; functions and graphs; polynomial, radical, rational, exponential and logarithmic functions; equations, inequalities, systems of equations and inequalities; and applications. Prerequisite: MATH 050 or mathematics placement.

120 - Precalculus (4 S.H.)

A study of topics designed to give students the skills necessary for successful completion of calculus. Equation solving, graphing, functions, and trigonometry are some of the main topics covered. Prerequisite: Qualifying score on the mathematics placement exam or MATH 115.

130 - Matrix Algebra (3 S.H.)

An introduction to matrix algebra and elementary vector spaces with an emphasis on computation. Prerequisite: MATH 120

140 - Applied Calculus (3 S.H.)

An intuitive approach to calculus for students in business, management, or the social sciences. Emphasis throughout is to enhance students' understanding of how mathematics is used in real-world applications. Prerequisite: Qualifying score on the mathematics placement exam, MATH 115, or MATH 120.

150 - Modeling using Precalculus and Statistics, 155 - Calculus Based Modeling (3 S.H. Each)

A two-semester sequence designed for earth- and life-science majors to develop their algebraic, trigonometric, statistical, and calculus skills through modeling applications. Prerequisite for MATH 150: Qualifying score on the mathematics placement exam or MATH 115. Prerequisite for MATH 155: MATH 150.

160, 165 - Calculus I, II (4 S.H. Each)

Differential and integral calculus of functions of a single variable. Two semesters in sequence. Prerequisite: Qualifying score on the mathematics placement exam or MATH 120.

161 - Calculus Companion I: Skills for Success (1 S.H.)

A course that reinforces students' algebraic and trigonometric skills in the context of Calculus I. Intended to be taken concurrently with the instructor's Calculus I course; students' abilities with algebra and trigonometry are improved upon as they are needed in the calculus. Prerequisite: Concurrent enrollment in instructor's section of MATH 160 or instructor's permission.

166 - Calculus Companion II: Toward Your Continued Success (1 S.H.)

Provides students with increased ability with topics of Calculus I as these are required in the development of Calculus II. Instruction is given in applying the methods of calculus to new material as introduced in the second semester of calculus. Prerequisite: Concurrent enrollment in instructor's section of MATH 165 or instructor's permission.

210 - Foundations of Mathematics (4 S.H.)

Introductory discrete mathematics including symbolic logic, elementary number theory, sequences, sets, relations, functions, and recursion. Valid and invalid argument forms are studied, and direct and indirect methods of proof are introduced. Prerequisite: MATH 110 or MATH 120 or MATH 150.

260 - Multivariable Calculus (4 S.H.)

Multivariable functions and vector functions are studied as the concepts of differential and integral calculus are generalized to surfaces and higher dimensions. Topics include vectors, parametric equations, cylindrical and spherical coordinates, partial and directional derivatives, multiple integrals, line and surface integrals, and the theorems of Green, Gauss, and Stokes. Prerequisite: MATH 165.

270 - Differential Equations and Linear Algebra (4 S.H.)

Solution techniques for ordinary differential equations including boundary/initial value problems and systems of first-order equations. Topics include linear homogeneous and non-homogeneous differential equations and the Laplace transform. Methods of linear algebra are studied as they apply to the solution of differential equations. Prerequisite: MATH 165.

280 - Special Topics (1-3 S.H.)

Exposure to lower-division mathematical topics not included in other courses. Prerequisite: Determined by topics. Offered on demand.

305 - Probability (3 S.H.)

Introduction to basic ideas and fundamental laws of probability. Topics include an introduction to combinatorics, probability axioms, conditional probability, discrete random variables, common discrete distributions, expectation, generating functions, limit theorems, and continuous random variables. Prerequisites: MATH 160 and MATH 210, or instructor's permission.

310 - Number Theory (3 S.H.)

A study of primes, divisibility, congruences, number-theoretic functions, and diophantine equations. Prerequisites: MATH 165 and MATH 210. Offered spring semester.

315 - Chaos Theory (3 S.H.)

An introduction to chaos theory and fractal geometry. Topics will include bifurcations, Julia sets, the Mandelbrot set, fractal geometry, iterated function systems, and a survey of the applications of this theory to a variety of disciplines. Prerequisite: MATH 160. Offered spring semester.

320 - Theory of Functions of a Complex Variable (3 S.H.)

The calculus of functions of a complex variable including differentiability, analyticity, and integration. Additional topics include the residue theorem. Prerequisite: MATH 260. Offered on demand.

330, 335 - Advanced Calculus I, II (4 S.H. Each)

A systematic approach to the theory of differential and integral calculus for functions and transformations in several variables. Prerequisites: MATH 210 and MATH 260.

340 - Advanced Linear Algebra (3 S.H.)

A continuation of MATH 130 with emphasis on more general vector spaces. Additional topics include linear transformations, inner product spaces, eigen-systems, diagonalization of matrices, and canonical forms. Prerequisite: MATH 130 or MATH 270 or instructor's permission. Strongly recommended: Completion of MATH 160 and MATH 165 prior to enrollment. Offered spring semester.

410 - History of Mathematics (3 S.H.)

General view of the historical development of the elementary branches of mathematics. Prerequisites: MATH 160 and MATH 210. Offered spring semester.

420 - Numerical Analysis (4 S.H.)

Numerical solution of equations, numerical interpolation, differentiation, and integration, numerical linear algebra, numerical solution of differential equations with analysis and use of algorithms and related software. Prerequisites: CS 231 or CS 234 and MATH 260. Offered alternate fall semesters.

430 - Operations Research: Linear Programming (3 S.H.)

An introduction to linear programming, including the simplex method. Other topics chosen from duality, sensitivity analysis, and the transportation and assignment problems. Prerequisite: One calculus course. Recommended: One linear algebra course. Offered alternate fall semesters.

435 - Operations Research: Modeling (3 S.H.)

This course emphasizes mathematical model building: problem identification and model construction. Topics chosen from among network flow analysis, nonlinear mathematical programming, queuing theory, simulation, integer programming, and Markov chains. Prerequisite: One calculus course. Recommended: One course in probability and statistics and more than one course in calculus. Offered on demand.

440 - Abstract Algebra (4 S.H.)

Axiomatic development of groups, rings, and fields. Prerequisite: MATH 210. Offered fall semester.

450 - Introduction to Topology (3 S.H.)

A study of indexed families of sets, mappings, diagrams, continuity, neighborhoods, limit points, open and closed sets. Prerequisites: MATH 165 and MATH 210. Offered on demand.

460 - Real Analysis (3 S.H.)

Measurable sets, measurable functions, and the theory and methods of Lebesgue integration. Additional topics at the instructor's discretion, e.g., summability, L theory of Fourier series, orthogonal expansions in L, famous theorems of analysis. Prerequisite: MATH 330. Offered on demand.

470 - Math Projects (1-4 S.H.)

Practical experience in working on real problems or research under the supervision of a faculty member. Prerequisite: Instructor's permission. Offered on demand.

480 - Special Topics (1-3 S.H.)

Exposure to mathematical topics not included in other courses. Prerequisite: Determined by topics. Offered on demand.

490 - Independent Problems in Mathematics (1-4 S.H.)

An opportunity to continue study of selected topics. Prerequisite: Instructor's permission. Offered on demand.

MATHEMATICS EDUCATION (MTED)

125 - Mathematics for Elementary Teachers (4 S.H.)

The study of concepts and properties of operations essential to mathematics in the elementary and middle school grades. Prerequisite: Completion of basic skills mathematics (MATH) requirement.

201 - Technology-Based Geometry and Probability for Elementary Teachers (4 S.H.)

The study of geometry using technology and probability topics essential to mathematics in the elementary and middle school grades. Prerequisite: MTED 125.

221 - Middle School Methods in Mathematics (1 S.H.)

Organization and methods of teaching mathematics in the middle school, including a 10-hour field experience. Prerequisite: MATH 160 or MTED 125.

289 - Special Topics (1-3 S.H.)

Exposure to lower-division mathematics education topics not included in other courses. Prerequisite: Determined by topics. Offered on demand.

290 - Independent Problems in Mathematics Education (1-3 S.H.)

An opportunity to study selected lower-division topics in mathematics education. Prerequisite: Instructor's permission. Offered on demand.

320 - Teaching Mathematics in the Secondary Schools (3 S.H.)

This course is designed to inform the prospective secondary mathematics teacher about current trends and issues in the teaching of mathematics. It also focuses on instructional techniques and development of appropriate materials for the classroom. The course includes a 30-hour field experience component at the secondary level. Prerequisites: MATH 165, MATH 210, and MTED 221. Offered fall semester.

322 - Modern Geometry (4 S.H.)

This course is designed to give the prospective teacher of secondary school geometry an exposure to the concepts of non-Euclidean geometries, their relation to, and their impact on secondary school geometry. Teaching methodology and related items will be incorporated throughout the course. Prerequisites: MATH 165 and MATH 210. Offered spring semester.

420 - Technology and Professional Development in the Secondary Schools (3 S.H.)

This course incorporates the use of technology in the teaching of mathematics, research in mathematics education, and professional

development as a teacher of mathematics. Students are required to make a public presentation and attend a professional meeting. Prerequisites: MTED 320 and MTED 322. Offered fall semester.

489 - Special Topics (1-3 S.H.)

Exposure to mathematics education topics not included in other courses. Prerequisite: Determined by topics.

490 - Independent Problems in Mathematics Education (1-4 S.H.)

An opportunity to continue study of selected topics in mathematics education. Prerequisite: Instructor's permission.

STATISTICS (STAT)

110 - Fundamentals of Statistics (3 S.H.)

Introductory statistics with emphasis on applications. Note: Students in certain majors should take STAT 210 instead of STAT 110. Prerequisite: Qualifying score on the mathematics placement exam or MATH 050.

115 - Laboratory in Statistics (1 S.H.)

This course will provide experience in collecting data, analyzing data, and writing statistical reports. Students will study statistical concepts through activities and projects which involve collecting and analyzing data. Techniques for summarizing, analyzing and interpreting large sets of data will also be discussed. Emphasis will be on practical problem-solving with real data sets using appropriate computer software packages. Prerequisite: Completion of any introductory statistics course or instructor's permission.

210 - Statistics (3 S.H.)

First course in statistics for students with a strong mathematics background. Prerequisites: MATH 140 or MATH 160.

250 - Actuarial Exam Preparation (2 S.H.)

This is an independent study course designed to help students with actuarial exam preparation. Students enrolled in this course are required to take the appropriate exam at the date nearest completion of this course. Course cannot be applied toward fulfilling major or minor program requirements. Prerequisite: Instructor's permission. Offered on demand.

255 - Data Management Using SAS (3 S.H.)

An introduction to the statistical package SAS. The course will focus on DATA step programming and selected basic PROC routines, with an introduction to SAS/GRAPH if time permits. Prerequisite: STAT 110 or equivalent. Offered spring semester.

289 - Special Topics (1-3 S.H.)

Exposure to lower-division statistical topics not included in other courses. Prerequisite: Determined by topics. Offered on demand.

290 - Independent Problems in Statistics (1-4 S.H.)

Exposure to statistical topics not included in other courses. Prerequisite: Instructor's permission. Offered on demand.

303 - Introduction to Engineering Statistics (3 S.H.)

Introduction to statistics and quality control concepts and techniques. Topics include graphical techniques, descriptive statistics, probability distributions, hypothesis testing, control charts, process capability studies, and additional topics in total quality management. Note: Credit will not be given for both STAT 210 and STAT 303. Prerequisite: MATH 160. Offered fall semester.

305 - Biometry (3 S.H.)

An introductory course of statistical applications to the biological sciences. Data reduction, sampling, techniques of estimation, hypothesis testing, and model verification procedures are included. Diversity indices, techniques of species sampling, and other specific biometric methods will be covered. Prerequisite: MATH 120 or MATH 150 or instructor's permission. **Note:** MATH 305 cannot be used as a MATH or STAT elective for mathematics, mathematics education, or statistics majors.

310 - Intermediate Statistics (3 S.H.)

A second course in statistics covering regression, measures of association, and analysis of variance. Interpretation of computer output and applications will be emphasized throughout. Prerequisites: STAT 110, STAT 210, STAT 303, STAT 305, PSY 231 or equivalent. Credit will not be given for STAT 310 if the student has completed STAT 360 or STAT 365.

320 - Statistical Quality Control (3 S.H.)

An introduction to the basic philosophy of quality control and statistical tools used in quality control. Tools to include control charts, Ishikawa fishbone charts, Pareto charts, histograms, stem-and-leaf plots, and dot plots. There will be industrial case studies and tours of local industries (when available). Prerequisite: An introductory statistics course (preferably STAT 210). Offered alternate fall semesters.

321 - Industrial Design of Experiments I (3 S.H.)

An introduction to applications of statistical methods used by industrial researchers to aid in the solution of certain types of industrial problems. Methods to include analysis of means, analysis of variance, factorial designs, fractional factorial (screening) designs. There will be industrial case studies and actual (hands-on) experience at local industries (when available). Prerequisite: An introductory statistics course (preferably STAT 210 or STAT 303). Offered spring semester.

322 - Industrial Design of Experiments II (3 S.H.)

A second course in experimental design methods in industry. Topics may include empirical model building, review of factorial and fractional factorial designs, process improvement with steepest ascent, analysis of response surfaces, experimental designs for fitting response surfaces, Taguchi's robust parameter designs, experiments with mixtures. Prerequisite: STAT 321 or instructor's permission. Offered on demand.

350 - Design of Samples and Surveys (3 S.H.)

Practical problems of surveys. Design of optimal surveys. Questionnaire design. Practical problems of sampling. Design of optimal sampling procedures. Adapting standard statistical techniques to specialized sampling design. Prerequisite: An introductory statistics course (preferably STAT 210). Offered fall semester.

355 - Nonparametric Statistics (3 S.H.)

Statistical methods based on runs, the empirical distribution function and ranks. Topics will include one and two sample tests, ANOVA, goodness of fit tests, rank regression, correlation, and confidence intervals. Both applications and theory emphasized. Prerequisite: STAT 110 or STAT 210. Offered on demand.

360 - Regression Analysis (3 S.H.)

Simple linear regression, multiple regression, hypothesis testing, analysis of residuals, stepwise regression. Interpretation of computer output will be emphasized. Prerequisite: An introductory statistics course (preferably STAT 210 or STAT 305). Completion of or concurrent enrollment in MATH 130 or MATH 270 is recommended. Offered fall semester.

365 - Experimental Design and Analysis (3 S.H.)

One-way Analysis of Variance, planned comparisons, post-hoc procedures, two- and three-way Analysis of Variance, experimental design, Analysis of Covariance. Interpretation of computer output will be emphasized. Prerequisite: An introductory statistics course (preferably STAT 210 or STAT 305). Completion of, or concurrent enrollment in MATH 130 or MATH 270, is recommended; completion of STAT 360 is also recommended. Offered spring semester.

405 - Biostatistics (3 S.H.)

This course will give students an overview of Biostatistics. The topics to be covered include contingency tables analysis, relative risk, odds ratios, partial association, Cochran-Mantel-Haenszel methods, two-way ANOVA, interactions, repeated measures, logistic regression, Poisson regression, Kaplan-Meier methods, and Cox proportional hazards models. Parametric methods and various nonparametric alternatives will be discussed. Prerequisite: An introductory statistics course (preferably STAT 210 or STAT 305). Offered alternate fall semesters.

415 - Multivariate Analysis (3 S.H.)

Statistical analysis of multivariate data. Topics will include preparation of data for analysis, selection of techniques appropriate to research questions, measures of association for continuous and discrete variables, Hotelling's T, MANOVA, MANCOVA, discriminant analysis, principal component and factor analysis. This is a computer-oriented course with emphasis on application. Prerequisites: MATH 130 or MATH 270, STAT 360 or instructor's permission. Offered alternate spring semesters.

425 - Modern Methods of Data Analysis (3 S.H.)

An introduction to the use of the computer as a powerful tool in data analysis. Topics will include statistical graphics, advanced regression techniques, curve fitting and smoothing, generalized additive models, CART, multivariate techniques, cross-validation and the bootstrap. Additional topics that may be covered are random number generation and Monte Carlo simulation methods. Prerequisites: MATH 165 and STAT 360. Offered alternate spring semesters.

440 - Epidemiology (3 S.H.)

A general introduction to the concepts and methods of epidemiology as they are applied in a variety of disease situations. Topics include modeling the disease process in a population; retrospective, prospective, and observational studies; rates, ratios, and data interpretation; and evaluation of epidemiological information. Prerequisite: An introductory statistics course. Offered on demand.

450, 460 - Introduction to Mathematical Statistics I, II (3 S.H. Each)

A mathematical approach to probability and statistics. Prerequisites: MATH 260 and completion of or concurrent enrollment in MATH 220. Offered yearly as a fall/spring sequence.

488 - Statistics Projects (1-6 S.H.)

Practical experience working on real problems under the supervision of a faculty member experienced in statistics. Prerequisite: Instructor's permission. Offered on demand.

489 - Special Topics (1-3 S.H.)

Exposure to statistical topics not included in other courses. Prerequisite: Determined by topics. Offered on demand.

490 - Independent Problems in Statistics (1-4 S.H.)

An opportunity for continued study of selected topics. Prerequisite: Instructor's permission. Offered on demand.

492 - Practicum in Statistics (3-6 S.H.)

Provides the student with experience and training in statistical techniques. The student will work a minimum of 100 hours (3 credits) or a minimum of 200 hours (6 credits) on a job utilizing statistics. Prerequisite: Instructor's permission. P/NC only. Offered on demand.

MEDICAL TECHNOLOGY

Pasteur Hall (507-457-2993, 507-457-5462)

http://bio.winona.edu/biohp/acad_deg.htm

Note: Effective fall semester 2007, the Clinical Laboratory Science program (page 75) replaced the Medical Technology Program (MEDT). Students currently majoring in MEDT will be able to complete the program and graduate with a B. S. major in Medical Technology.

WSU DIRECTORS, MEDICAL TECHNOLOGY

Dr. *Judith A. Loewen*, B.S., University of Minnesota, Minneapolis; University of Minnesota, Medical School, Board Certified-Infectious Diseases Specialist; M.S., University of Wisconsin, Eau Claire; Ph.D., Mayo Graduate School of Medicine, Rochester, MN

Dr. *Frances R. Ragsdale*, B.S., Eastern Oregon State College; M.S., Southeastern Louisiana University; Ph.D., University of Idaho, 1993 –

ADJUNCT FACULTY

Note: ASCP = American Society of Clinical Pathologists

Community Memorial Hospital, Winona, Minnesota

Dennis Coon, MT (ASCP), Laboratory Director

†*Edward Hines Jr. VA Hospital*, Hines, Illinois

Donna M. Wray, MT (ASCP), Program Director

†*Hennepin County Medical Center (HCMC)*, Minneapolis, Minnesota

Robin Montgomery, MSED, MT (ASCP), SBB, Program Director

†*Marshfield Clinic*, Marshfield, Wisconsin

Julie Seehafer, MT (ASCP), Program Director

†*Mercy Hospital Medical Center*, Des Moines, Iowa

Kyla Diebler, MT (ASCP), Program Director

†*Sacred Heart Hospital*, Eau Claire, Wisconsin

Jim Sorenson, MT (ASCP), Program Director

†*University of North Dakota*, Grand Forks, North Dakota

Ruth Paur, MS, MT (ASCP), CLS, (NCA), Program Director

Mary Ann Sens, MD, PhD, Professor and Chairman

†*University of Iowa*, Des Moines, Iowa

Judith Kittleson, MT (ASCP), Site Coordinator

†Schools with which WSU has affiliated internship programs

CAREER OPPORTUNITIES AND REQUIREMENTS

The Medical Technology Program is a four-year course of instruction leading to the degree of Bachelor of Science in Medical Technology. After completing board examinations, individuals with a degree in medical technology find employment in clinical settings, where they are responsible for routine laboratory tests on body fluids. Frequently, at a large hospital or clinic, an individual will work primarily in one area of expertise, such as maintaining a blood bank. Many smaller institutions assign more diverse duties to broadly trained medical technologists. First-year medical technology majors must consult with a program director soon after arrival on campus. The first three years consist of intensive coursework in the basic sciences. The fourth year is a one-year clinical internship at an approved school of medical technology.

It should be noted that acceptance into the fourth year of training is not automatic upon completion of the third year at WSU. Entry into the clinical phase of study is competitive. Candidates are more likely to be selected if they complete the course of study outlined below with a minimum GPA of 3.0 (on a 4.0 scale). Affiliated institutions select students on the basis of academic achievement and their potential as medical technologists. The latter is determined through a personal interview with appropriate officials at approved schools of medical technology. Final approval is decided by clinical admission boards. Students accepting an invitation for clinical training in medical technology from an approved institution will complete the training required for graduation at that institution. WSU will assess tuition on a semester basis, and students will be evaluated each semester. Tuition for the clinical internship year is higher than that assessed for non-clinical semesters. This increase helps defray the costs of a clinical education.

Following the successful completion of the clinical fourth year, the student is granted the degree of Bachelor of Science with a major in medical technology. Upon satisfactory completion of the program, as determined by the clinical affiliate, the student is eligible to apply for examination by two certifying agencies:

- National Accrediting Agency for Clinical Laboratory Science (NAACLS)
- Committee on Allied Health Education and Accreditation (CAHEA).

Certification completes the experience and makes the graduate eligible for employment opportunities in the clinical setting.

Note: Students expecting to complete the WSU requirements within a three-year period should consult with a program director prior to registration. All student programs (schedules) must be approved each semester by a Director of Medical Technology. To complete this program within four years, students must take 17 to 19 credits per semester. Some students opt for a slower pace by completing their WSU courses in four years, followed by clinical studies during their fifth year. Currently, all clinical internships start in the summer or fall, depending on the clinical setting.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Biology Department offers the following flag courses in the University Studies Program:

FLAG

Oral I	BIOL 307	Cell Biology Laboratory (1)
	BIOL 309	Developmental Biology (3)
	BIOL 315	Environmental Biology (3)
	BIOL 409	General Microbiology (4)
	BIOL 423	Ecosystem Ecology (3)
	BIOL 460	General Parasitology (3)
	BIOL 462	Parasitology (4)

Math/Critical Analysis O

BIOL 310	Genetics (3)
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Writing P

BIOL 308	Cell Biology (3)
BIOL 323	General Physiology (5)
BIOL 415	Ecology of Large Rivers (4)
BIOL 431	Molecular Biology Lab (4)
BIOL 445	Immunology (3)
BIOL 499	Capstone Project (1-3)

Flag courses that can be used to satisfy medical technology major requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - MEDICAL TECHNOLOGY (MEDT)

REQUIRED COURSES (124 - 126 S.H.)

UNIVERSITY STUDIES COURSES (30 S.H.)

Note: A number of courses required by the medical technology major also satisfy requirements of the University Studies Program. Students should consult with their academic advisor for more information.

MAJOR AREA COURSES (30-32 S.H.)

Required Biology Courses – BIOL (25 S.H.)

	241	Basics of Life (4)
	242	Organismal Diversity (4)
P	308	Cell Biology (3)
I	307	Cell Biology Lab (1)
I	409	General Microbiology (4)
	443	Urinalysis (1)
	444	Immunochemistry and Hematology (2)
P	445	Immunology (3)
I	460	Parasitology (3)

Note: BIOL 241 and 242 should be taken prior to BIOL 308 and BIOL 307.

MAJOR ELECTIVES (5-7 S.H.)

Biology – BIOL

O	310	Genetics (3)
	201	Human Anatomy (4)
P	323	General Physiology (5)

Statistics – STAT

	305	Biometry (4) (Required by Sacred Heart)
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ADDITIONAL REQUIREMENTS (32-34 S.H.)

Chemistry – CHEM (16 S.H.)

*	212	Principles of Chemistry I (4)
*	213	Principles of Chemistry II (4)
	340	Organic Chemistry Survey (4) OR CHEM 350 Principles of Organic Chemistry I (4) and CHEM 351 Principles of Organic Chemistry II (5)
	400	Biochemistry I (4) (Required by HCMC; recommended by most other affiliates.) OR
	425	Analytical Chemistry I (4) OR CHEM 426 Analytical Chemistry II (4)

Mathematics – MATH (4-6 S.H.)

	120	Precalculus, Functions and Graphs (4) OR
	150	Modeling Using Precalculus and Statistics (3) AND
	155	Calculus Based Modeling (3)

Physics – PHYS (8 S.H.)

*	201	General Physics I (4)
	202	General Physics II (4)

Note: *PHYS 221 and *PHYS 222 may be taken in place of the above series. However, be aware that MATH 160 is a prerequisite for PHYS 221 and that this substitution may prevent completion of the major in four years.

CLINICAL EDUCATION – BIOL (32 S.H.)

	450	Medical Technology I (12)
	451	Medical Technology II (12)
	452	Medical Technology III (4)
	453	Medical Technology IV (4)

Note: The clinical training can be completed at any NAACLS-approved clinical training site.

OTHER ELECTIVES

Some clinical schools require a course in statistics; therefore, it is recommended that students select STAT 305 as an elective in the "Major Electives" above.

MUSIC

Performing Arts Center, Room 146 (507-457-5250)

www.winona.edu/music

Catherine Schmidt (Chairperson)

FACULTY

Suzanne Rhodes Draayer, Professor; B.M., Furman University; M.S., George Peabody College of Vanderbilt University; D.M.A., University of Maryland College Park; 1993 –

Donald Lovejoy, Associate Professor; B.S., Asbury College; M.M., University of Regina; M.M., Northwestern University; D.M.A., University of Wisconsin-Madison; 2000 –

R. Richard MacDonald, Professor; B.M., M.M.E., University of North Texas; D.A., University of Northern Colorado; 1996 –

Harry Mechell, Professor; B.Mus., M.M., Temple University; D.M.A., University of Illinois; 1989 –

Deanne Mohr, Associate Professor; B. Mus., University of Regina; M. Mus.; Université de Montreal; D.M.A., Université de Montreal; 2002 –

Catherine Schmidt, Professor; B.S., M.S., University of Illinois, Urbana; Ph.D., University of Wisconsin-Madison; 1991 –

Paul Vance, Professor; B.A., Moorhead State University; M.M., University of Wisconsin-Milwaukee; D.M.A., University of Michigan; 1996 –

PURPOSE

The Department of Music offers courses of study leading to a B.S. or a B.A. degree with a major in music. The department is committed to providing music degree programs that foster creativity, skill development, critical thinking, independent learning, and understanding of and respect for multiple perspectives.

For students majoring in other fields, the department offers a program leading to a minor as well as a variety of courses and activities for the general student. Musical organizations are open to all students. The department also offers private study of instruments and voice for credit with members of the music faculty. WSU is an accredited institutional member of the National Association of Schools of Music.

PRIVATE INSTRUCTION

The courses denoted as “Private Instruction” in the program requirements may be repeated at various levels of instruction. Students must pass an audition to be permitted to enroll in courses designated as “Private Instruction.”

PASS/NO CREDIT (P/NC) COURSES

Except for the internship, students must take all courses in the major or minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

ADDITIONAL REQUIREMENTS

- Students must achieve a “C” or better in all required music courses within a music degree program in order to count the courses for graduation. (For a checklist of the University graduation requirements, see page 23.)
- Students majoring in music education (teaching) must have a 2.75 overall GPA and a 2.75 GPA in the major.
- All majors are required to register for Concert Attendance (MUS 001) each semester—maximum 8 semesters. Minors are required to complete 4 semesters of MUS 001, Concert Attendance.

ENSEMBLE REQUIREMENT

All music majors must participate in the large ensemble related to their major performing medium each semester they are enrolled as music majors. The major performing ensemble for wind and percussion players is MUS 241 (Symphonic Wind Ensemble); the major performing ensemble for string players is MUS 242 (Orchestra); and the major performing ensemble for vocalists is MUS 243 (Concert Choir). Piano and guitar majors should work with their advisor to determine the appropriate ensemble for their program, skills, and interests.

PIANO PROFICIENCY EXAMINATION

All music majors must pass a piano proficiency examination. Students may enroll in piano classes to help prepare for passing the proficiency examination; however, these piano classes do not count towards a degree.

ENTRANCE AUDITIONS

All entering music majors are required to audition for the appropriate studio instructor in their primary performing medium. (These auditions can be in conjunction with scholarship auditions.)

ADMISSION REQUIREMENTS FOR MAJORS

All incoming students who wish to major in music must perform an audition, successfully complete entrance examinations in theory and aural skills, and have a personal interview with professors in their major field.

Students will receive a letter confirming their status. If admitted, the student will enter either as a music major or as a major with probationary status. (Admission status is at the discretion of performing area full-time faculty and is dependent upon having sufficient room available in the applied studio.)

Students electing a performance major (B.A. Performance) must pass a performance review at the end of the first year to receive full acceptance into the performance degree program. Methods of assessment include juries, recitals, and written examinations.

ADMISSION REQUIREMENTS FOR MINORS

All incoming students who wish to minor in music must perform an audition and successfully complete entrance examinations in theory and aural skills. Students will receive a letter confirming their status. If admitted, the student will enter either as a music minor or as a minor with probationary status. (Admission status is at the discretion of performing area full-time faculty and is dependent upon having sufficient room available in the applied studio.)

THEORY ENTRANCE AND PLACEMENT EXAMINATION

To register for MUS 201, Theory I, new music majors and minors must pass an entrance examination on basic music notation including note values, note names, and key signatures. Students who do not meet the minimum requirements for MUS 201 may register for MUS 120, Introduction to Music Theory. A theory placement exam is required for those students requesting advanced placement in the theory sequence. The exam is offered prior to the beginning of the fall semester each year.

DEPARTMENT OF MUSIC RETENTION POLICIES

1. Music majors and minors may enroll in each music theory, music history, or music methods course twice only. A third time may be granted on appeal to the music faculty.

- Declared (probationary) music majors and minors must attain 100-level lessons no later than the end of their third semester. After that time, registration as a major or minor will be denied.
- Music majors and minors may enroll in each level of lessons for a maximum of three semesters. After that time, registration as a major or minor will be denied.
- Music majors must satisfactorily complete both the theory sequence and the piano proficiency by the end of the third year of classes taken as an admitted WSU music major.
- Students seeking to transfer to WSU as a music major or minor must:
 - Perform an entrance audition to determine level of lesson registration.
 - Take a music theory and aural skills assessment exam to determine skill level (regardless of whether theory credits are transferred).
 - Take a music history assessment exam to determine level of knowledge (only if music history credits are transferred).
 - Complete a minimum of one year of applied study at WSU at the level required for the individual degree program.
 - Complete a minimum of one year in the large ensemble appropriate to the performance medium at WSU and satisfy ensemble requirements as stated in the WSU catalog.
 - Perform all recitals required for the degree program at WSU (after at least one year of study with a WSU instructor).

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Music offers the following flag courses in the University Studies Program:

FLAG

Oral I

- MUS 440 American Art Music (3)
- MUS 471 Survey of Vocal Literature I (Italian) (2)
- MUS 472 Survey of Vocal Literature II (German) (2)
- MUS 473 Survey of Vocal Literature III (French) (2)
- MUS 475 Survey of Instrumental Literature and Styles (3)
- MUS 477 Piano Literature I (2)
- MUS 478 Piano Literature II (2)

Math/Critical Analysis O

- MUS 402 Form and Analysis (3)

Writing P

- MUS 351 Music of the Middle Ages, Renaissance and Baroque (3)
- MUS 352 Music of the Classical Period, 19th and 20th Centuries (3)

Flag courses that can be used to satisfy music major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - MUSIC (LIBERAL ARTS) (MUSL)

50-51 S.H. (No Minor Required)

CORE REQUIREMENTS - MUS (25 S.H.)

- 001 Concert Attendance (0)
- 114 World Music (3)
- 201, 202 Music Theory I, II (8)
- 203, 204 Music Theory III, IV (8)
- P 351 Music of the Middle Ages, Renaissance, Baroque (3)
- P 352 Music of the Classical Period, 19th and 20th Centuries (3)

REQUIRED COURSES (20-21 S.H.)

- 109 Introduction to Music (3)
- I 440 American Art Music (3)
- Choose from the following Literature courses (2-3):
- I 475 Instrumental Literature & Styles (3)
- I 471, 472, 473 Vocal Literature Class (2)
- I 477 Piano Literature I (2)
- Major Performing Large Ensemble (4): Choose one: 241, 242, 243 (See Note 1 below.)
- Applied Lessons in Primary Performance Medium (8) (See Note 2 below.)

Music (Liberal Arts) Notes:

- All credits must be taken in the large ensemble related to major performing medium. Students must participate in this large ensemble every semester they are enrolled as music majors.
- Students must enroll in a minimum of 4 semesters of applied lessons, and they must pass the 260 series level requirements in applied lessons to graduate.

CAPSTONE PROJECT (2 S.H.)

- 491 Independent Study (2)

ELECTIVES (3 S.H.)

Electives must be taken from the areas of theory, history, and literature. MUS 109 and 120 do not fulfill elective requirements. (Suggested course: MUS 402, Form and Analysis, to fulfill Critical Analysis Flag requirement.)

PIANO PROFICIENCY

See page 160 for information concerning piano proficiency.

B.A. MAJOR - MUSIC PERFORMANCE (MUSP)

85-86 S.H. (No Minor Required)

ADMISSION TO THE MAJOR

To be admitted into the Performance degree program, students must make

a formal application and pass an audition before a faculty committee after their first year.

CORE REQUIREMENTS (25 S.H.)

- 001 Concert Attendance (0)
- 114 World Music (3)
- 201, 202 Music Theory I, II (8)
- 203, 204 Music Theory III, IV (8)
- P 351 Music of the Middle Ages, Renaissance, Baroque (3)
- P 352 Music of the Classical Period, 19th and 20th Centuries (3)

REQUIRED COURSES (54-55 S.H.)

- 109 Introduction to Music (3)
- 306 Conducting (2)
- I 440 American Art Music (3)
- 480 Junior and Senior Recital (3)
- Applied Lessons in Primary Performance Medium (28)** (See Note 3 below.)
- Major Performing Large Ensemble (8)**
- Choose one: 241, 242, 243 (See Note 4 below.)

Pedagogy & Literature (7-8)

Vocal Performance Major

- 415 Vocal Pedagogy (2)
- I 471 Italian Vocal Literature (2)
- I 472 German Vocal Literature (2)
- I 473 French Vocal Literature (2)

Piano Performance Major

- 416 Piano Pedagogy (2)
- I 477 Piano Literature I (2)
- I 478 Piano Literature II (2)
- 337 Accompanying (1-2)

Instrumental Performance Major

- 255 Jazz Improvisation (2)
- I 475 Instrumental Literature & Styles (3)

Choose two of the following four courses (See Note 5 below):

- 311 Woodwind Methods I (1)
- 312 String Methods I (1)
- 313 Percussion Methods I (1)
- 314 Brass Methods I (1)

Music Performance Notes:

- Student must enroll in a minimum of 8 semesters of applied lessons.
- Credits must all be taken in the large ensemble related to major performing medium. Students must participate in this large ensemble every semester they are enrolled as music majors.
- One of the two methods courses required for the instrumental performance major must be in the student's primary performance medium.

ADDITIONAL REQUIREMENTS

- Piano proficiency. See page XX for information concerning the piano proficiency examination.
- Participation in small chamber ensemble required.

ELECTIVES (6 S.H.)

Electives must be taken from areas of theory, history, and literature. MUS 120 does not fulfill elective requirements. (Suggested course: MUS 402 (Form and Analysis) to fulfill Critical Analysis Flag requirement.)

B.S. MAJOR - MUSIC EDUCATION (Teaching) (MSTI; MSTV)

142 S.H. (Total S.H. includes all University Studies requirements.)

Both the Music Education degree program and the Professional Education Sequence are subject to changes in Board of Teaching licensure requirements. Check with your advisor for current program/licensure requirements.

UNIVERSITY STUDIES PROGRAM (23 S.H.)

Basic Skills (10 S.H.)

- ENG 111 College Reading and Writing (4)
- CMST 191 Introduction to Public Speaking (3)
- Mathematics (3)
- Physical Development and Wellness (fulfilled by HERS 204) (0)

Arts and Sciences Core (10 S.H.)

- Humanities (3 credits fulfilled by ART 109, 221, 222, or 224) (3)
- Natural Science (7)
- Social Science (fulfilled by SPED 400 and EDUC 305) (0)
- Fine and Performing Arts (fulfilled by THAD 131) (0)

Unity and Diversity (3 S.H.)

- Critical Analysis (fulfilled by MUS 203) (0)
- Science and Social Policy (3)
- Global or Multicultural Perspectives (fulfilled by EDUC 308) (0)
- Contemporary Citizenship or Democratic Institutions (fulfilled by MUS 298) (0)

CORE REQUIREMENTS (25 S.H.)

- 001 Concert Attendance (0)
- 114 World Music (3)
- 201, 202 Music Theory I, II (8)
- 203, 204 Music Theory III, IV (8)
- P 351 Music of the Middle Ages, Renaissance and Baroque (3)
- P 352 Music of the Classical Period, 19th and 20th Centuries (3)

REQUIRED COURSES: BOTH VOCAL AND INSTRUMENTAL LICENSURES (37 S.H.)

- 002 Music Education Seminar (0) **Note:** Must enroll every semester except when student teaching.
- 255 Jazz Improvisation I (2)
- 301 Orchestration and Instrumentation (2)
- 306 Conducting I (2)
- 406 Conducting II (1)
- 298 Foundations and Principles of Music Education (3)
- 322 Elementary Music Methods I (3)
- 332 Elementary Music Methods II (2)
- 323 Secondary Music Methods (3)
- 480 Recital (1)

Major Performing Large Ensemble (6)

Choose one: 241, 242, or 243 (See Note 6 below.)

Private Instruction in Major Applied Field (12) (See Note 7 below.)

Music Education Notes:

6. Credits must all be taken in the large ensemble related to major performing medium. Students must participate in this large ensemble every semester they are enrolled as music majors.
7. Students must enroll in a minimum of 6 semesters of applied lessons.

ADDITIONAL REQUIREMENTS FOR INSTRUMENTAL MAJORS (12 S.H.)

- 311 Woodwind Methods (1)
- 312 String Methods (1)
- 313 Percussion Methods (1)
- 314 Brass Methods (1)
- 341 Woodwind Methods II (1)
- 342 String Methods II (1)

- 343 Percussion Methods II (1)
- 344 Brass Methods II (1)
- 236 Voice Class (2)
- 425 Instrumental Ensemble Administration and Marching Band Techniques (2)

ADDITIONAL REQUIREMENTS FOR VOCAL MAJORS (12 S.H.)

- 415 Vocal Pedagogy (2)
- 422 Music Seminar on Choral Techniques & Materials (2)

Private Instruction in Minor Applied Field (6)

Substitution of up to 2 credits of 337 permitted; substitution of up to 2 credits of 335 permitted.

Choose two of the following four courses (2):

- 311 Woodwind Methods (1)
- 312 String Methods (1)
- 313 Percussion Methods (1)
- 314 Brass Methods (1)

OTHER REQUIRED COURSES (INSTRUMENTAL AND VOCAL LICENSURES) (13 S.H.)

- * THAD 131 Performance I for Everyone (3)
- HERS 204 Personal and Community Health (3)
- * SPED 400 Education of Exceptional Children/Youth (3)

Choose one of the following four courses (3):

- ART 109 Introduction to Art (3)
- ART 221 Art History I (3)
- ART 222 Art History II (3)
- ART 224 American Art (3)

Choose one of the following two courses:

- * THAD 155 Modern Dance I (1)
- * THAD 153 Jazz Dance I (1)

PROFESSIONAL EDUCATION SEQUENCE FOR K-12 AND 5-12 LICENSURE (32-36 S.H.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 304 Human Development and Learning: Middle Level and K-12 (4) OR
- * EDUC 305 Human Development and Learning: Secondary (4)
- * EDUC 308 Human Relations and Student Diversity (3)
- O EDUC 311 Instructional Planning and Assessment: Middle Level and K-12 (3) OR
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- EDUC 429 Secondary Reading and Teaching Strategies (4)
- P EDUC 449 Middle Level Philosophy, Organization and Planning (3)
- P EDUC 459 The Professional Educator (3)
- I EDST 465 Student Teaching (12-16)

OTHER REQUIREMENTS

In addition to the above course requirements, all students must:

- Pass a piano proficiency examination (see page 160 for more information).
- Pass a guitar proficiency examination.
- Participate in small ensemble performance.
- Attend a specified proportion of music education workshops/seminars yearly.
- Pass Music Education Seminar (MUS 002) each semester they are enrolled as music education majors except when student teaching.

B.S. MAJOR - MUSIC (MUSIC BUSINESS) (MUBU)

95-96 S.H. (No Minor Required)

CORE REQUIREMENTS (25 S.H.)

- 001 Concert Attendance (0)
- 114 World Music (3)
- 201, 202 Music Theory I, II (8)
- 203, 204 Music Theory III, IV (8)

- P 351 Music of the Middle Ages, Renaissance, and Baroque (3)
 P 352 Music of the Classical Period, 19th and 20th Centuries (3)

REQUIRED COURSES (33-34 S.H.)

- 107 Music Technology (3)
 108 Audio Production (3)
 109 Introduction to Music (3)
 I 440 American Art Music (3)

Select 4 credits from the following courses:

- 301 Orchestration and Instrumentation (2)
 306 Conducting (2)
 311 Woodwind Methods (1)
 312 String Methods (1)
 313 Percussion Methods (1)
 314 Brass Methods (1)

Major Performing Large Ensemble (4):

Choose one: 241, 242, 243 (See Note 8 below)

Applied Lessons in Primary Performance Medium (8) (See Note 9 below.)

Select 5-6 credits from the following courses:

- 110 History of Jazz (3)
 111 Film Music (3)
 122 History of Rock (3)
 207 Music Technology II (2)
 208 Audio Production II (3)

CAPSTONE PROJECTS (13. S.H.)

- 399 Music Internship (10)
 491 Independent Study (3)

Music Business Notes:

- Credits must all be taken in the large ensemble related to major performing medium. Students must participate in this large ensemble every semester they are enrolled as music majors.
- Students must enroll in a minimum of 4 semesters of applied lessons, and they must pass the 200-level requirements in applied lessons to graduate.

ADDITIONAL REQUIREMENTS (BUSINESS) (24 S.H.)

Accounting (6 S.H.)

- ACCT 211 Financial Accounting Principles (3)
 ACCT 212 Managerial Accounting Principles (3)

Economics and Finance (9 S.H.)

- * ECON 201 Principles of Microeconomics (3)
 * ECON 202 Principles of Macroeconomics (3)
 FIN 360 Corporate Finance (3)

Business Administration (6 S.H.)

- O BUSA 220 Business Statistics (3)
 BUSA 291 Legal Environment of Business (3) OR
 BUSA 301 Business Law I (3)

Marketing (3 S.H.)

- MKTG 300 Principles of Marketing (3)

PIANO PROFICIENCY

See page 160 for information concerning piano proficiency.

B.A. MINOR - MUSIC (MUSA)

22 S.H.

REQUIRED COURSES (19 S.H.)

- 001 Concert Attendance (0)
 114 World Music (3)
 201 Music Theory I (4)
 202 Music Theory II (4)

Major Performing Large Ensemble (4) Choose one: 241, 242, 243 (See Note 10 below.)

Applied lessons in primary performance medium (4) (See Note 11 below.)

Substitution of up to 2 credits of MUS 337 permitted for piano students.

B.A. Music Minor Notes:

- Credits must all be taken in the large ensemble related to major performing medium.
- Students must enroll in a minimum of two consecutive semesters of applied lessons.

ELECTIVES (3 S.H.)

Any 3 credits of music elective courses except MUS 109 and MUS 120.

B.A. MINOR – MUSIC/JAZZ STUDIES (MUJS)

27 S.H.

REQUIRED COURSES – MUS (27 S.H.)

- 001 Concert Attendance (0)
 110 Jazz History (3)
 201 Music Theory I (4)
 206 Jazz Fundamentals (2)
 239 Jazz Combo (1) (2 semesters required to earn 2 S.H.)
 244 Jazz Ensemble (1) (2 semesters required to earn 2 S.H.)
 255 Jazz Improvisation I (2)
 256 Jazz Improvisation II (2)
 334 Jazz Piano Class (2)
 355 Jazz Improvisation III (2)
 356 Jazz Improvisation IV (2)

Applied lessons in primary performance medium (4). Students must enroll in a minimum of two consecutive semesters of applied lessons.

B.S. MINOR - MUSIC (MUSS)

26 S.H.

Minor suggested for elementary education majors. Music minor not for licensure.

REQUIRED COURSES (26-28 S.H.)

- 001 Concert Attendance (0) (4 semesters)
 114 World Music (3)
 201 Music Theory I (4)
 202 Music Theory II (4)

Major Performing Large Ensemble (4) Choose one: 241, 242, 243 (See B.S. Music Minor Note)

Applied Piano (Studio instruction) (4) OR 234, 235, and 335 OR Applied Guitar (Studio Instruction) (4)
 Substitution of up to 2 credits of MUS 337 permitted. Substitution of 2 credits of MUS 315 permitted.
 298 Foundations and Principles of Music Education (2)
 306 Conducting (2)
 322 Elementary Music Methods (3)

B.S. Music Minor Note: Credits must all be taken in the large ensemble related to major performing medium.

COURSE DESCRIPTIONS (MUS)

Note: Music course descriptions are listed in the following order: (1) applied courses, (2) ensembles, (3) methods and education, and (4) theory, history, and literature.

APPLIED COURSES

234 - Class Piano I (2 S.H.)

First semester of a sequence designed to develop basic keyboard and musicianship skills in preparation for the Piano Proficiency Examination. Instructor's permission required. Offered yearly.

235 - Class Piano II (2 S.H.)

Second semester of a sequence designed to further develop basic keyboard and musicianship skills in preparation for the Piano Proficiency Examination. Instructor's permission required. Offered yearly.

236 - Class Voice (2 S.H.)

Classification of voices, English diction, fundamentals of vocal techniques. Performance of songs in English and Italian. Offered alternate years.

335 - Class Piano III (2 S.H.)

Final course of a sequence designed to develop and strengthen basic keyboard and musicianship skills in preparation for the Piano Proficiency Examination. Instructor's permission. Offered yearly.

337 - Accompanying (1-2 S.H.)

Survey of accompanying techniques and styles. Assignment to specific accompanying duties. May be repeated up to total of 6 credits. Prerequisite: Instructor's permission. Offered each semester.

INDIVIDUAL INSTRUCTION

Private lessons meeting once a week may be repeated for credit and are offered each semester. Entering music students must pass an entrance audition to qualify for the 160-level series of lessons. Students who do not fulfill requirements for 160-level series lessons are placed in 060-level series lessons until they are ready for the 160-level series. Piano students who do not meet 160-level requirements may be placed in either piano class or 061 lessons. All 060-level series lessons are half-hour lessons for 2 semester hour

credits. These credits do not count toward the major or minor for graduation. Music majors or minors may take only two semesters at the 060 level. Credit is variable in the 160, 260, 360 and 460 series. Half-hour lessons receive 2 semester hour credits. One-hour lessons receive 4 semester hour credits. Prerequisite: Enrollment in all applied lesson series requires the instructor's permission.

060-series: Students entering with limited music background (2 S.H.). Instructor's permission required.

160-series: Entering students with previous musical training and background (2 or 4 S.H.). Students pursuing secondary performance medium. Prerequisite: Instructor's permission.

260-series: Second-year students (2 or 4 S.H.). Students must show sufficient progress in 160-level series lessons before enrolling for 260-level series lessons. Prerequisite: Instructor's permission.

360-series: Third-year students (2 or 4 S.H.). Students must show sufficient progress in 260-level series lessons before enrolling for 360-level series lessons. Prerequisite: Instructor's permission.

460-series: Fourth-year students and beyond (2 or 4 S.H.). Students must show sufficient progress in 360-level series lessons before enrolling in 460-level series lessons. Instructor's permission required.

061, 161, 261, 361, 461 - Piano (2 or 4 S.H.)

062, 162, 262, 362, 462 - Voice (2 or 4 S.H.)

063, 163, 263, 363, 463 - Strings (2 or 4 S.H.)

064, 164, 264, 364, 464 - Woodwinds (2 or 4 S.H.)

065, 165, 265, 365, 465 - Brass (2 or 4 S.H.)

066, 166, 266, 366, 466 - Percussion (2 or 4 S.H.)

ENSEMBLES

Open to all students by audition. Repertory selected to acquaint the student with representative literature from all periods. Can be repeated for credit. Offered each semester.

142 Oratorio Chorus (1)

143 Women's Chorus (1)

239 Jazz Combo (1)

240 Percussion Ensemble (1)

241 Symphonic Wind Ensemble (1)

242 Orchestra (1)

243 Concert Choir (1)

244 Jazz Ensemble (1)

245 String Ensemble (1)

246 Brass Ensemble (1)

247 Woodwind Ensemble (1)

249 Madrigal Ensemble (1)

METHODS AND EDUCATION

002 - Music Education Seminar (0 S.H.)

A seminar designed to provide music education students with consistent practice in conducting, rehearsal techniques, and performing on secondary instruments or voice throughout their major program. All music education majors are required to enroll each semester they are in attendance at WSU.

298 - Foundations and Principles of Music Education (2 S.H.)

Study of the historical foundations and principles of music education. Examination of selected current topics in music education. Prerequisite: MUS 202 or instructor's permission. Offered alternate years.

311 - Woodwind Methods I (1 S.H.)

Class instruction in flute, oboe, clarinet, saxophone, and bassoon. History, literature, and teaching methods for the music major or minor. Offered alternate years.

312 - String Methods I (1 S.H.)

Class instruction in violin, viola, cello, and bass. History, literature, and teaching methods for the music major or minor. Offered alternate years.

313 - Percussion Methods I (1 S.H.)

Class instruction in percussion instruments. History, literature, and teaching methods for the music major or minor. Offered alternate years.

314 - Brass Methods I (1 S.H.)

Class instruction in cornet, trumpet, horn, trombone, and tuba. History, literature, and teaching methods for the music major or minor. Offered alternate years.

315 - Guitar Methods (2 S.H.)

Class instruction in guitar and other fretted instruments. History, literature, and teaching methods for music major or minor. Offered alternate years.

320 - Music for Elementary Teachers (3 S.H.)

Study of the fundamentals of music and methods for teaching music in the kindergarten and elementary grades. Students with an adequate background in music should consider MUS 322 as an alternate to this course. Prerequisite: Admission to the Professional Education Sequence. Not for music majors. Not applicable toward B.A. degree. Offered each semester.

322 - Elementary Music Methods I (3 S.H.)

Study of material and methods for music instruction in the elementary grades. Not applicable toward the B.A. degree. Prerequisite: Admission to the Professional Education Sequence. Offered alternate years.

323 - Secondary Music Methods (3 S.H.)

Study of material and methods for music in the secondary school. Not applicable toward the B.A. degree. Prerequisites: Successful completion of guitar and piano proficiencies, and admission to the Professional Education Sequence. Offered alternate years.

332 - Elementary Music Methods II (2 S.H.)

Advanced study of materials and methods for elementary music instruction. Development and application of skills and techniques needed to successfully teach elementary general music. Prerequisites: MUS 322. Successful completion of guitar and piano proficiencies and admission to the Professional Education Sequence. Offered yearly.

341 - Woodwind Methods II (1 S.H.)

Continuation of the study of woodwind instruments. The course emphasizes pedagogical principles and materials available for the beginning level through high school including solo literature and small ensemble repertoire. Prerequisite: MUS 311 or instructor's permission. Offered alternate years.

342 - String Methods II (1 S.H.)

Continuation of the study of string instruments. The course emphasizes pedagogical principles and materials available for the beginning level through high school including solo literature and small ensemble repertoire. Prerequisite: MUS 312 or instructor's permission. Offered alternate years.

343 - Percussion Methods II (1 S.H.)

Continuation of the study of percussion instruments. The course emphasizes pedagogical principles and materials available for the beginning level through high school including solo literature and small ensemble repertoire. Prerequisite: MUS 313 or instructor's permission. Offered alternate years.

344 - Brass Methods II (1 S.H.)

Continuation of the study of brass instruments. The course emphasizes pedagogical principles and materials available for the beginning level through high school including solo literature and small ensemble repertoire. Prerequisite: MUS 314 or instructor's permission. Offered alternate years.

399 - Music Internship (10 S.H.)

Supervised experience in music business or industry designed by music faculty advisor, work supervisor, and student. Prerequisites: Successful completion of required music and business courses with a 2.5 GPA or better. P/NC only. Offered each semester.

415 - Vocal Pedagogy (2 S.H.)

Techniques and methodologies of voice instruction. Current trends in vocal pedagogy. Offered alternate years.

416 - Piano Pedagogy (2 S.H.)

Survey of schools of playing and teaching throughout the course of the piano's development. Analysis and comparison of 20th century teaching methods and historical anthologies. Special unit addressing beginner's needs. Prerequisite: Instructor's permission required. Offered in a 3-year rotation.

422 - Music Seminar on Choral Techniques and Materials (2 S.H.)

Criteria for selection of vocal music, examination of representative music suitable for groups at various levels of development, principals of programming, rehearsal techniques, and organization. Offered alternate years.

425 - Instrumental Administration and Marching Band Techniques (2 S.H.)

The organization and administration of elementary and secondary instrumental music programs, performance practice, rehearsal, and marching band techniques. Prerequisite: Instructor's permission. Offered alternate years.

435 - Wind Instrument Repair (2 S.H.)

Care, maintenance, and repair of woodwind and brass instruments. Offered based on demand.

490 - Music for Today's Schools: New Ideas in Music Education (1-3 S.H.)

This course consists of workshops presenting new ideas or theories, elaborating on new trends in music education, and offering guidelines for improving public school music programs. Course content changes each year. May be repeated for credit.

THEORY, HISTORY, AND LITERATURE

107 - Music Technology I (3 S.H.)

This course is taught in Rochester at RCTC. Students will investigate the relationship between computer, software, and electronic instruments. The student will investigate basic MIDI concepts in theory and practice. The student will be given individual lab time where he/she will create music compositions and audio projects. Prerequisite: None.

108 - Audio Production I (3 S.H.)

This course is taught in Rochester at RCTC. Students will learn basic terminology, theory and practice of modern recording techniques, and become proficient at operating analog and digital recording equipment. Students

will be given individual lab time for audio production projects. Prerequisite: None.

109 - Introduction to Music (3 S.H.)

Study of the elements of music, fundamental techniques, and formal patterns. Stylistic traits of Baroque, Classic, Romantic, and modern periods. Brief biographies of outstanding composers. Students become familiar with representative works through recordings. Offered each semester.

110 - History of American Jazz (3 S.H.)

A history of jazz in America, its African and European influences, its emergence as a recognizable art form in the 20th century, and its present-day varieties. Offered yearly.

111 - Film Music: Art Behind the Scenes (3 S.H.)

This course will demonstrate the importance of music in perhaps the most important 20th century new entertainment and artistic medium known as "Film." The course will progress from the early beginnings of the silent screen up to the present day. Students will learn the important, basic musical elements (i.e. melody, rhythm, harmony, etc.) and how composers use them in film scoring. Students will do a "hands-on" project putting music to a film clip. No prior music experience necessary. Laptop is required.

114 - World Music (3 S.H.)

A survey of selected world music cultures. Cultures covered are chosen from Africa, India, China, Japan, Southeast Asia, Indonesia, and the Americas. Designed for the general student as well as the music major and minor. Concert/listening lab required. Offered yearly.

120 - Introduction to Music Theory (3 S.H.)

An introduction to the structure and notation of music found in past and current composition. Does not fulfill elective requirements for music major/minor. Offered yearly.

122 - The History of Rock Music (3 S.H.)

A history of rock and roll and pop/rock music, its diverse American influences, its emergence as a recognizable style in the 1950s, and its symbiotic relationship with modern society. Offered occasionally.

201 - Theory I (4 S.H.)

Scales; intervals; non-harmonic tones; simple harmonic progression and voice leading; beginning aural skills. Prerequisite: Successful completion of Theory Entrance Exam or MUS 120. Offered yearly.

202 - Theory II (4 S.H.)

Continuation of MUS 201, covering 4-part writing and harmonic progression, melodic construction, binary and ternary forms, diatonic seventh chords; aural skills. Prerequisite: MUS 201. Must be a declared music major or minor. Offered yearly.

203 - Theory III (4 S.H.)

Continuation of 4-part writing, tertian structures greater than the octave, secondary dominants, modulation, Augmented 6th chords. Forms studied include Binary, Ternary, Variation as well as contrapuntal forms such as Invention and Fugue. Aural skills further developed. Prerequisite: MUS 202. Must be a declared music major. Offered yearly.

204 - Theory IV (4 S.H.)

Chromatic harmony. New harmonic approaches including twelve tone, polytonality, atonality, and related 20th century techniques. Aural skills further developed. Prerequisite: MUS 203. Must be a declared music major. Offered yearly.

207 - Music Technology II (2 S.H.)

This course is taught in Rochester at RCTC. Continuation of concepts taught in MUS 107. Additional areas of study will include writing music and data CDs, creation of sound and music for video productions, and basic Quicktime video editing and production. The student will be given individual lab time to create music for audio/video projects. Prerequisite: MUS 107 (Electronic Music I).

208 - Audio Production II (3 S.H.)

This course is taught in Rochester at RCTC. Continuation of the concepts taught in MUS 108. This course will emphasize the understanding of sound and acoustics; microphone design, construction and placement; and equalization. Students will be given individual lab time for audio production projects. Prerequisite: MUS 108.

250 - Sight Singing (2 S.H.)

Study in aural perception of interval and rhythmic relationships. Prerequisite: Knowledge of musical notation. Offered occasionally.

255 - Jazz Improvisation I (2 S.H.)

A study of the basic tools of jazz improvisation including scales, chord terminology, the blues, and basic jazz forms. Prerequisite: MUS 201 or instructor's permission. Offered alternate years.

256 - Jazz Improvisation II (2 S.H.)

This course is the second of a four-part sequence in jazz improvisation. Sectional forms, progressions in minor keys, pentatonic scales, diminished scales. Prerequisite: MUS 255 or equivalent.

301 - Orchestration and Instrumentation (2 S.H.)

Study of techniques, ranges, and timbre of instruments. Fundamentals of

scoring for band and orchestra. Prerequisite: MUS 204. Offered yearly.

302 - Jazz Ensemble Arranging (3 S.H.)

Scoring for large and small ensembles. Prerequisite: MUS 202 or equivalent. Offered occasionally.

306 - Conducting (2 S.H.)

Techniques of conducting choral and instrumental groups. Offered yearly.

351 - Music of the Middle Ages, Renaissance and Baroque (3 S.H.)

Study of the development of music from antiquity through approximately 1750. Heritage and central concepts of medieval theory and the rise of individual composers in the Renaissance. Study of multi-movement forms from the cyclic polyphonic mass to opera, oratorio, and early instrumental genres. Prerequisites: MUS 204. Instructor's permission required for non-major. Offered yearly.

352 - Music of the Classical Period, 19th and 20th Centuries (3 S.H.)

Study of the development of music from c.1750 to the present day. Significant works of the growing art-music repertoire and careers of important composers. Changing roles of form and harmonic language, proliferating responses to the changing role of art music. Prerequisites: MUS 204 and MUS 351. Instructor's permission required for non-major. Offered yearly.

355 - Jazz Improvisation III (2 S.H.)

This course is the third of a four-part sequence in jazz improvisation. Technology tools are presented and investigated. In-depth study of altered dominant chords. Prerequisite: MUS 256 or equivalent.

356 - Jazz Improvisation IV (2 S.H.)

This course is the final course in a four-part sequence in jazz improvisation. In-depth investigation of major group styles. Free jazz, preparation for jazz recital. Prerequisite: MUS 355 or equivalent.

402 - Form & Analysis (3 S.H.)

Analysis of compositions as to form, melodic, and harmonic structure. Students write original compositions modeled after works analyzed. Prerequisite: MUS 204. Offered alternate years.

406 - Conducting II (1 S.H.)

Advanced techniques of conducting choral and instrumental groups. Prerequisites: MUS 306 and instructor's permission. Offered yearly.

440 - American Art Music (3 S.H.)

Music in America from the time of the Puritans to the present day. Historical, biographical material, and listening. For the general student as well as for music majors and minors. Prerequisite: MUS 109 or equivalent. Offered occasionally.

456 - Music Theatre Production (1-3 S.H.)

Study of representative operas and musical plays and production problems. Performance of scenes and/or complete works. Can be repeated up to 8 credits.

471 - Survey of Vocal Literature I (Italian) (2 S.H.)

Songs and arias of the 17th and 18th centuries, Baroque performance practice. Prerequisite: MUS 351. Offered in a 3-year rotation.

472 - Survey of Vocal Literature II (German) (2 S.H.)

Lieder of Schubert, Schumann, Franz, Mendelssohn, Brahms, Strauss, Wolf, and others. Offered in a 3-year rotation.

473 - Survey of Vocal Literature III (French) (2 S.H.)

Representative French songs of Faure, Duparc, Chausson, Debussy, Poulenc, and others. Offered in a 3-year rotation.

475 - Survey of Instrumental Literature and Styles (3 S.H.)

Study of the rise of instrumental styles beginning with Renaissance and continuing through the Romantic Orchestra. Survey course studying representative works of various composers. Prerequisite: MUS 351. Offered alternate years.

477 - Piano Literature I (2 S.H.)

Appropriate early keyboard and piano literature of the Baroque and classical periods. Performance and analysis of forms, genres, style and primary composers are studied. Includes discussion of the history of the piano's development. Prerequisite: Instructor's permission. Offered in a 3-year rotation.

478 - Piano Literature II (2 S.H.)

Piano literature of the Romantic, Impressionistic, and Contemporary periods (including brief look at Nationalism). Continued developments in instrumental design of piano discussed. Prerequisite: Instructor's permission. Offered in a 3-year rotation.

480 - Recital (1-2 S.H.)

Half recital (1 S.H.) or full recital (2 S.H.) of representative literature. May be repeated for credit. Prerequisite: Must be enrolled in 300- or 400-level lessons for half recital; 400-level lessons for full recital.

491 - Independent Studies in Music (1-6 S.H.)

Course designed to offer advanced students the opportunity to work in a music area of special interest to them. May be taken for or repeated up to 6 credits. Prerequisite: Department's permission. Offered each semester.

NURSING

Stark Hall, Room 303 (507-457-5120)

www.winona.edu/nursing

Email: nursing@winona.edu

Joanne Stejskal (Chairperson)

FACULTY

Note: All nursing faculty are registered nurses.

Susan Ballard, Professor; B.S.N., University of Illinois; M.S.N., University of Minnesota; 1984 –
Cynthia Bork, Associate Professor; B.S.N., College of St. Teresa; M.S., Winona State University; Ed.D., St. Mary's University of Minnesota; 1993 –
Diane McNally Forsyth, Associate Professor; B.S., Winona State University; M.S., University of Wisconsin-Madison; Ph.D., University of Wisconsin-Milwaukee; 2004 –
Karen L. Gardner, Professor; B.S.N., Florida State University; M.S.N., Texas Woman's University; 1985 –
Phyllis Gaspar, Professor; B.S.N., M.S.N., University of Nebraska; Ph.D., Case Western Reserve University; 1995 –
Timothy Gaspar, Professor, Dean, College of Nursing and Health Sciences; B.S., South Dakota State University; M.S.N., University of Nebraska Medical Center; Ph.D., University of Utah; 1995 –
Elizabeth Harrison, Associate Professor; B.S., University of Wisconsin-La Crosse; A.A., Rochester Community College; B.S., Marquette University; M.S., Ph.D., University of Wisconsin-Milwaukee; 2005 –
Jacqueline Hatlevig, Professor; B.S.N., Winona State University; M.S.N., Ph.D., University of Wisconsin-Milwaukee; 1987 –
Linda Heath, Associate Professor; B.S., M.S.N., University of Wisconsin; Ph.D., Walden University; 1993 –
Judy Hovelson, Associate Professor; B.S.N., University of Vermont; M.S.N., University of Minnesota; F.N.P., Winona State University; 1984 –
Lola Johnson, Professor; B.S.N., Minnesota State University-Mankato; M.S.N., Washington University; Ph.D., Rush University; 1989 –
Kathryn Lammers, Assistant Professor; B.S., Kent State University; M.S.N., Winona State University; 2001 –
William McBreen, Professor; B.S.N., Mount Marty College; M.S.N., University of Nebraska Medical Center; Ph.D., University of Texas; 2000 –
Jane Mrozek, Assistant Professor; B.S., Viterbo College; M.S., University of Wisconsin-Eau Claire; 2006 –
Shirley Newberry, Associate Professor; B.S., University of Dubuque; M.S., Winona State University; Ph.D., Rush University; 1994 –
Catherine Nosek, Associate Professor; A.D., Inver Hills Community College; B.S., M.S., University of Wisconsin; Ph.D., University of Wisconsin-Madison; 1997 –
Gayle P. Olsen, Professor; B.S.N., College of Saint Teresa; M.S., University of California; 1980 –
Ann Olson, Associate Professor; B.S., Winona State University; M.A., St. Mary's University of Minnesota; M.S., Winona State University; 2007 –
Kathy S. Orth, Professor; A.A., Austin Community College; B.S.N., College of Saint Teresa; M.S.N., University of Minnesota; 1983 –
Christine E. Pilon-Kacir, Professor; B.S.N., Mercy College of Detroit; M.S., University of Michigan; Ph.D. University of Missouri, 1992 –
Julie Ponto, Associate Professor; B.S., University of Minnesota; M.S., University of California-San Francisco; 2004 –
Quinn, Nancee, Assistant Professor; B.S.N., South Dakota State University; M.S., Winona State University; 2006 –
Amy Reitmaier, Assistant Professor; B.S., M.S., Winona State University; 2006 –
Martha Scheckel, Assistant Professor; B.S.N., Graceland University; M.S.N., Clarke College; Ph.D., University of Wisconsin-Madison; 2005 –
Cindy Scherb, Professor; B.S., Mount Mercy College; M.S., University of Minnesota; Ph.D., University of Iowa; 2002 –
Lisa Schnepfer, Associate Professor; A.D., Western Wisconsin Technical College; B.S., Winona State University; M.S., University of Wisconsin-Eau Claire; 2005 –
Linda Seppanen, Professor; B.S.N., St. Olaf College; M.S.N., The Catholic University of America; Ph.D., University of Alabama; 1990 –
Joanne Stejskal, Professor; B.S.N., College of Saint Teresa; M.S.N., University of Wisconsin; Ed.D., University of St. Thomas; 1975 –
Susan Sullivan, Assistant Professor; B.S., M.S., Winona State University; 2004 –
Patricia Thompson, Professor; B.S.N., B.S., Winona State University; M.S.P.H., Ph.D., University of Minnesota; 1990 –
Mary Welbaven, Professor; B.S.N., Winona State University; M.S., Ph.D., University of Minnesota; 1981 –
Linda Wlodyga, Assistant Professor; B.S.N., Rush University; M.S.N., University of Phoenix; 2007 –

PROGRAM OVERVIEW

The nursing major offers a liberal education with a concentration of study in nursing. The curriculum builds on a broad base of university studies. In addition to liberal learning and global perspectives, students develop clinical, scientific, decision-making, and caring skills in nursing courses that combine the theory and the practice of nursing. Graduates are prepared to practice in all health care settings, work with clients of all ages, and pursue graduate study. The nursing major is structured in two options:

- **Generic Option** for students seeking professional preparation at the level of B.S. degree (Bachelor of Science in Nursing) and registered nurse licensure. The Generic Option can be completed on the Winona campus, through the 2+2 Program with RCTC on the Rochester campus (page 41), or by traditional transfer. This option includes two years of sequenced upper-division nursing coursework. Most students complete the major on a full-time basis of study; part-time study is possible.
- **RN-to-BS Option** for those who already hold a registered nurse license and are now seeking a B. S. degree. This option includes sequenced upper-division nursing courses that can be completed in one to two years after all other degree requirements are completed. The RN-to-BS Option can be completed on a full-time or part-time basis at the Rochester campus and through outreach. The Department of Nursing also offers an adapted RN-to-MS Professional Pathway for registered nurses whose goal is to earn a Masters Degree in Nursing.

A variety of community facilities are utilized for site-based experiences for students in the nursing major. Campus assignment determines location of clinical facilities. Students in the Generic Option assigned to the Winona campus participate in acute care clinical experiences at Community Memorial Hospital in Winona and the Gundersen-Lutheran and Franciscan-Skemp medical complexes in La Crosse, Wisconsin. Students in the Generic Option assigned to the Rochester campus participate in acute care clinical experiences at hospitals affiliated with Mayo Medical Center and Olmsted Medical Center. Both campuses also offer a wide variety of other clinical experiences in nursing homes, public health agencies, mental health agencies, school systems, occupational health settings and other agencies, and clients' homes. Students in the RN-to-BS Option have learning experiences in the Rochester area through a variety of community and county agencies. RN-to-BS courses are delivered through classroom and web-based instruction.

ACCREDITATION AND APPROVAL

The Nursing Programs are accredited by the Commission on Collegiate Nursing Education (CCNE), 1 Dupont Circle NW, Suite 530, Washington, D. C. 20036-1120 (202-887-6791 or www.aacn.nche.edu). The undergraduate Nursing Program is approved by the Minnesota Board of Nursing (www.nursingboard.state.mn.us). Graduates are eligible to write the professional nurse licensure examination (NCLEX-RN) and apply for Public Health Nursing Certification. Graduates can apply to the Board of Teaching for a school nurse license in Minnesota after they obtain the RN license and Public Health Nurse certification.

ADMISSIONS

For general information about Winona State University admission procedures and requirements, see page 5.

Admission to the Generic Option

1. Complete the WSU admissions process before the application deadline for the nursing major.
2. Complete the application to the nursing major during the spring semester prior to beginning nursing courses the following fall (during a student's second year) or during the fall semester for spring admission prior to beginning nursing courses. Check with the Department of Nursing for the application deadline set for that semester. Notification of admission to the nursing major is made during the semester of application. Nursing advisors are available to assist with the application process. Please refer to the Department of Nursing Student Progression Policies for further delineation of the admission policies. The number of students admitted to the upper-division nursing major is limited.
 - a. Students applying to the nursing major must have completed four prerequisite courses in the natural sciences with a grade of "C" or better and have an admission GPA of 3.00 or above. This admission GPA is cumulative and calculated on the most recent five years of college coursework. If there are fewer than 50 credits within the 5-year interval and there are previous college credits, the most recent 50 semester hour credits of college work will be used. If 50 credits fall within a semester, all credits within that semester will be used in the GPA calculation. Quarter credits will be converted into semester credits. All grades for prerequisite courses must be at a "C" or better no matter when they were completed. All prerequisite coursework must be completed before beginning coursework in the major.
 - b. When applying, students must indicate a plan for completing any remaining prerequisite courses in the natural and social sciences and ENG 111 prior to starting the nursing major in the fall. ALL prerequisite courses must be completed with a grade of "C" or better.
 - c. In addition to meeting the above requirements, a student transferring from another nursing program must submit to the Department of Nursing an official transcript from the program and a letter from the academic head of the program stating that the student is eligible for continuation in or readmission to that program. Placement in the major will then be determined based on background and space available.
 - d. Campus preference (Winona or Rochester) is indicated during the application phase. Campus assignments are made at the time of admission to the major. Students who are accepted to a particular campus must start at that campus in the semester for which they applied. Slots will not be held from semester to semester.

Four-Year Graduation Guarantee

Winona State University guarantees that all eligible students wishing to graduate in four years will be provided necessary courses as required by the University, the College of Nursing and Health Sciences, and the participating department. This guarantee applies to new entering first-year students who begin at Winona State University in the fall semester. Students who earn college credits during high school years or during the summer prior to their first year at WSU meet this requirement as the four-year period begins with the fall semester of the first year. Any required courses needed beyond four years will be provided to the student tuition-free, subject to the student's fulfillment of the conditions.

Students who meet the following requirements of the Four-Year Graduation Guarantee are admitted to the nursing major:

1. All fall semester entering first-year students who wish to participate in the graduation guarantee program must complete the guarantee application form and officially declare a major within the Department of Nursing before beginning their fall semester classes.
2. All participating students must be qualified to begin college-level (i.e., non-remedial) science, mathematics and English as required by the nursing major. If the student takes MATH 050 or English (ENG) 099, this contract is void.
3. All participating students must pre-register for classes each semester and have their schedules approved by their official nursing advisor.
4. All participating students must meet any University or program GPA and/or grade requirements as stipulated in the University catalog and/or schedule of classes. They must also have a cumulative GPA of 3.300 at the time of first application to the nursing major. The cumulative GPA is not rounded up.
5. All participating students must successfully complete an average course load of 16 credits each semester (32 credits per year). This includes any PSEO credits and summer school credits completed prior to the first application to the nursing major.
6. All prerequisite courses must be completed with a grade of "C" or better, and none of these courses can be repeated.
7. No change in major, option, or minor.
8. Failure to meet any of the above conditions (1-7) voids the guarantee. Once the graduation guarantee is void, the student is not eligible for reinstatement of the contract.

Admission to the RN-to-BS Option

1. Complete the WSU admissions process before applying to the nursing major (page 5). After receiving the Official Evaluation of Credit from the Office of Admissions (DARS), arrange an appointment with a nursing advisor on the Rochester campus.
2. Apply for admission to the nursing major. Applicants to the Nursing Program are admitted once a year for the following academic year.
 - a. Contact the Rochester campus Nursing Department office in the preceding fall for application materials, deadline dates, and general information. Students need to seek academic advisement prior to applying to the RN-to-BS Option program to ensure that all requirements are fulfilled. Select the full-time or part-time option for completing the nursing courses.
 - b. Additional degree requirements beyond nursing courses will need to be completed for graduation. It is highly recommended that all non-nursing degree requirements and the nursing requirement of 5 upper-division elective credits be completed prior to the RN-to-BS Option nursing courses because of scheduling considerations.
 - c. All RN-to-BS Option students must hold an RN license with current registration by a state or territory of the United States. A photocopy of the license must be submitted to the Nursing Department.
 - d. Twenty-four credits in the RN-to-BS Option of the nursing major (NURS 302, NURS 304, NURS 306, and NURS 308) will be granted by transfer to RN students who have completed an Associate Degree in Nursing from an NLNAC-accredited program. The Comprehensive Nursing Assessment Test (CNAT) is used as a challenge for these credits for RNs who are graduates of diploma programs and A.D.N. programs that are not accredited by NLNAC. If the examination is successfully completed at 74% achievement, the 24 credits are validated for the graduate of the A.D.N. program not accredited by NLNAC. For the graduate of the diploma program, if the examination is successfully completed at 74% achievement, the 24 credits are processed through the WSU registration with payment of appropriate tuition. The CNAT may be retaken if the 74% is not attained. The cost of the CNAT is borne by the student.
 - e. The RN-to-MS Professional Pathway is designed for highly motivated nurses who graduated with an associate degree in nursing or a diploma in nursing, who have nursing experience, and whose goal is a Masters Degree in Nursing. Selected courses meet requirements for the undergraduate and graduate programs. Students must meet additional admission requirements and should also consult the *WSU Graduate Catalog*. Separate formal application to the Master's Nursing Program is required. Further information can be obtained from the Department of Nursing at WSU-Rochester.

MnSCU Statewide Nursing Articulation Agreement

The following terms and conditions of articulation among nursing programs are in effect at WSU:

1. The candidate must have graduated from an Associate Degree program for registered nurses that is approved by a state board of nursing and based in a regionally accredited college or university.
2. The candidate must have been awarded the Associate in Science (A.S.) Degree in Nursing with a cumulative GPA of 2.75 and a minimum grade of "C" in each nursing course.

*"Additional Requirements" course as defined in Item 3, page 18

- The candidate must have been graduated from a board-approved program in nursing and have a current unencumbered authorization to practice as a Registered Nurse (RN).
- The Associate in Science (A.S.) Degree transfers to the baccalaureate institution as a whole package of nursing major and supporting courses.
- Articulation RNs should not be required to complete more total credits for the degree than the generic nursing baccalaureate students.

ACADEMIC POLICIES, PROCEDURES, REQUIREMENTS, AND RESOURCES

Costs

Nursing students admitted into the upper-division nursing major must assume responsibility for any costs incurred while meeting the clinical agency requirements. Nursing students are expected to provide their own transportation to all site-based experiences. Nursing students also must assume responsibility for the costs of their name pins and any necessary identification, uniform(s), lab coats and faculty-approved stethoscopes, as well as any costs incurred to maintain their health (throat cultures, physician/nurse practitioner visits, etc.) and meet any clinical agency requirements. Initial costs for book purchases for junior nursing students in the Generic Option can total approximately \$750 to \$1000. Most textbooks are used throughout the program. Nursing students need to provide for themselves compatible computer access for electronic communication for coursework and departmental needs. Fees will be assessed for learning and assessment purposes.

Scholarships

A number of scholarships are available for nursing majors through the Department of Nursing; a complete listing is maintained in the Nursing Department Offices on both the Rochester and Winona campuses. Students should apply for scholarships one academic year in advance of the academic year when the scholarship is desired (e.g., apply during the 2008-2009 academic year for the 2009-2010 academic year). Scholarships are provided by individual benefactors, affiliated hospitals, and professional and community organizations. Students are encouraged to contact agencies (hospitals, nursing homes, American Legion, VFW, etc.) in their hometowns regarding possible nursing scholarships. Refer to pages 10 and 13 for general information on financial aid and scholarships, respectively.

Professional-Related Organizations

Minnesota Student Nurses Association (MSNA): This is a pre-professional organization with membership at the local, state, and national levels. Declared nursing majors are welcome and encouraged to join. The Winona campus MSNA office is located in Stark Hall, Room 324. Names of current officers are posted on Nursing Department bulletin boards in Winona and Rochester.

Undergraduate Nursing Clubs: The membership includes all who are in the Generic Option, with separate clubs on the Winona and Rochester campuses. They deal with student-related issues and events. Officers and representatives to Department of Nursing committees are elected yearly, and names are posted on the respective campuses.

Kappa Mu Chapter of Sigma Theta Tau: The purpose of this nursing honor society is to recognize superior achievement and development of leadership qualities, foster high professional standards, and encourage creative work. Membership is by invitation and includes nurses in the southeast Minnesota area and students.

Program Assessment

The Department of Nursing requires all students enrolled in the nursing major to participate in the systematic evaluation of program outcomes. This involves completion of surveys, participation in discussion groups, and maintenance of a portfolio. This portfolio includes examples of work showing critical thinking, communication abilities, caring therapeutic nursing interventions and service, and evidence of progression in the professional nursing roles throughout the educational experience. Costs associated with program assessment may be the student's responsibility.

Honors in Nursing Program

This program provides eligible students an opportunity to participate in scholarly activity above and beyond the normal course of study provided within the Nursing Department. Students in the Honors in Nursing Program have an opportunity to work closely with faculty advisors pursuing research or clinical projects, and they receive recognition for their achievements. Students interested in the Honors in Nursing Program should contact their nursing faculty advisor. Students who successfully complete the Honors in Nursing Program will, upon graduation, have their official transcripts stamped with the words, "Graduated with Honors in Nursing"; their graduation status (Honors in Nursing) will be indicated on the graduation program.

Standards within the Nursing Major

To satisfy the academic standards of the nursing major, students must:

- Achieve a grade of "C" or above in each required nursing course. Grades less than "C" constitute a failure in the nursing major. Students must adhere to the University standards for retention and scholarship.
- Maintain a level of health that does not interfere with the student's ability to function adequately and safely in the nursing major. The student is expected to seek appropriate professional assistance as needed. The faculty may recommend the need for assistance, a leave of absence, and/or withdrawal from the program.
- Follow the ethical responsibilities as outlined in the *Handbook for Undergraduate Nursing Students*.
- Complete the forms for the background studies conducted by the licensing division of the Department of Human Services on behalf of the Department of Health. Under the 1995 amendments to the Vulnerable Adults Act, individuals who provide direct contact service to patients or residents in select health facilities must undergo a background check.

"Minnesota law requires that any person who provides services that involve direct contact with patients and residents at a health care facility licensed by the Minnesota Department of Health have a background study conducted by the state. An individual who is disqualified from having direct patient contact as a result of the background study, and whose disqualification is not set aside by the Commissioner of Health, will not be permitted to participate in a clinical placement in a Minnesota licensed health care facility. Failure to participate in a clinical placement required by the academic program could result in ineligibility to qualify for a degree in this program."
- Meet clinical agency requirements when enrolled in courses with site-based experiences: yearly Mantoux skin tests; diphtheria-tetanus immunity; measles, mumps and rubella immunity; polio immunity; Hepatitis B vaccination; chicken pox immunity/titer; medical/hospital insurance coverage; a physical examination within the past 10 years; annual health care provider CPR certification; and professional liability insurance. The professional liability insurance will be an automatic fee, which the student incurs upon admission to the nursing major.

Professional Retention and Progression Policies

- No nursing course may be repeated more than once due to withdrawal or grade less than "C." (A grade of "D" or less is considered to be a failing grade.) No theory exams can be retaken. Students who fail or withdraw from a course (theory and/or clinical) will be able to continue part-time in the nursing major if they have satisfied progression policies and as space allows.
- Students will not be allowed to continue in the nursing major if they have failed or withdrawn for academic reasons from the same nursing course more than once or from two different nursing courses over more than one semester.

3. A student may be dismissed from a course for breach of ethical responsibilities. See the Handbook for Undergraduate Nursing Students or contact the Office of the Vice President for Student Life and Development for information regarding University expectations and policies. A student dismissed for such a violation will not be allowed to continue in any clinical nursing course that semester, will be dropped from the nursing major at the end of the semester, and will be not readmitted to the major.
4. A student may be dismissed from a nursing course for breach of clinical safe practice guidelines as described in the course syllabus.
5. Students who once were admitted to the nursing major, completed at least one nursing course, but currently are not enrolled in the nursing major have one year from the date of withdrawal/failure to file a progression plan approved by the nursing advisor (for Generic Option students) or the RN Coordinator (for RN-to-BS Option students). After one year, the student must reapply for admission to the nursing major.
6. All students are assigned to a clinical site-based experience sequence. If a student varies from the assigned plan, space in clinical courses cannot be assured.
7. All part-time students must file a written progression plan that has been approved by the nursing advisor or the RN-to-BS Option Coordinator (for RN-to-BS Option students) and the Progression Committee.
8. Students who change from full-time to part-time status in the nursing major for academic or personal reasons must file a progression plan developed with the assistance of their academic advisor and must obtain plan approval from the department chairperson or designated faculty member (for Generic Option students) or the RN Coordinator (for RN-to-BS Option students). This plan is based on space availability in clinical courses and completion of prerequisites for courses.
9. The grade of "Incomplete" (I) may be granted at the discretion of the course instructor in special cases where, for reasons beyond the student's control, some course assignments were not finished but the student was passing all other aspects (refer to page 25). For courses that are prerequisite to subsequent nursing courses, the "Incomplete" must be resolved by the second week of the new semester.

Credit by Examination

A student may receive credit by examination and/or demonstration of competence for courses or parts of courses in the Generic and RN-to-BS Options. Faculty permission is needed for some course challenges.

Graduation Requirements

Graduation requirements include completion of WSU University Studies Program requirements or their equivalent for transfer students as well as all nursing major course requirements. A total of 128 semester credits is needed to graduate with a baccalaureate degree from WSU; at least 64 of these semester credits must be from a four-year college. For the RN-to-BS Option nursing major, the 64 credits from a four-year college include 30 credits in nursing, 3 credits in statistics, 5 upper-division elective credits (2 credits of these in nursing), plus 26 credits.

A formal application for graduation must be made no later than one semester before the expected graduation semester. For a checklist of the University's graduation requirements, see page 23.

Withdrawal

Withdrawal from a nursing course and/or the University must be completed according to WSU guidelines (page 27).

OBTAINING LICENSURE AS A REGISTERED NURSE

After graduation, Generic Option nursing graduates must pass the National Council Licensure Examination (NCLEX-RN) in order to obtain a Registered Nurse (RN) license. Students may apply for licensure and take the NCLEX-RN in the state of their choice. Contact information for all state boards of nursing can be obtained from the National Council of State Boards of Nursing at <http://www.ncsbn.org/>.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Nursing offers the following flag courses in the University Studies Program:

FLAG

Oral I	NURS 419	Advanced Health Promotion (3)	NURS 423	Role Development III (4)
	NURS 491	Capstone Experience in Role Synthesis (3)	NURS 445	Management and Leadership (3) (RN-to-BS Option)
Math/Critical Analysis O			NURS 475	Community Health Nursing (4) (RN-to-BS Option)

NURS 375 Nursing Research, Theory, and Technology (3)

Writing P

NURS 330 Role Development I (3)

Flag courses that can be used to satisfy nursing major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - NURSING (NUGE; NURN)

96 S.H. (No Minor Required)

Note: All courses must be taken for a letter grade

PREREQUISITES/REQUIRED COURSES 41 S.H.

NATURAL SCIENCE 22 S.H.

Biology (14 S.H.)

BIOL 206 Normal Nutrition (3) OR HERS 205 Nutrition for Lifetime Wellness (3)

BIOL 209 Microbiology (3)

* BIOL 211 Anatomy and Physiology I (4)

* BIOL 212 Anatomy and Physiology II (4)

Chemistry (5-8 S.H.)

CHEM 210 Chemistry for Health Sciences (4) OR

CHEM *212 (4), *213 (4) Principles of Chemistry I and II

SOCIAL SCIENCE 12 S.H.

Psychology (6 S.H.)

* PSY 210 Introduction to Psychological Science (3)

* PSY 250 Developmental Psychology (3)

Sociology (6 S.H.)

* SOC 150 Introduction to Sociology (3)

* SOC 212 The Family (3)

OTHER REQUIRED COURSES 7 S.H.

English (4 S.H.)

ENG 111 College Reading and Writing (4)

Statistics (3 S.H.)

STAT 110 Fundamentals of Statistics (3) OR

O PSY 231 Statistics (3) **Note:** This course does not fulfill a mathematics requirement for University Studies Program (USP).

UPPER-DIVISION ELECTIVES

(300- and 400-level courses) (5 S.H.)

Five semester hours of upper-division electives (300- and 400-level courses) are required for the nursing major; of these, two semester hours must be from nursing electives. Electives may be taken as letter grade or pass/no credit if the courses are offered on a P/NC basis.

NURSING ELECTIVES (100-200 LEVEL)

120 Introduction to the Health Professions (3) (USP—Contemporary Citizenship)

260 Women's Health Issues (3) (USP—Contemporary Citizenship)

NURSING ELECTIVES - NURS (300-400 LEVEL)

325	Transcultural Issues in Health Care (3) (USP—Multicultural Perspectives)
327	Introduction to Public Health (3)
360	Pharmacology (1) (for RN-to-BS Option only)
366	Pathophysiology (3) (for RN-to-BS Option only)
382	A London Nursing History Tour (2)
392	Cardiac Risk Prevention (3) (USP—Critical Analysis)
399	Skills for Professional Success (2)
401	Spirituality in Nursing (2)
402	Clinical Pharmacology (3) (RN-to-MS Professional Pathway)
404	Advanced Pathophysiology (3) (RN-to-MS Professional Pathway)
406	Psychosocial Interventions in Family Care (2) (RN-to-MS Professional Pathway)
408	Advanced Role Seminar (2) (RN-to-MS Professional Pathway)
410	Theoretical Foundations and Research for Advanced Nursing Practice
412	Critical Care Nursing (2-3)
414	Health Care Policy and Finance (3) (RN-to-MS Professional Pathway)
416	Issues in Gerontology and Geriatrics for the 21st Century (1-3)
417	Health Assessment Techniques (1)
418	Computer Applications in Nursing (2)
I 419	Advanced Health Promotion (3) (RN-to-MS Professional Pathway)
432	Principles of OR Nursing (3)
460	Cooperative Education in Nursing (3)
480	Holistic Approaches to Health (3)
490	Independent Study in Nursing (1-3)
492	Jamaica Studies: Health Care in an Emerging Country (3)
493	The Patient's Voice: Experiences of Illness (2)
494	Contemporary Film: Understanding the Patient's Experience (2)
495	Seminar/Workshop in Nursing (1-3)
496	Feminist Perspectives in Nursing (2)
497	Nursing Care of the Aged (3)
498	Advanced Critical and Progressive Care Nursing (2) (Registered Nurses only)

B.S. MAJOR - NURSING: GENERIC OPTION (NUGE)

56 S.H. (Required courses must be taken for a letter grade.)

REQUIRED COURSES (NURS)

300	Caring Skills I (2)
301	Caring Skills II (2)
311	Clinical Decisions: Adult Health I (2)
320	Caring Concepts I (3)
321	Caring Concepts II (3)
P 330	Role Development I (3)
331	Role Development II (4)
345	Health Assessment I (3)
360	Pharmacology (1)
366	Pathophysiology (3)
P 375	Nursing Research, Theory and Technology (3)
400	Emerging Health Care Systems (2)
411	Clinical Decisions: Adult Health II (2)
413	Nursing of Families Experiencing Mental Illness (2)
421	Nursing of Childbearing Families (2)
422	Nursing of Childrearing Families (2)
O 423	Role Development III (4)
433	Role Development III Seminar (1)
471	Community Health Care (2)
472	Leadership/Management in Nursing (2)
474	Role Development IV (4)
484	Role Development IV Seminar (1)
I 491	Capstone Experience in Role Synthesis (3)

B.S. MAJOR - NURSING: RN-TO-BS OPTION (NURN)

54 S.H. (Required courses must be taken for a letter grade.)

Note: Includes 24 S.H. of nursing in transfer or exam.

REQUIRED COURSES (NURS)

O 375	Nursing Research, Theory and Technology (3)
415	Holistic Caring (5)
435	Holistic Assessment (4)
P 445	Management and Leadership (3)
455	Continuity of Care (4)
465	Nursing Roles and Health Promotion (4)
P 475	Community Health Nursing (4)
I 491	Capstone Experience in Role Synthesis (3)

COURSE DESCRIPTIONS (NURS)

Note: Courses offered on a pass/no credit-only (P/NC) or grade-only basis are so designated. All required courses in the major must be completed on a grade-only basis.

120 - Introduction to the Health Professions (3 S.H.)

Examines the practice and politics of the health and health-related disciplines within the U.S. health care system. Explores entering the health care professions and also how to be an astute consumer of health care. P/NC option.

260 - Women's Health Issues (3 S.H.)

A study of contemporary issues in women's health focusing on historical aspects, current significance, and future trends of each issue. Focus is on preparing students to make their own health care decisions. P/NC option.

300 - Caring Skills I (2 S.H.) (Generic Option)

Develops the knowledge and skills for meeting basic physiologic needs and providing a safe environment for individual clients as part of professional nursing practice lab course. Prerequisite: Admission to the major. Grade only.

301 - Caring Skills II (2 S.H.) (Generic Option)

Develops the knowledge and skills for integrating selected therapeutic nursing interventions into nursing care of individuals, families, and communities in professional nursing practice. Lab course. Prerequisite: NURS 300. Grade only.

302 - CNAT: Care of the Adult Client (6 S.H.) (RN-to-BS Option)

Demonstration of knowledge through an exam focusing on the nursing care of clients in a variety of settings and at various stages of the wellness-illness continuum. Items also assess nursing skills in meeting physiologic and psychosocial needs of clients with stable conditions. The Comprehensive Nursing Assessment Test (CNAT) is required for RNs who are graduates of diploma programs and A.D.N. programs that are not accredited by NLNAC. P/NC only.

304 - CNAT: Care of Client During Childbearing (6 S.H.) (RN-to-BS Option)

Demonstration of knowledge through an exam focusing on nursing care during the antepartal, intrapartal, and neonatal periods. Emphasis is on the normal, with some common complications. The Comprehensive Nursing Assessment Test (CNAT) is required for RNs who are graduates of diploma programs and A.D.N. programs that are not accredited by NLNAC. P/NC only.

306 - CNAT: Care of the Child (6 S.H.) (RN-to-BS Option)

Demonstration of knowledge through an exam concerned with nursing care of children of all ages at various stages of health and illness. The Comprehensive Nursing Assessment Test (CNAT) is required for RNs who are graduates of diploma programs and A.D.N. programs that are not accredited by NLNAC. P/NC only.

308 - CNAT: Care of the Client with a Mental Disorder (6 S.H.) (RN-to-BS Option)

Demonstration of knowledge through an exam addressing the broad spectrum of psychological wellness-illness. The content includes psychosocial assessment and intervention strategies to support the client's strengths. The Comprehensive Nursing Assessment Test (CNAT) is required for RNs who are graduates of diploma programs and A.D.N. programs that are not accredited by NLNAC. P/NC only.

311 - Clinical Decisions: Adult Health I (2) (Generic Option)

This course introduces students to beginning clinical decision-making and the application of therapeutic nursing interventions for adult clients and their families. Students are expected to apply theory and scientific principles, as well as to begin analyzing client responses to nursing and medical interventions. Prerequisites: NURS 320, NURS 330, NURS 345, NURS 360, NURS 366. Grade only.

320 - Caring Concepts I (3 S.H.) (Generic Option)

Introduces the profession of nursing in the context of the changing health care delivery system. The course emphasizes caring, critical thinking, and the student as an active learner. The course focuses on the individual and family as client and introduces ethical decision-making and crisis intervention. The professional roles of provider of care, advocate, and scholar are emphasized. Prerequisite: Admission to the major. Grade only.

321 - Caring Concepts II (3 S.H.) (Generic Option)

The course focuses on the application of the nursing process with families, groups, and communities, including high-risk population groups. Emphasis is on health promotion across the life span; health risk appraisal and assessment techniques for families, groups, and communities; and public health principles for population-based practice. Students will be introduced to major/national public health initiatives. Prerequisite: NURS 320. Grade only.

325 - Transcultural Issues in Health Care (3 S.H.) (Elective)

Explores the importance of transcultural concepts that are present in health care delivery systems. It is designed to help learners increase awareness of all types of human diversity, understand the importance of these diverse differences, and incorporate ways of utilizing this knowledge to deliver culturally competent health care in all settings within the global community. Prerequisite: Sophomore standing or instructor's permission. P/NC option.

327 - Introduction to Public Health (3 S.H.) (Elective)

This course is designed to introduce concepts of public health appropriate for students in health care fields. These concepts will be applied to present health care delivery systems, health and disease of population groups, and community planning. The influence of political, economic, and social aspects are considered. P/NC Option.

330 - Role Development I (3 S.H.) (Generic Option)

This site-based experience introduces the student to the professional nursing role. It offers students the opportunity to apply the skills, decision-making, and the nurse-client relationship principles. Students will have experiences in the community and health care facilities to develop the nursing role. Prerequisite: Admission to the major; prerequisites or corequisites: NURS 300, NURS 320, NURS 345, NURS 360, NURS 366. Grade only.

331 - Role Development II (4 S.H.) (Generic Option)

This site-based experience (SBE) course offers the students opportunity to apply content of previous and concurrent nursing courses in the care of individuals, families and/or children, and aggregates. To meet the objectives of this course, students rotate through various settings (i.e., ambulatory clinics, acute care settings, schools, workplaces, and/or homes). Prerequisites: NURS 300, NURS 320, NURS 330, NURS 345, NURS 360, NURS 366; prerequisites or corequisites: NURS 301, NURS 321. Grade only.

345 - Health Assessment I (3 S.H.) (Generic Option)

This course provides an opportunity for students to develop the beginning knowledge and skills necessary for holistic assessment of individuals who have had no previously identified health problem. Content on history taking, physical assessment skills, and health problem identification is included. Prerequisite: Admission to the major or instructor's permission. Lecture and lab course. Grade only.

360 - Pharmacology (1 S.H.) (Generic Option; elective for RN-to-BS Option)

This course is designed to provide the student with the pharmacologic basis for understanding drug therapies. Prerequisite: Generic nursing option, RN-to-BS option, instructor's permission. Grade only.

366 - Pathophysiology (3 S.H.) (Generic Option; elective for RN-to-BS Option)

This course is designed to provide the student with an understanding of the pathophysiologic processes which may occur within the human individual throughout the life span and which are associated with diminished health states. Common treatment modalities of selected health conditions will be discussed. Prerequisite: Completion of anatomy and physiology sequence or instructor's permission. HERS prerequisites: HERS 340 and completion of the anatomy and physiology sequence. Grade only.

375 - Nursing Research, Theory and Technology (3 S.H.) (Generic & RN-to-BS Options)

Develops the ability to analyze, critique, and interpret research findings and data based on nursing theory and practice needs. Includes use of selected software and technological modalities. Prerequisite: Statistics course or instructor's permission. Grade only.

382 - A London Nursing History Tour (2 S.H.)

This travel program is an experiential enrichment course that provides nursing students with an opportunity to study nursing history and to compare nursing education programs and health care delivery systems of the United States and the United Kingdom. Students will also have the opportunity for historical sightseeing and museum tours. Prerequisite: Instructor's permission; NURS 400 recommended. Grade only.

392 - Cardiac Risk Prevention (3 S.H.) (Elective)

This course is designed to identify risk factors that can lead to cardiovascular disease. The major risk factors will be analyzed, and strategies for modifying each will be developed. Health information sources and their reliability for health promotion information also will be discussed. New technology in diagnosing and treating cardiac conditions is included. Prerequisite or corequisite: Anatomy and physiology course. P/NC option.

399 - Skills for Professional Success (2 S.H.) (Elective)

This course helps the student learn what he/she needs to know to live a

successful and harmonious life as a person working in a professional career. The coursework focuses in three areas critical to career success: (1) how to develop the self-confidence and self-esteem essential for personal and professional well-being; (2) how to relate with others in a professional and confident manner to make work more vital, effective, and satisfying every day; (3) how to determine one's desired professional career path, make career decisions comfortably and efficiently, and achieve professional goals. P/NC option.

400 - Emerging Health Care Systems (2 S.H.) (Generic Option)

Explores American and global health care delivery systems, considering issues and trends in those systems. Prerequisite: Senior standing in major or instructor's permission. Grade only.

401 - Spirituality in Nursing (2 S.H.) (Elective)

The purpose of this course is to assist students in their understanding of spirituality and spiritual development, and to identify ways of incorporating the essence of spirituality in their nursing practice. Eastern and Western spirituality and practices affecting health are explored. Students examine how society and their own biases have affected their ability to respond to spiritual concerns and needs. Spiritual assessment and specific spiritual interventions are discussed. Students are challenged to explore their own spiritual nature and its impact in their personal and professional lives. P/NC option.

402 - Clinical Pharmacology (3 S.H.) (Elective, RN-to-MS Professional Pathway)

This course includes principles of pharmacokinetics and pharmacodynamics as a foundation for the use of medications in the clinical management of diseases. Major classes of drugs will be discussed in terms of actions; therapeutic and other effects; adverse, allergic and idiosyncratic reactions; indications and contraindications. The importance of sound diagnostic reasoning in the selection of pharmacological interventions with attention to safety, cost, simplicity, acceptability, and efficacy will be stressed. The responsibilities related to prescribing medications will be emphasized. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Grade only.

404 - Advanced Pathophysiology (3 S.H.) (Elective, RN-to-MS Professional Pathway)

Advanced physiology and pathophysiology at the cellular, organic, and systemic level will be explored as a basis for clinical assessment and management by the advanced practice nurses. Integration of function among organ systems will be emphasized. The effect of psychosocial variables on physiologic function will be explored. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Grade only.

406 - Psychosocial Interventions in Family Care (2 S.H.) (Elective, RN-to-MS Professional Pathway)

This course explores the role of the advanced practice nurse in addressing the psychosocial needs of the client and family. Focus will be on developing counseling skills for advanced psychosocial assessment and providing culturally sensitive guidance in caring for the client and family during health crisis and acute and chronic illness. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Grade only.

408 - Advanced Role Seminar (2 S.H.) (Elective, RN-to-MS Professional Pathway)

This course will provide a forum for the explorations of advanced practice role behaviors including collaboration and leadership. Selected theories and frameworks relevant to the various roles will be evaluated. Ethics and diversity issues in nursing and health care will be discussed. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Grade only.

410 - Theoretical Foundations and Research for Advanced Nursing Practice (4 S.H.) (Elective, RN-to-MS Professional Pathway)

The goal of this course is to provide students with the opportunity to critically analyze existing nursing theories and articulate a personal philosophy of nursing. Students will do an in-depth analysis of a concept. Students will analyze methods and techniques of research and interpret their usefulness for application in clinical practice. Theory and practice will be used to define nursing problems and develop a research proposal. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Corequisite or prerequisite: STAT 601. Grade only.

411 - Clinical Decisions: Adult Health II (2 S.H.) (Generic Option)

Theoretical, scientific, developmental, and nursing theories are applied to the care of individual adults/older adults. Students utilize clinical decision-making skills, reflective judgment, and medial-surgical practice standards to plan care for acute and chronic health conditions. Prerequisites: NURS 330, NURS 360, NURS 366. Grade only.

412 - Critical Care Nursing (2-3 S.H.) (Elective)

This course is designed to introduce the student to care for critically ill persons. Emphasis is on rapid assessment, setting priorities, rapid decision-making, and nursing interventions for the critically ill. The 2-credit option has theory only. The 3-credit option has theory and a clinical laboratory

experience. The 3-credit option requires the instructor's permission. Prerequisites: NURS 411, NURS 423, and senior standing or instructor's permission. P/NC option.

413 - Nursing of Families Experiencing Mental Illness (2 S.H.) (Generic Option)

This course addresses the theoretical basis of nursing care for individuals, families, and groups with emotional concerns or mental illnesses and explores nursing in the psychiatric/mental health setting. Prerequisite: NURS 330. Prerequisite or corequisite: NURS 331. Grade only.

414 - Health Care Policy and Finance (3 S.H.) (Elective, RN-to-MS Professional Pathway)

This course provides a base for nurse leaders and advanced practice nurses to enter and effectively shape health care policy in the workplace, organizations, community, and government at the state and federal level. Students will develop an understanding of health care financing in the delivery of health care. Prerequisite: Admission to the graduate program in nursing or instructor's permission. Grade only.

415 - Holistic Caring - (5 S.H.) (RN-to-BS Option)

This course introduces the WSU nursing curriculum and organizing framework to the RN student. Holistic caring is related to critical thinking, teaching-learning, role development, and nursing practice. Prerequisite: Admission to RN-to-BS Option; corequisites: NURS 375, NURS 435, NURS 475. Grade only.

416 - Issues in Gerontology and Geriatrics for the 21st Century (1-3 S.H.) (Elective)

This course is a series of three consecutive modules of content related to common issues in gerontology and geriatrics. A student may take one, two, or all three modules, and each has the preceding module as a prerequisite. The course focuses on normal aging, theories of aging, social gerontology, and societal effects of an increasing population of older people. The geriatric content will focus on major geriatric syndromes such as immobility, incontinence, instability, iatrogenic illness, and intellectual impairment. Emphasis will be placed on assessment and maintenance of individual competency, independence, and physiological function across clinical settings. Prerequisite: Senior standing in major or instructor's permission. Grade only.

417 - Health Assessment Techniques (1 S.H.) (Elective)

A guided study review of the basic components of physical assessment and an opportunity for performance evaluation at completion of course. Content relative to obtaining a complete health history and performing a physical examination, with appropriate documentation of each. Designed to ensure readiness for Advanced Practice Health Assessment. Prerequisite: Instructor's permission. P/NC option.

418 - Computer Applications in Nursing (2 S.H.) (Elective)

This course is designed to provide knowledge of technological modalities presently used to assist in the diagnosis and treatment of patients, planning and monitoring of care, management of information, and data analysis. The application of nursing informatics in nursing research, administration, education, and practice will be explored. Emphasis in this course is on extensive hands-on experience in Microsoft® Windows, word processing, spreadsheet and database applications, presentation software, the Internet, and other computer-related applications. Prerequisite: Sophomore standing. P/NC option.

419 - Advanced Health Promotion (3 S.H.) (Elective, RN-to-MS Professional Pathway)

Concepts related to health promotion and maintenance are analyzed from theoretical- and research-based perspectives. Using principles of epidemiology, advanced practice nurses identify risk factors for specific populations and examine variables that influence wellness. Interventions for promotion of optimal health are designed with particular consideration for age and cultural differences. A community-based practicum allows the student to explore possibilities for enacting the advanced practice role outside traditional biomedical settings and within the context of families and communities. (2 S.H. seminar; 1 S.H. clinical). Prerequisite: Admission to the graduate program in nursing or instructor's permission and NURS 410. Grade only.

421 - Nursing of Childbearing Families (2 S.H.) (Generic Option)

The student learns the theoretical basis of nursing care dealing with sexuality, reproductive health promotion, and prenatal through postpartum health promotion. Prerequisite: NURS 330; prerequisite or corequisite: NURS 331. Grade only.

422 - Nursing of Childrearing Families (2 S.H.) (Generic Option)

This course is designed to explore the theoretical basis of nursing care for families with children. Prerequisite: NURS 330; prerequisite or corequisite: NURS 331. Grade only.

423 - Role Development III (4 S.H.) (Generic Option)

This clinical course focuses on the development of the professional nursing roles in restoring, maintaining, and promoting the health of individuals and

their families. Students care for selected populations (i.e., mothers, children, adults, those with mental illness) in various settings. 120 hours practicum for semester. This is a companion course to NURS 433, Role Development III Seminar. The core content related to the populations in the student's site-based experiences must be completed prior to or with this course.

Prerequisites: NURS 311, NURS 331, NURS 411. Corequisites: NURS 411, NURS 433. Prerequisites or corequisites depending upon client populations: NURS 471, NURS 413, NURS 421, NURS 422. Grade only.

432 - Principles of OR Nursing (3 S.H.) (Elective)

Students will learn the nurse's role during the intraoperative phase of patient care. Experiences include circulating and scrub nurse roles. Course includes a clinical laboratory experience. Prerequisites: NURS 300 and NURS 301 or instructor's permission. P/NC option.

433 - Role Development III Seminar (1 S.H.) (Generic Option)

This seminar course integrates major concepts and professional roles through presentations and discussion of clinical exemplars, nursing research, and nursing literature. Includes Care Group activities. This is a companion course to NURS 423, Role Development III. Corequisite: NURS 423. Grade only.

435 - Holistic Assessment (4 S.H.) (RN-to-BS Option)

This course teaches the student to assess the client and family in a holistic manner. Traditional physical history and assessment of the individual is expanded to include multiple variables. Prerequisite: Admission to RN-to-BS Option; Corequisites: NURS 415 and NURS 475. Grade only.

445 - Management and Leadership (3 S.H.) (RN-to-BS Option)

This course explores the management and leadership roles of the professional nurse, analyzing current nursing practices as well as applying the change process to a nursing situation. Prerequisites: NURS 375, NURS 415, NURS 435, NURS 475. Corequisites: NURS 455, NURS 465, NURS 491. Grade only.

455 - Continuity of Care (4 S.H.) (RN-to-BS Option)

This course explores professional nursing situations or populations involving continuity of care issues: complex acute/chronic care issues; loss; the elderly; and other cultures. Teaching-learning theory and skills are applied to the adult learner. Prerequisites: NURS 375, NURS 415, NURS 435, NURS 475. Corequisites: NURS 445, NURS 465, NURS 491. Grade only.

460 - Cooperative Education in Nursing (3 S.H.) (Elective)

Students receive a planned and supervised clinical experience with a nurse preceptor, integrating formal classroom and clinical study in nursing. This course facilitates a student's career pathway by emphasizing clinical practice interests. Prerequisite: Completion of second semester of clinical lab courses in the nursing major or instructor's permission. P/NC option.

465 - Nursing Roles and Health Promotion (4 S.H.) (RN-to-BS Option)

Focuses on the professional nursing roles of provider of care, advocate, teacher, case manager, change agent, and researcher of individuals and families in a variety of situations. Students will apply communication skills in various interpersonal situations. Sixty hours of site-based experiences. Prerequisites: NURS 375, NURS 415, NURS 435, NURS 475; corequisites: NURS 445, NURS 455, NURS 491. Grade only.

471 - Community Health Care (2 S.H.) (Generic Option)

The purpose of this course is to provide an understanding of the complex and often fragmented community health care system available to clients with chronic health conditions. Students will focus on the health needs of vulnerable groups in the community and identifying the various community health care agencies and programs organized to meet their needs. The functions and roles of public health nursing, predominantly in tertiary prevention will be emphasized in caring for clients with chronic health conditions. Prerequisites: NURS 411, NURS 423. Prerequisite or corequisites: NURS 472, NURS 474. Grade only.

472 - Leadership/Management in Nursing (2 S.H.) (Generic Option)

The purpose of this course is to explore leadership and management theories, attributes, and behaviors within the culture of nursing. These principles will be applied during NURS 474, (Role Development IV) and NURS 484 (Role Development IV Seminar). Prerequisites: NURS 400, NURS 423. Grade only.

474 - Role Development IV (4 S.H.) (Generic Option)

This clinical course focuses on professional role development with special emphasis on the leadership role in caring for groups of selected populations in various settings. 120 hours practicum for semester. This is a companion course to NURS 484 (Role Development IV Seminar). The core content related to the populations in the student's site-based experiences must be completed prior to or with this course. Prerequisites: NURS 423, NURS 433; corequisites: NURS 484 and NURS 472. Prerequisites or corequisites depending upon client populations: NURS 411, NURS 471, NURS 413, NURS 421, NURS 422. Grade only.

475 - Community Health Nursing (4 S.H.) (RN-to-BS Option)

Focuses on the nursing roles and functions of the community health nurse

in maintaining and restoring health of individuals, families, and groups in a variety of situations and settings. Prerequisite: Admission to RN-to-BS Option; prerequisites or corequisites: NURS 375, NURS 415, NURS 435. Grade only.

480 - Holistic Approaches to Health (3 S.H.) (Elective)

This course examines the relationship of the body, mind, and spirit within the field of health, healing, and nursing. Holism, the view that an integrated whole has a reality independent of and greater than the sum of its parts, forms the framework for this inquiry. The concepts of healing, psychophysiology, the transpersonal, the transpersonal self, body-mind-spirit and the nurse as healer will be discussed. Prerequisite: Sophomore standing or instructor's permission. P/NC option.

484 - Role Development IV Seminar (1 S.H.) (Generic Option)

This seminar course integrates major concepts and professional roles, emphasizing the leadership role, through group activities and application of nursing research. Includes Care Group activities. This is a companion course to NURS 474 (Role Development IV). Corequisite: NURS 474. Grade only.

490 - Independent Study in Nursing (1-3 S.H.) (Elective)

Offers an opportunity for nursing students to do independent study or research in nursing in an area of special interest. Prerequisite: Instructor's permission. Written objectives and evaluation required. P/NC option.

491 - Capstone Experience in Role Synthesis (3 S.H.) (Generic & RN- to-BS Options)

Intense preceptor-led, site-based experience designed to encapsulate the essence of baccalaureate professional role development. Ninety hours of practicum for semester including seminar. Prerequisite: Last semester of nursing major or instructor's permission. Grade only.

492 - Jamaica Studies: Health Care in an Emerging Country (3 S.H.) (Elective)

This international course will focus on the health care delivery system in Jamaica and the factors which influence the effectiveness of the system. The specific focus will be on the nursing aspects of the system. Students will be exposed to both public and private aspects of nursing. Jamaican experts will present on a variety of topics which influence health care including economics, politics, culture, and society. Prerequisites: Admission to major and instructor's permission. Grade only.

493 - The Patient's Voice: Experiences of Illness (2 S.H.) (Elective)

This course is designed to introduce students to contemporary autobiographical accounts of illness, both physical and psychiatric. The content can be applied to the practice of nursing. Prerequisite: Sophomore standing or instructor's permission. P/NC option.

494 - Contemporary Film: Understanding the Patient's Experience - (2 S.H.) (Elective)

Utilizing contemporary film, this course explores the experiences of patients experiencing both physiological and psychiatric illness, and helps students to utilize this information in developing a caring nursing practice. Prerequisite: Sophomore standing or instructor's permission. P/NC option.

495 - Seminar/Workshop in Nursing (1-3 S.H.) (Elective)

Subject matter of current interest arranged by the Department. Course may be repeated when offered with different content and title. Prerequisite: Admission to major or instructor's permission. P/NC option.

496 - Feminist Perspectives in Nursing (2 S.H.) (Elective)

This seminar explores the relationship of the feminist movement, feminist theory, and gender issues for nursing history and practice. Prerequisite: Admission to major or instructor's permission. P/NC option.

497 - Nursing Care of the Aged (3 S.H.) (Elective)

The focus of this course is the bio-psycho-social-spiritual and holistic care of the elderly, given within the nursing process framework. The uniqueness of the aged person is considered as students plan the care and management of altered health states including chronic and high-risk pathophysiological conditions. The course is designed to increase students' awareness and understanding of the aging process. The strengths and life experience of the aged client are recognized and reinforced to encourage their maximal coping abilities. Course includes a clinical laboratory experience. Prerequisite: Admission to major or instructor's permission. P/NC option.

498 - Advanced Critical and Progressive Care Nursing (2 S.H.) (Elective for Registered Nurses Only)

This course is specifically designed for Registered Nurses currently caring for adults in critical or progressive/acute care nursing units. Course content is designed to meet knowledge requirements for practice and/or certification in critical care or progressive care nursing and as such, promotes continuing excellence in the nursing profession. Course content will be based on topic and certification blueprints established by the American Association of Critical-Care Nurses (AACN) Certification Corporation. The emphasis of learning activities will (1) address clinical judgment in the eight major categories including cardiovascular, pulmonary, endocrine, hematology/immunology, neurology, gastrointestinal, renal, and multisystem; and (2) explore concepts of professional caring and ethical practice in nursing. National certification exam is an option for specific sections of the course. Offered spring semester. Grade or P/NC option.

PARALEGAL

Minné Hall, Room 212 (507-457-5400)
Kurt Hohenstein (Program Director)

FACULTY

Kurt Hohenstein, Assistant Professor; B.A., J.D., M.A., University of Nebraska; Ph.D., University of Virginia, 2005 –

PURPOSE

The purpose of the Paralegal Program is to enable students to develop both intellectual and professional skills in the law. The program is designed to meet the needs of students wishing to enter into a career that demands knowledge of and experience with legal systems and institutions. This includes careers working for law firms, government agencies, insurance companies, banking institutions, and nonprofit agencies. It also serves as an excellent preparation for law school.

The program is an interdisciplinary program within the College of Liberal Arts that develops skills in legal research, writing and investigation alongside a deeper understanding of the substance, politics and history of the law. The American Bar Association approves the WSU Paralegal Program.

Note: Graduates of the program may not provide legal services directly to the public except under the supervision of a practicing attorney or as provided by law.

ADMISSION REQUIREMENTS

A high school diploma and admission to WSU are required for admission to the program. It is recommended candidates for admission be in the upper half of the class or have a score of at least 20 on the ACT. Students wishing to enter or transfer into the program must seek advising from the Director of the Paralegal Program.

PARALEGAL PHASES

The Paralegal Program has three phases:

Phase I - Interdisciplinary Foundations: These courses address topics related to the U.S. legal system in a variety of academic disciplines, ranging from history and political science to business and accounting.

Phase II - Legal Specialty Courses: These courses concentrate on specific aspects of the legal profession. Legal specialty courses are offered in sequence and typically begin in the fall of the junior year. HIST 370, Legal Research and Writing I, must be taken as the first course in the sequence.

Phase III – Recommended Electives for Specialization and/or Minor: In Phase III, students choose to complete the requirements of the Paralegal Program, including an additional 35 semester hours in a variety of law-related courses from various disciplines. A student may elect to complete a minor of her/his choice in addition to completing the first two phases of the program, which will reduce the law-related electives accordingly.

ADDITIONAL COURSE AND GPA REQUIREMENTS

- Students are required to have substantially completed their University Studies requirements and Phase II requirements before they enroll in the Legal Specialty courses. They also must have the academic advisor's approval.
- Except for Legal Research, transfer students cannot substitute a 100- or 200-level legal specialty course taken at another school for a similar course at a 300- or 400-level at WSU.
- All students must provide the Paralegal Program Director with a copy of their transcripts with recorded GPAs before enrolling in HIST 370, Legal Research and Writing I.
- Coursework below a grade of "C" in legal specialty courses does not count toward completion of the paralegal major.

For a checklist of the University's graduation requirements, see page 23.

PASS/NO CREDIT (P/NC) COURSES

Except for the Paralegal Internship and Paralegal Institute, no classes taken on a P/NC basis can be used to satisfy any specific course requirements of the Paralegal Program or coursework in the options.

B.S. MAJOR - PARALEGAL (PLG)

128 S.H.

CORE REQUIREMENTS

I. INTERDISCIPLINARY FOUNDATIONS (27 S.H.)

History – HIST (12 S.H.)

- * 150 U.S. History to 1865 (3)
- * 151 U.S. History Since 1865 (3)
- P 365 American Legal History (3)** OR
- P 488 American Constitutional History** (3)

One of the following – HIST:

- 220 Introduction to African American History (3)
- 235 History of the American Indian (3)
- I 315 Women in U.S. History (3)
- 355 European Intellectual and Cultural History (3)
- I 398 Topics in History with Oral Communication Emphasis (3)
- 461 Latin American Social Revolution (3)
- 468 History of the Andean Nations (3)
- 469 History of Brazil (3)
- P 485 Contemporary America 1945-Present (3)
- 486 American Intellectual and Cultural History (3)

Political Science – POLS (9 S.H.)

- * 120 Intro to American Politics (3)
- 320 Constitutional Law (3)
- 420 Administrative Law (3)

** A student may also choose to take both HIST 365 American Legal History and HIST 488 Constitutional History to satisfy this requirement.

II. LEGAL SPECIALTY SEQUENCE – HIST (29 S.H.)

- P 370 Legal Research and Writing I (3)
- 371 Substantive Law and Ethics I (2)
- O 372 Legal Research and Writing II (3)
- 373 Adversary Systems: Civil Procedure (2)
- 374 Evidentiary Rules (2)
- 375 Substantive Law & Ethics II (3)
- 376 Adversary Systems: Criminal Procedure (2)
- 380 Paralegal Internship (12)

ELECTIVES

32 S.H. of approved electives, with or without a minor

Courses approved by Paralegal Program Director and academic advisor.

COURSE DESCRIPTIONS (HIST)

370 - Legal Research and Writing I (3 S.H.)

The student will become acquainted with commonly used terminology, the need for precision in meaning, and how courts interpret documents; and techniques of legal research, the process of judicial review, the extent of legal reporting, and methods of researching court decisions. Students will draft legal briefs and legal memoranda. Prerequisites: Admission to the paralegal major and advanced sophomore standing. Grade only. Offered yearly.

371 - Substantive Law and Ethics I (2 S.H.)

Students will learn the basic rules of contract law, real property law, torts, including workers' compensation, and legal ethics, and will be expected to practice their skills in legal research and writing. Grade only. Offered yearly.

372 - Legal Research and Writing II (3 S.H.)

Students will expand use of research and writing techniques gained in Legal Research and Writing I (HIST 370) by drafting deeds, leases, negotiable instruments, business agreements, corporate minutes and by-laws, wills and researching issues that are relevant to these topics. Students will continue to draft legal briefs and memoranda reflecting their research findings. Prerequisite: HIST 370. Grade only. Offered yearly.

373 - Adversary System: Civil Procedure (2 S.H.)

Basic civil court procedures, such as pleadings; pre-trial discovery; trials and appeals; background of the adversary system; the role of the advocate, judge and jury in the search for justice. Prerequisite: HIST 370. Grade only. Offered yearly.

374 - Evidentiary Rules (2 S.H.)

Acquaints the student with logic of evidentiary rules, value of first-hand evidence, burden of proof, qualification of witnesses, impeachment of witnesses, differentiation between proof and argument, order of proof. Prerequisite: HIST 370. Grade only. Offered yearly.

375 - Substantive Law and Ethics II (3 S.H.)

Students will study the basic elements of probate law, negotiable instruments, bankruptcy, landlord-tenant law with extensive coverage of family law (divorce, separation, and paternity), including the study of motion practice and the Minnesota Rules of Family Court Procedure, pre-trial discovery and conflict resolution techniques as well as ethical issues associated with each. Prerequisite: HIST 372. Grade only. Offered yearly.

376 - Adversary System: Criminal Procedure (2 S.H.)

Supplements HIST 373 (Adversary System: Civil Procedure) and covers criminal pleadings, the grand jury system, criminal pretrial discovery, jury instructions, post-trial sentencing, requirements of a fair hearing, and constitutional legal defenses. Prerequisite: HIST 372. Grade only. Offered yearly.

377 - Practical Legal Investigation Techniques (3 S.H.)

Students will learn the practical techniques used in investigating cases involving traffic, aircraft, personal negligence, employer negligence, product liability, professional malpractice, and criminal investigation. Students will become acquainted with the technique of working with witnesses. Prerequisite: Admission to the paralegal major. Grade only. Offered yearly.

380 - Paralegal Internship (12 S.H.)

Field placement in a selected organization for the purpose of experience and training as a professional paralegal. Prerequisites: HIST 370, HIST 371, HIST 372, HIST 373, HIST 374, HIST 375, HIST 376, and completion of portfolio. P/NC only.

381 - Paralegal Topics and Issues (3 S.H.)

This course is an approved elective for paralegal majors taken in conjunction with the program-required internship. In addition to selected readings on some aspect of law in contemporary American society, students will engage in a weekly discussion via email with the instructor and fellow students on topics relating to the readings and their internship experience. Students will be evaluated both by the quality of their contribution to these discussions and a final paper that grows out of the readings, internship, and email discussions.

383 - Paralegal Institute (1-3 S.H.)

The Paralegal Institute will cover various specialized topics, which directly relate to areas of the paralegal profession. The specialized institutes will be offered for 1-3 credits and may be repeated to a maximum of 3 credits toward the WSU paralegal degree. P/NC only.

PHILOSOPHY

Minné Hall, Room 329 (507-457-5475)

www.winona.edu/philosophy

Email: philosophy@winona.edu

Kevin Possin (chairperson)

FACULTY

Kevin Possin, Professor; B.A., Southwest State University; Ph.D., University of Wisconsin-Madison; 1990 –

Don E. Scheid, Professor; B.A., Colorado College; M.A., J.D., University of Utah; Ph.D., New York University; 1986 –

Edward Slowik, Professor; B.A., University of Illinois at Chicago; M.A., Ph.D., Ohio State University; 1998 –

“The unexamined life is not worth living.” – Socrates

“He who knows only his own side of the case knows little of that.” – J. S. Mill

Philosophy is the examination of ideas and the evaluation of first principles. In addition to studying its own traditional areas such as ethics, logic, metaphysics and epistemology, philosophy investigates other disciplines by critically reviewing their foundations and methods. Philosophy helps us free ourselves from dogmatic or unreflective habits of mind. It instills habits of intellectual integrity, impartiality, and rationality. Philosophy enlarges our conception of what is possible and enriches our intellectual imagination. Accordingly, philosophy is an essential ingredient of any sound education.

Besides providing individual courses, the Philosophy Department offers a well-rounded minor in philosophy. The minor provides an introduction to ethics, logic, and the history of philosophy. It also helps students develop crucial intellectual skills such as critical thinking, logical reasoning, and conceptual analysis; in short, it helps students learn to think for themselves. Emphasis is balanced between philosophical content and the cultivation of philosophical thinking.

Most of the philosophy courses are also University Studies courses. Therefore, students can complete most of the requirements for a philosophy minor while satisfying their University Studies requirements. The electives in the minor enable students to tailor the program to their own interests and major.

PASS/NO CREDIT (P/NC) COURSES

Students must take all courses for the minor on a grade-only basis. The P/NC option is available to non-minors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

B.A. MINOR - PHILOSOPHY (PHIL)

18 S.H.

REQUIRED COURSES - PHIL (12 S.H.)

One of the following courses in logic:

- 110 Critical Thinking (3)
- 210 Inductive Reasoning (3)
- 250 Symbolic Logic (3)

One of the following courses in moral philosophy:

- 220 Philosophy of Democracy (3)
- 230 Moral Theory (3)
- 330 Biomedical Ethics (3)
- 332 Philosophy of Law (3)
- 335 Constitutional Philosophy (3)
- 401 Independent Readings in Philosophy, for appropriate readings (3)
- 430 Topics in Social and Political Philosophy (3)

One of the following courses in the early history of philosophy:

- 201 Classical Philosophy (3)
- 401 Independent Readings in Philosophy, for appropriate readings (3)
- 460 Great Philosophers (3)

One of the following courses in the later history of philosophy:

- 301 Early Modern Philosophy (3)
- 302 Contemporary Philosophy (3)
- 401 Independent Readings in Philosophy, for appropriate readings (3)
- 460 Great Philosophers (3)

ELECTIVES (6 S.H.)

Any two philosophy courses not used to satisfy the preceding requirements.

COURSE DESCRIPTIONS (PHIL)

110 - Critical Thinking (3 S.H.)

This computer-assisted, self-mastery course teaches you how to employ good reasoning skills and how to avoid being fooled by bad reasoning and rhetorical tricks. Competencies acquired in the course include the following: Identifying, evaluating, and constructing arguments; identifying informal fallacies; testing syllogisms and propositional arguments for validity and overall cogency; and assessing and constructing position papers. Practice exercises and exams are done on computer. Offered each semester.

120 - Introductory Philosophy (3 S.H.)

An introduction to major areas in philosophy, considering some fundamental problems and concepts. Typical issues include some of the following: the existence of God, what we can know, what reality is, how mind and body are related, whether or not we have free will. Traditional and intellectually chic theories on these or other topics are critically reviewed. Offered each semester.

130 - Moral Problems (3 S.H.)

A practical course in ethics, involving concrete issues and their impact on the individual, society, and social policy. Topics may include abortion, euthanasia, sexuality and sexual morality, feminism, welfare, capital punishment,

pornography and censorship, animal rights, world hunger, war, and terrorism. Offered yearly.

201 - Classical Philosophy (3 S.H.)

A study of the philosophical ideas, values, and world views of ancient Greece, especially its views on the nature of the universe, humanity, knowledge, religion, ethics, and politics. Theories from the Presocratics, Socrates, Plato, and Aristotle will be critically examined and contrasted with contemporary beliefs and values. Offered each semester.

210 - Inductive Reasoning (3 S.H.)

Introduction to inductive reasoning and how to avoid being tricked by faulty or pseudo scientific claims and arguments, and how to critically assess public policy in light of good scientific reasoning. Students study how to use experimentation and the scientific method to test theoretical, statistical, and causal hypotheses. Famous discoveries in the history of science are used as illustrations. Other topics include fundamental concepts of probability, sampling, causation, and correlation. Offered yearly.

220 - Philosophy of Democracy (3 S.H.)

An introductory course in political philosophy, investigating the nature and implications of liberal democracy. Topics may include social-contract theory, notions of natural rights, the moral virtues of democracy, voting paradoxes, limitations of and various critiques of democracy. Offered yearly.

230 - Moral Theory (3 S.H.)

A study of major ethical theories, concepts, and issues; for instance, Kantianism, utilitarianism, ethical relativism, concepts of justice, human rights, moral responsibility, and free will. Offered yearly.

240 - Philosophy of Science (3 S.H.)

Examines basic issues in the philosophy and foundations of science, such as the testing of hypotheses, the construction and confirmation of theories, the nature of scientific explanation, and the concept of laws of nature. The course also investigates the distinction between science and pseudoscience and studies to what extent each has influenced recent public policy, social debates, and school curricula. Offered yearly.

250 - Symbolic Logic (3 S.H.)

An examination of methods for putting ordinary deductive reasoning into symbols in order to test its validity. Topics include ways to translate English into symbols, uses of truth tables, rules for deduction in propositional and predicate logic, models for showing invalidity, and strategies for constructing proofs. Offered as appropriate.

260 - Problems in Philosophy (3 S.H.)

A variable-content course considering salient problems in philosophy. May be repeated as University Studies credit as issues change. Offered as appropriate.

270 - Philosophy of Religion (3 S.H.)

Topics will include arguments for and against the existence of God; the nature of religious belief, miracles, religious language, faith, and reason; as well as Freudian, Existentialist, and Postmodern approaches to religion. This course also briefly reviews the historical and theological background of the main Western religions. Offered as appropriate.

280 - Philosophy of Art (3 S.H.)

An introduction to the fundamental concepts and issues in the philosophy of art. Topics include: The definition of art, art's role and function, taste

and judgment, interpretation and intention, representation and expression. The course covers a wide range of views and spans the length of Western philosophy, within the larger realm of social, political, moral, gender, and scientific issues. Offered as appropriate.

301 - Early Modern Philosophy (3 S.H.)

This course examines the main themes of early modern philosophy by investigating the views of some of the principal European philosophers of the 17th and 18th centuries: the rationalism of such philosophers as Descartes, Spinoza, and Leibniz; the empiricism of Locke, Berkeley, and Hume; and the constructivism of Kant. Offered yearly.

302 - Contemporary Philosophy (3 S.H.)

A study of major figures and issues from the 19th and 20th centuries. Philosophers may include Mill, Marx, and Wittgenstein. Issues may include the nature of knowledge, the nature of mind, and the nature of the state. Offered yearly.

330 - Biomedical Ethics (3 S.H.)

Ethical issues in health care; for example, abortion, termination of treatment, euthanasia, truth-telling and confidentiality, medical experimentation and informed consent, transplant surgery, artificial insemination, surrogate pregnancy, the allocation of medical resources. Offered yearly.

332 - Philosophy of Law (3 S.H.)

Consideration of the philosophical foundations of law. Topics may include the nature of law, concepts of responsibility and liability, theories of

punishment, causation in the law, discrimination and equality, the relation of law and morality, the obligation to obey the law, civil disobedience, liberty and privacy, theories in private law (tort, contract, property). Offered yearly.

335 - Constitutional Philosophy (3 S.H.)

At the crossroads of political philosophy and philosophy of law, this course investigates the philosophical foundations of the American constitution and contemporary philosophical issues arising from its enforcement in a liberal democracy. Topics may include natural law theory, the separations of powers, theories of constitutional interpretation, theories of free speech, privacy doctrine, equal protection, affirmative action, criminal due process, and the Constitution's relation to American society. Offered as appropriate.

401 - Independent Readings in Philosophy (1-3 S.H.)

An individually planned program of readings. May be repeated to a maximum of 9 semester hours. Prerequisites: One philosophy course and instructor's permission. Offered by arrangement.

430 - Topics in Social and Political Philosophy (1-3 S.H.)

A variable-content course considering issues in social and political philosophy. May be repeated as topics change. Offered as appropriate.

460 - Great Philosophers (1-3 S.H.)

An intensive study of a single philosopher. May be repeated for different philosophers. Prerequisites: One philosophy course and instructor's permission. Offered as appropriate.

PHYSICAL EDUCATION AND SPORT SCIENCE

Memorial Hall, Room 122 (507-457-5202; Fax: 507-457-5606)

Douglas Callahan (Chairperson)

FACULTY

Douglas Callahan, Associate Professor; B.S., M.A., University of Denver; Ph.D., University of Kansas, 2000 –

Stephen Juairé, Professor; B.S., M.S., Winona State University; Ph.D., Florida State University; 1975 –

Michael Leaf, Associate Professor, Men's Basketball Head Coach; B.A., St. Mary's College of Minnesota; B.S., M.A., M.S., Winona State University; 1987 –

Tom Sawyer, Associate Professor, Football Coach; B.S., M.S., Winona State University; 1996 –

Don Wistrill, Assistant Professor; B.S., M.S., Winona State University; 1990 –

PURPOSE

The Department of Physical Education and Sport Science (PESS) exists within the College of Education. Through traditional methods, the faculty prepare majors to become physical education teachers and coaches. The physical education major leads to a Bachelor of Science (teaching) degree. In addition, the department offers numerous physical education courses that fulfill the 2-semester hour University Studies requirement for Physical Development and Wellness.

CAREER OPPORTUNITIES

Graduates in the physical education major are employed as K-12 educators in private and public schools. Students can expand their career options by combining a health education major and a coaching minor and/or an adapted physical education licensure with the physical education major.

DEPARTMENT PROGRAMS

- B.S. Major: Physical Education (Teaching)
- B.S. Minor: Coaching
- Developmental Adapted Physical Education Licensure

PASS/NO CREDIT (P/NC) COURSES

Students majoring or minoring in PESS programs must take all courses in the major, minor, and options on a grade-only basis except for PESS 190, which is a P/NC-Only course. Courses offered for pass/no credit-only or grade-only are so designated in the course descriptions. If no grading method is listed for a particular course in the course descriptions, the course may be taken for either grade or pass/no credit.

B.S. MAJOR - PHYSICAL EDUCATION (Teaching) (PET)

49 S.H. (No minor required)

Teaching majors must take all courses in the Professional Education Sequence in addition to courses in the content area. Refer to the Professional Education Sequence in the Education Department's section of this catalog (page 90).

Notes:

1. Professional Education Sequence courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

To be admitted into the Professional Education Sequence and to qualify for graduation, students majoring in physical education must have both a 2.75 overall GPA and a 2.5 GPA in the major. Students can expand their career options by taking dual majors, minors, adapted physical education licensure, or a coaching minor.

REQUIRED PHYSICAL EDUCATION

Theory Courses - PESS (22 S.H.)

- | | |
|-----|---|
| 129 | Perspectives of Physical Education (1) |
| 190 | Introduction to Teaching in Physical Education (1) |
| 205 | Teaching Middle/Secondary Physical Education (3) |
| 206 | Teaching Elementary Physical Education for Majors (3) |
| 214 | Standard First Aid and CPR (2) |
| 300 | Motor Learning and Development (3) |
| 317 | Curriculum & Methods of Physical Education (3) |
| 337 | Developmental/Adapted Physical Education (3) |
| 402 | Organization and Administration of Physical Education and Sport (3) |

Activity Cores - PESS (9 S.H.)

- 130 Individual/Dual Sports and Activities (3)
- 132 Rhythm, Dance, Tumbling and Movement Forms (3)
- 133 Team Sports and Activities (3)

Activity Course Required - PESS (1 S.H.)

- 123 Swimming & Water Safety (1) OR
- 124 Water Safety Instructor (1)

Biology – BIOL (8 S.H.)

- * 211 Anatomy and Physiology I (4)
- * 212 Anatomy and Physiology II (4)

Health, Exercise and Rehabilitative Sciences – HERS (6 S.H.)

- 314 Anatomical Kinesiology (3)
- 340 Physiology of Exercise (4) (See Note below.)

Statistics – STAT (3 S.H.)

- 110 Foundations of Statistics (3)

Prerequisites for Student Teaching

- PESS 129, 190, 205, 206, 317; BIOL 211 and BIOL 212
(Students must earn a “C” or better in each course.)

Note: Students must earn a “C” or better in BIOL 211 and 212 to enroll in HERS 340, Physiology of Exercise. Students must complete two of three activity cores and PESS 129 and 190 to enroll in PESS 205 and 206.

DEVELOPMENTAL/ADAPTED PHYSICAL EDUCATION LICENSURE

Candidates seeking licensure in developmental/adapted physical education (D/APE) must:

1. Hold a baccalaureate degree and a valid teaching license in physical education (K-12) or be enrolled in the physical education teaching major.
2. Complete 9 credits of core skills area requirements in special education:
 - SPED 400 Education of Exceptional Children/Youth (3)
 - SPED 405 Student Management Systems (3)
 - SPED 420 Special Education Administrative Procedures (3)
3. Complete the physical education teacher preparation program, which consists of 46 credits.
4. Complete the D/APE licensure course requirements not included in the physical education major: PESS 331 Perceptual Motor Development (2) and PESS 434 D/APE Practicum (4).

Developmental/adapted physical educators will be eligible for licensure in the State of Minnesota when the preceding process is implemented. Practicing teachers may request that their teaching experience and preparation in D/APE be evaluated and credited. Teachers will be asked to complete evaluation forms, documenting their teaching experience and preparation in D/APE. The candidate will be expected to file a formal application with the WSU Office of Admissions and to schedule a consultation regarding deficiencies or additional requirements needed prior to receiving licensure certification. For additional information, candidates should contact the Department of Physical Education & Sport Science, Adapted Physical Education, Memorial Hall, Winona State University, Winona, MN 55987.

B.S. MINOR - COACHING (COAC)

22 S.H.

REQUIRED COURSES**Physical Education - PESS (18 S.H.)**

- 235 Principles of Coaching (3)
- 251 Sports Science (3) (See Note 1 below.)
- 280 Psychology of Physical Activity and Sport (3)
- 300 Motor Learning and Development (3) (See Note 2 below.)
- 402 Organization and Administration of Physical Education and Sport (3)
- 406 Coaching Practicum (3)

Health, Exercise and Rehabilitative Sciences - HERS (2 S.H.)

- 291 Prevention and Care of Athletic Injuries (2)

Choose two of the following PESS courses (2 S.H.):

- 304 Techniques of Coaching Football (1)
- 305 Techniques of Coaching Basketball (1)
- 306 Techniques of Coaching Track and Field and Cross Country (1)
- 307 Techniques of Coaching Baseball and Softball (1)
- 322 Techniques of Coaching Soccer (1)
- 328 Techniques of Coaching Volleyball (1)

Notes:

1. PESS 251 is waived for students taking HERS 340.
2. PESS 300 is waived for physical education majors (part of the major curriculum).

Additional Considerations:

- Prerequisites: PESS 235, PESS 280, HERS 291, and current CPR/First Aid certification.
- Academic Requirements: Evidence of current CPR/First Aid certification required before graduation. Grade of “C” or above required in all coaching minor courses.

PHYSICAL EDUCATION COURSE DESCRIPTIONS**THEORY COURSES****121 - Introduction to Movement & Music (1 S.H.)**

A comprehensive, practical study of fundamental dance movement and its relationship with music. World music and dance will be investigated.

129 - Perspectives of Physical Education (1 S.H.)

Introduction and orientation to the field of Physical Education. Includes brief historical perspective, aims, objectives, values, issues, qualifications and opportunities in the profession. Majors only. Grade only.

190 - Introduction to Teaching in Physical Education (1 S.H.)

This course provides an introduction to writing lesson plans and performance/behavioral objectives. In addition, students will apply these instructional plans in peer teaching. Prerequisites: At least two of these courses—PESS 130, PESS 132, or PESS 133. P/NC only.

200 - Teaching Elementary Physical Education (3 S.H.)

Program planning, games, materials, methods, and techniques of teaching physical education activities to children for early childhood, elementary and middle school. Grade only.

201 - Teaching Dance (2 S.H.)

Techniques of teaching dance. Theory and practical experience in methods of teaching dance to all grade levels. Prerequisite: PESS 121 plus one additional dance activity course. Grade only.

205 - Teaching Middle/Secondary Physical Education (3 S.H.)

This course provides practical instruction methods through lecture, classroom settings, and teaching models that will be focused at the middle and secondary level of instruction. Students will be able to understand and instruct a prescribed curriculum in the physical education classroom setting. Prerequisites: PESS 129, PESS 190 and at least two of these courses—PESS 130, PESS 132, or PESS 133. Grade only.

206 - Teaching Elementary Physical Education for Majors (3 S.H.)

Introduction to teaching physical education in grades PK-6; the course is designed especially for physical education majors. The course focuses on movement concepts, fitness, integration, rhythmic activities, games, and motor development of young learners and how to organize, plan, implement, and assess that content through a physical education program. Grade only.

214 - Standard First Aid and CPR (2 S.H.)

Accident scene management, victim assessment and basic life support, injury management and victim care knowledge and practice are emphasized. Certification can be earned. Grade only.

235 - Principles of Coaching (3 S.H.)

This course is designed to provide the student an introduction to the principles of coaching. Topics to be covered include the following: developing a positive philosophy of coaching, qualities of head and assistant coach, sport pedagogy (planning and teaching sport skills), team management, personal manager, support groups, manager of media, recruiting process and issues, problems and concerns of athletics. Grade only.

251 - Sports Science (3 S.H.)

The study of anatomical, mechanical, maturational, psychological, and physiological kinesiology as it applies to the practice of coaching. The major focus is to present the scientific principles that constitute the basis for sound athletic coaching practices. Grade only.

280 - Psychology of Physical Activity and Sport (3 S.H.)

A detailed study of the application of selected psychological variables for coaches and individuals who participate in physical activity and sport. Grade only.

300 - Motor Learning and Development (3 S.H.)

Theoretical foundations of motor learning and development and practical applications of theories in the teaching of motor skills across a life span. Prerequisites: STAT 208 or instructor's permission. Grade only.

304 - Techniques of Coaching Football (1 S.H.)

Theory and practice of teaching and coaching football. Grade only.

305 - Techniques of Coaching Basketball (1 S.H.)

Theory and practice of teaching and coaching basketball. Grade only.

306 - Techniques of Coaching Track/Field & Cross Country (1 S.H.)

Theory and practice of teaching and coaching track/field and cross country. Grade only.

307 - Techniques of Coaching Baseball & Softball (1 S.H.)
Theory and practice of teaching and coaching baseball and softball. Grade only.

308 - Techniques of Coaching Wrestling (1 S.H.)
Theory and practice of teaching and coaching wrestling. Grade only.

311 - Techniques of Coaching Tennis (1 S.H.)
Theory and practice of teaching and coaching tennis. Grade only.

317 - Curriculum & Methods of Physical Education (3 S.H.)
Curriculum and teaching methods of physical education. Prerequisites: PESS 129, PESS 200, and one activity core course. Grade only.

322 - Techniques of Coaching Soccer (1 S.H.)
Theory and practice of teaching and coaching soccer. Grade only.

328 - Techniques of Coaching Volleyball (1 S.H.)
Theory and practice of teaching and coaching volleyball. Grade only.

329 - Techniques of Coaching Gymnastics (1 S.H.)
Theory and practice of teaching and coaching gymnastics. Grade only.

331 - Perceptual Motor Development (2 S.H.)
In-depth examination of contemporary motor developmental theories, principles of normal and abnormal motor development, and clinical applications of immature locomotor patterns. Grade only.

337 - Developmental/Adapted Physical Education (3 S.H.)
Methods, techniques, and special programs of physical education for the atypical child. Emphasis will be on those disabling conditions most prevalent in the school system and the laws that govern them. Lab and practical experiences are included. Grade only.

402 - Organization and Administration of Physical Education and Sport (3 S.H.)
Plans of organization, administration, policies, budget, finance, legal aspects, staff, physical plant, publicity, public relations, time schedules, student leaders, and programs. Prerequisites: PESS 129, PESS 200 and PESS 317, senior standing or instructor's permission. Grade only.

406 - Coaching Practicum (3 S.H.)
Directed supervision in coaching. The student proposes the sport and location when he/she is interested in coaching. After approval of the cooperating coach and the Director of Coaching, the student will be granted a coaching practicum under direct supervision. Prerequisites: PESS 235, PESS 280, HERS 291, and current CPR/First Aid certification. The student must show proof of current CPR/First Aid certification prior to beginning the practicum. Grade only.

410 - Coaching Clinic (2 S.H.)
Lectures, videos, demonstrations and discussions covering skills, techniques of coaching, pre- and off-season conditioning, practice sessions, conditioning, and care and prevention of injuries relative to the designated sport. May be repeated when offered with a different title.

412 - Independent Study in Physical Education or Sport (1-3 S.H.)
Opportunity to work independently. Prerequisite: Junior or senior standing, preparation of proposed outline and major advisor's permission. Grade only.

417 - Special Topics in Physical Education or Sport (1-3 S.H.)
Typically offered on a workshop basis. Subject matter determined by department. Course may be repeated when offered with different subject matter, content and topic. Grade only.

422 - Standard First Aid/Personal Safety Instructor and Basic First Aid/Cardiopulmonary Resuscitation Instructor Course (2 S.H.)
Red Cross instructor certification in Basic First Aid and CPR.

434 - Developmental/Adapted Physical Education Practicum (4 S.H.)
The application of skills, knowledge, and concepts necessary for planning, organizing, and conducting developmental/adapted physical education programs through supervised field experience. Prerequisites: PESS 331, PESS 337. Grade only.

435 - Assessment in Adapted Physical Education (3 S.H.)
Instruction in the assessment, prescription and use of instructional methods, materials and equipment relevant to specific handicapping conditions in the adaptive physical education setting. Grade only. Offered on demand.

436 - Programming/Special Populations in Developmental/Adapted Physical Education (3 S.H.)
Fundamental concepts and skills essential to programming and adaptation of methods, materials, physical activities and facilities to meet the needs of physically, mentally, and emotionally challenged individuals. Grade only. Offered on demand.

ACTIVITY CORES FOR PHYSICAL EDUCATION MAJORS ONLY

Courses in this category include comprehensive development of skills, knowledge of rules, strategies, terminology, and participation in the designated activities.

130 - Individual/Dual Sports and Activities (3 S.H.) Grade only.
Additional fee.

132 - Rhythm, Dance, Tumbling and Movement Forms (3 S.H.) Grade only. Additional fee.

133 - Team Sports and Activities (3 S.H.) Grade only.

ACTIVITY COURSES FOR ALL STUDENTS

Activity courses are offered on an optional pass/no credit basis except those designated P/NC-only or grade-only. Activity courses required for physical education majors and dance minors must be taken for letter grade. If physical education activity courses are repeated to improve competency, only the final grade will count in calculating GPA. All activity courses are offered yearly or on demand.

100 - Soccer (1 S.H.)
Fundamental skills and knowledge necessary for the recreational purposes of the participant. Includes rules, conditioning, and strategy of play.

101 - Basketball (1 S.H.)
The development of basic fundamental skills, knowledge, and strategies involved in beginning basketball in order to be able to enjoy recreational basketball.

102 - Slow-Pitch Softball (1 S.H.)
This course will develop skills and techniques in softball, including rules and strategies of play.

103 - Racquetball (1 S.H.)
The development of basic fundamental skills, knowledge, and strategies involved in beginning racquetball in order to be able to enjoy playing recreational racquetball.

104 - Volleyball (1 S.H.)
The development of basic fundamental skills, knowledge and strategies involved in volleyball in order to be able to enjoy recreational volleyball.

112 - Folk and Square Dance (1 S.H.)
Fundamental skills and knowledge necessary for the recreational purposes of the participant.

120 - Ballroom Dance (1 S.H.)
Introduction to the basic techniques of recreational ballroom dancing. Includes the foxtrot, waltz, lindy, and rumba.

122 - Beginning Swimming (1 S.H.)
This course covers basic water safety skills and knowledge including physical and mental adjustment to water for non-swimmers.

123 - Swimming & Water Safety (1 S.H.)
Fundamental skills and endurance related to swimming strokes and aquatic safety. For swimmers who can handle themselves in deep water.

124 - Water Safety Instructor (1 S.H.)
Teaching methods for swimming, diving, basic water safety, and program development. Culminates with Red Cross certification. Prerequisite: PESS 123 or demonstrated competency.

134 - Downhill Skiing (1 S.H.)
Fundamental skills and knowledge appropriate for the beginner, intermediate, and advanced skier. Additional fee for those who need to rent equipment.

135 - Weight Training (1 S.H.)
Fundamental skills and knowledge necessary for the recreational purposes of the participant.

137 - Fencing (1 S.H.)
Fundamental skills and knowledge necessary for the recreational purposes of the participant. Includes rules, conditioning, and strategy of play.

139 - Tennis (1 S.H.)
Fundamental skills and knowledge appropriate for the beginner, intermediate, and advanced plays, including rules, conditioning, and strategy of play. Students must supply their own racquet and balls.

140 - Bowling (1 S.H.)
Fundamental skills and knowledge necessary for the recreational purposes are provided for the participant. The course includes rules and strategies of play. Additional fee.

141 - Golf (1 S.H.)
This course will teach students the techniques of a golf swing. Golf course strategies and etiquette will be explained and examined on an authentic golf course. Additional fee.

142 - Badminton (1 S.H.)
The development of basic fundamental skills, knowledge, and strategies involved in beginning badminton in order to be able to enjoy playing recreational badminton.

144 - Contemporary Activities (1 S.H.)
This course introduces the student to varied contemporary, movement-based activities. A variety of activities will be introduced as a means of encouraging movement and expanding the student's leisure interest profile. May be repeated for credit under different subtitle.

199 - Lifetime Fitness (2 S.H.)
A theory and lab course designed to encourage a lifetime commitment to regular physical fitness. Includes wellness topics, laboratory sessions, and aerobic activities. Activities vary according to semester offered. Grade only.

PHYSICS

Pasteur Hall, Room 142 (507-457-5260)

www.winona.edu/physics

Frederick Otto (Chairperson)

FACULTY

George Bolon, Professor; B.S., M.S., Oregon State University; Ph.D., University of Utah; 1968 –

Andrew Ferstl, Associate Professor; B.S., University of Wisconsin; Ph.D., University of Minnesota; 2000 –

David E. Hamerski, Professor; B.S., St. Mary's College of Minnesota; M.S., University of Minnesota-Twin Cities; Ph.D., Washington University (St. Louis, Missouri); 1961 –

Nathan Moore, Assistant Professor, B.S., Grove City College; Ph.D., University of Minnesota; 2005 –

Frederick Otto, Professor; B.A., B.S., Humboldt State University; Ph.D., University of California-Berkeley; 1990 –

Richard H. Shields, Professor; B.S., M.S., Eastern Illinois University; Ph.D., University of Missouri-Rolla; 1973 –

PURPOSE

The Department of Physics provides quality undergraduate instruction to meet the needs and special interests of those students who wish to acquire an understanding and appreciation of the natural world. Knowledge of physics provides a basis for creative careers in many areas of engineering and technology. Physicists find employment in teaching, research and development, and management. The B.S. Physics major provides two options:

- Option I is the traditional physics major, designed principally for students who wish to pursue graduate study in physics and related fields.
- Option II is for those who have interests in electronics engineering. Many students in Option II take additional coursework in computer science.

For students interested in teaching, the Physics Department also offers two pathways. One option is Physics Teaching, which certifies teachers to teach high school physics, physical science, and general science for grades 5 through 12. The second option is Physical Science, which certifies teachers to teach high school physics, chemistry, and physical science for grades 9 -12.

The Physics Department also offers minors in physics, aviation, and electronics. The aviation minor, in conjunction with majors in business management or computer science, is certified by the Federal Aviation Administration as an Airway Science curriculum.

PASS/NO PASS CREDIT (P/NC) COURSES

Except for internships and practica, students must take all courses in their major, minor, options, concentrations and licensures on a grade-only basis. Any course not required for a major or minor may be taken on a pass/no credit basis. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

HONORS IN PHYSICS PROGRAM

Philosophy

Physics faculty believe that experience in the process of doing science—that is, conducting research—is invaluable for students who wish to pursue advanced degrees in physics. It is important that students be familiar not only with the body of knowledge that physics encompasses, but also with the procedures of scientific inquiry used to advance this body of knowledge.

Student Benefits

Students benefit from the experience of planning, conducting, and completing a coherent undergraduate research project. They add to their skills and understanding in a particular area of physics and practice communicating their results to their peers and the physics community. Successful completion of the project enhances their opportunities for admission to graduate school or for scientific employment following graduation.

Eligibility

To be accepted into the Honors in Physics Program, a student must:

1. Be a physics major and have completed 20 semester hours of physics.
2. Have at least a 3.0 GPA both overall and within the major.
3. Identify a WSU faculty member who is willing to serve as a research advisor.
4. Apply to the Physics Department for admission to the program.

Participation

Students who are accepted into the program are expected to:

1. Maintain a 3.0 GPA overall and within the major.
2. Make steady progress toward the goals of the research program.
3. Write an acceptable honors thesis describing the research.
4. Give a seminar describing the research to fellow honors students and faculty.
5. Present the results of the research study at an appropriate regional meeting.

Completion

Upon graduation, students who successfully complete the Honors in Physics Program receive the following recognition of their accomplishments:

1. Official transcripts are stamped with the words “Graduated with Honors in Physics.”
2. Transcripts include the title of their honors thesis.
3. Graduation status (Honors in Physics) is acknowledged on the graduation program and during the graduation ceremonies.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Physics Department offers the following flag courses in the University Studies Program:

FLAG

Oral I

PHYS 460 Undergraduate Research (1-4)

Math/Critical Analysis O

PHYS 345 Thermodynamics and Statistical Physics (4)

PHYS 430 Electromagnetic Theory I (3)

Writing P

PHYS 330 Electronics (4)

PHYS 340 Modern Physics (4)

PHYS 370 Optics (4)

Flag courses that can be used to satisfy physics major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - PHYSICS: OPTION I - PHYSICS (PHYP)

77 S.H. (No Minor Required)

REQUIRED COURSES (71 S.H.)

Physics - PHYS (47 S.H.)

- 221, 222, 223 University Physics I, II, III (12)
- 320 Computational Physics (2)
- P 330 Electronics (4)
- P 340 Modern Physics (4)
- O 345 Thermodynamics and Statistical Physics (4)
- 350 Mechanics (4)
- P 370 Optics (4)
- O 430 Electromagnetic Theory I (3)
- 431 Electromagnetic Theory II (3)
- 451 Quantum Mechanics (3)
- I 460 Undergraduate Research (4)

Mathematics - MATH (16 S.H.)

- 160, 165 Calculus I, II (8)
- 260 Multivariable Calculus (4)
- 270 Differential Equations (4)

Chemistry - CHEM (8 S.H.)

- *212, *213 Inorganic Chemistry I, II (8)

ELECTIVES - PHYS (6 S.H. from the list below)

- 328 Electrical Circuits I (4)
- 329 Electrical Circuits II (4)
- 332 Computer Organization (2)
- 333 Microprocessor Electronics (4)
- 399 Internship (1-4)
- 400 Seminar (1-4)
- 420 Control Theory (3)
- 425 Physics of Semiconductors (3)

B.S. MAJOR - PHYSICS: OPTION II - ELECTRONICS (PHYE)

78 S.H. (No Minor Required)

REQUIRED COURSES (72 S.H.)

Physics - PHYS (45 S.H.)

- 221, 222, 223 University Physics I, II, III (12)
- 320 Computational Physics (2)
- 328 Electrical Circuits I (4)
- P 330 Electronics (4)
- 332 Computer Organization (2)
- 333 Microprocessor Electronics (4)
- P 340 Modern Physics (4)
- 420 Control Theory (3)
- 425 Physics of Semiconductors (3)
- O 430 Electromagnetic Theory I (3)
- I 460 Undergraduate Research (4)

Mathematics - MATH (16 S.H.)

- 160, 165 Calculus I, II (8)
- 260 Multivariable Calculus (4)
- 270 Differential Equations I (4)

Chemistry - CHEM (8 S.H.)

- *212, *213 Chemistry I, II (8)

Computer Science - CS (3 S.H.)

- 231 Fortran for Engineering and Science (3) OR
- * 234 Algorithms and Problem Solving (3) OR
- 298 Unix and C Programming (3)

ELECTIVES - PHYS (6 S.H.)

- 329 Electrical Circuits II (4)
- O 345 Thermodynamics and Statistical Physics (4)
- 350 Mechanics (4)
- P 370 Optics (4)
- 399 Internship (1-4)
- 400 Seminar (1-4)
- 431 Electromagnetic Theory II (3)
- 451 Quantum Mechanics (3)

B.S. MINOR - PHYSICS (PHYS)

33 S.H.

REQUIRED COURSES (16 S.H.)

Physics - PHYS (8 S.H.)

- 201 General Physics I (4)
- 202 General Physics II (4) OR
- 221 University Physics I (4)
- 222 University Physics II (4)

Mathematics - MATH (8 S.H.)

- 160 Calculus I (4)
- 165 Calculus II (4)

Note: Students not prepared to take MATH 160 should take MATH 120.

ELECTIVES (17 S.H.)

Physics - PHYS

- 223 University Physics III (4)
- 320 Computational Physics (2)
- 328 Electrical Circuits and Measurements I (4)
- 329 Electrical Circuits and Measurements II (4)
- P 330 Electronics (4)
- 332 Computer Organization (2)
- 333 Microprocessor Electronics (4)
- P 340 Modern Physics (4)
- O 345 Thermodynamics and Statistical Physics (4)
- 350 Mechanics (4)
- P 370 Optics (4)
- 400 Seminars (1-4)
- 420 Control Theory (3)
- 425 The Physics of Semiconductors (3)
- O 430 Electromagnetic Theory I (3)
- 431 Electromagnetic Theory II (3)
- 440 Mathematical Methods in Physics I (3)
- 451 Quantum Mechanics (3)
- I 460 Undergraduate Research (4)
- 490 Individual Problems in Physics (1-3)

B.S. MINOR - ELECTRONICS (ELTR)

33 S.H.

REQUIRED COURSES (25 S.H.)

Physics - PHYS (17 S.H.)

- 201, 202 General Physics I, II (8) OR
- 221, 222 University Physics I, II (8)
- P 330 Electronics (4)
- 332 Computer Organization (2)
- 333 Microprocessor Electronics (3)

Mathematics - MATH (8 S.H.)

- 160, 165 Calculus I, II (8)

Note: Students not prepared to take MATH 160 should take MATH 120.

ELECTIVES (8 S.H.)

Physics - PHYS

- 223 University Physics III (4)
- 320 Computational Physics (2)
- 328 Electrical Circuits and Measurements I (4)
- 329 Electrical Circuits and Measurements II (4)
- P 340 Modern Physics (4)
- 350 Mechanics (4)
- P 370 Optics (4)
- 399 Internship (1-8)
- 420 Control Theory (3)
- 425 The Physics of Semiconductors (3)
- O 430 Electromagnetic Theory I (3)
- 431 Electromagnetic Theory II (3)
- 440 Mathematical Methods in Physics I (3)
- 451 Quantum Mechanics (3)
- I 460 Undergraduate Research (4)
- 490 Individual Problems in Physics (1-3)

B.S. MAJOR - PHYSICS (Teaching) (PHST)

114 S.H. (No Minor Required)

Note: The Minnesota Board of Teaching (BOT) has approved the following major, which certifies graduates to teach general science, physical science, and physics for grades 5-12.

REQUIRED COURSES (114 S.H.)**Additional Requirements (42 S.H.)****Chemistry - CHEM(8 S.H.)**

*212, *213 Principles of Chemistry I, II (8)

Mathematics - MATH (12 S.H.)160, 165 Calculus I, II (8)
270 Differential Equations I (4)**Biology - BIOL (8 S.H.)**

*241, *242 Basics of Life, Organismal Diversity (8)

Geoscience - GEOS (8 S.H.)* 120 Dynamic Earth (4)
* 130 Earth Through Life and Time (4)**Health, Exercise and Rehabilitative Sciences - HERS (3 S.H.)**

* 204 Personal and Community Health (3)

Special Education - SPED (3 S.H.)

* 400 Education of Exceptional Children/Youth (3)

Physics - PHYS (40 S.H.)221, 222, 223 University Physics I, II, III (12)
311 Science Teaching Methods (4)
320 Computational Physics (2)
P 330 Electronics (4)
P 340 Modern Physics (4)
O 345 Thermodynamics and Statistical Physics (4)
350 Mechanics (4)
P 370 Optics (4)
I 460 Undergraduate Research (2)**Education - EDUC (32 S.H.)****Notes:**

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
- The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

* 305 Human Development and Learning (4)
308 Human Relations and Student Diversity (3)
O 312 Instructional Planning and Assessment: Secondary (3)
429 Secondary Reading and Teaching Strategies (4)
P 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
P 459 The Professional Educator (3)
I EDST 465 Student Teaching (12)

B.S. MAJOR - PHYSICAL SCIENCE (Teaching) (PPST)

118 S.H.

Note: The Minnesota Board of Teaching (BOT) has approved the following major, which certifies graduates to teach physical science, physics and Chemistry for grades 9-12.

REQUIRED COURSES (118 S.H.)**Additional Requirements (18 S.H.)****Mathematics - MATH (12 S.H.)**160, 165 Calculus I, II (8)
270 Differential Equations I (4)**Health, Exercise and Rehabilitative Sciences - HERS (3 S.H.)**

* 204 Personal and Community Health (3)

Special Education - SPED (3 S.H.)

* 400 Education of Exceptional Children/Youth (3)

Chemistry - CHEM (32 S.H.)*212, *213 Principles of Chemistry I, II (8)
320 Environmental Chemistry (4)
340 Organic Chemistry Survey (4)
I 360 Chemical Information I (2)
400 Biochemistry (4)O 412 Physical Chemistry I (3)
P 413 Physical Chemistry I Lab (1)
425 Analytical Chemistry I (4)
431 Guided Study in Teaching Chemistry (2)**Physics - PHYS (34 S.H.)**221, 222, 223 University Physics I, II, III (12)
311 Science Teaching Methods (4)
320 Computational Physics (2)
P 330 Electronics (4)
P 340 Modern Physics (4)
350 Mechanics (4)
P 370 Optics (4)**Physics or Chemistry (2 S.H.)**CHEM 430 Individual Problems (1) and CHEM 475 Seminar in Chemistry (1) OR
I PHYS 460 Undergraduate Research (2)**Education - EDUC (32 S.H.)****Notes:**

- These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
 - The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.
- * 305 Human Development and Learning (4)
308 Human Relations and Student Diversity (3)
O 312 Instructional Planning and Assessment: Secondary (3)
429 Secondary Reading and Teaching Strategies (4)
P 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
P 459 The Professional Educator (3)
I EDST 465 Student Teaching (12)

Notes:

- Individuals holding a college degree and wanting only a certification for grades 9 - 12 physics are required to complete PHYS 221, 222, 223, 311, 320, 340, 345, 350, 330, 370, and 460; CHEM 212, 213; MATH 160, 165, 270; and EDUC 305, 308, 312, 429, 449, 459, 459, 465. (The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.)
- Individuals holding a college degree and wanting only a certification for grades 9 - 12 chemistry are required to complete CHEM 212, 213, 320, 340, 360, 400, 412, 413, 425, 430, 431 and 475; PHYS 221, 222, and 311; MATH 160, 165; and EDUC 305, 308, 312, 429, 449, 459, 459, 465. (The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.)

B.S. MINOR - AIRWAY SCIENCE/AVIATION (ASAV)

26 S.H.

REQUIRED COURSES (26 S.H.)**Physics - PHYS(8 S.H.)**

201, 202 General Physics I, II (8)

Mathematics - MATH(3 S.H.)140 Applied Calculus (3) **Note:** Students not prepared to take MATH 140 should take MATH 120.**Management and Marketing (3 S.H.)**

BUSA 301 Business Law I (3)

Aviation - PHYS (12 S.H.)200 Fundamentals of Aviation (3)
205 Airspace, Communications and Regulations (1)
383 Air Traffic Control (3)
387 Flight Safety (3)
388 Legislative & Legal Aspects of Aviation (2)

Note: For a complete listing of the FAA-approved Airway Science Program, see page 111.

COURSE DESCRIPTIONS (PHYS)

PHYSICS

115 - Conceptual Physics (4 S.H.)

Many demonstrations, everyday applications, and hands-on interactive simulations are used to make physics understandable to the general education student. Non-mathematical approach. Lab. Not open to students with credits in higher numbered, non-aviation physics courses. Prerequisite: None. Offered each semester.

140 - Energy (3 S.H.)

This course focuses on energy needs, trends, and long-term prospects and resource supplies. The physics of energy, atoms, nuclei, thermal energy, solar energy, alternative energies, and consequences of energy production are discussed. The present governmental energy policy will be discussed along with proposed changes to the policies. Prerequisite: None. Offered each semester.

201 - General Physics I (4 S.H.)

An algebra-based course covering the principles of mechanics, waves, sound, and fluids for those contemplating the study of biology, medicine, etc. or seeking a general education course in the physical sciences. Lecture and laboratory. Prerequisite: MATH 120. Offered each semester.

202 - General Physics II (4 S.H.)

A continuation of PHYS 201. Principles of thermodynamics, electricity and magnetism, light and modern physics. Lecture and laboratory. Prerequisite: PHYS 201. Offered each semester.

221 - University Physics I (4 S.H.)

A calculus-based course covering mechanics, which aims to meet the specific requirements of students who expect to major in physics, mathematics, chemistry, or engineering. Lecture and laboratory. Prerequisite: MATH 160. Offered each semester.

222 - University Physics II (4 S.H.)

A continuation of PHYS 221, covering thermodynamics, electricity, and magnetism. Lecture and laboratory. Prerequisites: PHYS 221 and MATH 165. Offered each semester.

223 - University Physics III (4 S.H.)

A continuation of PHYS 222 covering waves, sound, light, relativity, nuclear physics, and special topics in modern physics. Lecture and laboratory. Prerequisite: PHYS 222. Offered yearly.

302 - Electrical Circuits (3 S.H.)

DC and AC circuit analysis, including RC, RL, RLC and three-phase network analysis. Lecture only. Prerequisites: PHYS 222 and MATH 165. Offered yearly.

310 - Science and Technology in Litigation (4 S.H.)

Designed to provide a working knowledge of investigative procedures; basic science, especially dynamics, sound, and radiation; and recent technological advances employed in litigation in the areas of automobile collisions, accidents, and product liabilities. Prerequisites: HIST 365, HIST 370 and HIST 377 or instructor's permission. Grade only. Offered yearly.

311 - Science Teaching Methods (4 S.H.)

The application of current research trends and modern technology in science education are used to prepare science majors for the teaching of secondary school science content and process. Prerequisites: Acceptance in the Education Department, two years of coursework in a science major and PHYS 201 or PHYS 221. This course is a prerequisite to student teaching. Offered yearly.

320 - Computational Physics (2 S.H.)

A laptop course in computational physics. Numerical methods for integration and differential equations. Symbolic manipulation. Graphics animations, 3-D plots, density plots, three-body problem, potentials and fields, chaos, and quantum mechanics. Prerequisites: PHY 223 and MATH 270. Offered yearly.

328 - Electrical Circuits and Measurements I (4 S.H.)

DC and AC circuit analysis, including RC, RL, RLC and three phase network analysis. Includes laboratory. Prerequisites: PHYS 202 or PHYS 222 and MATH 165. Offered yearly.

329 - Electrical Circuits and Measurements II (4 S.H.)

A continuation of PHYS 328 covering magnetically coupled circuits, complex frequency approach, and the application of Laplace and Fourier transform techniques. Introduces computer analysis and design of linear circuits. Lecture and laboratory. Prerequisite: PHYS 328. Offered on demand.

330 - Electronics (4 S.H.)

A lecture-laboratory course in solid state electronics including circuit theory, diodes, transistors, power supplies, operational amplifiers, wave-form generators, and integrated circuits. Prerequisites: PHYS 222 or PHYS 202 and MATH 165 or instructor's permission. Offered yearly.

332 - Computer Organization (2 S.H.)

A lecture-laboratory course in fundamentals of digital computers and digital

electronics; Boolean algebra, logic circuits, counters, registers, arithmetic-logic units, sequential circuits, sequence detectors. Prerequisite: PHYS 202 or PHYS 222 or CS 250. Offered yearly.

333 - Microprocessor Electronics (4 S.H.)

A lecture-laboratory course on the programming and interfacing of the M68HC12 Motorola microcontroller. Applications of the controller to analog to digital conversion, input and output control, software timing and interrupts will be covered. Prerequisite: PHYS 332. Offered yearly.

340 - Modern Physics (4 S.H.)

A lecture-laboratory course in modern physics. Special relativity, kinetic theory, Bohr Atom, quantum mechanics, atomic physics, nuclear physics, and condensed matter physics. Prerequisites: PHY 223 and MATH 165. Offered yearly.

345 - Thermodynamics and Statistical Physics (4 S.H.)

Equation of state, first and second law, entropy, equilibrium, reversible and irreversible processes, heat engines, probability distributions, statistical representation of entropy, quantum fluids. Prerequisites: PHYS 202 or PHYS 222 and MATH 165. Offered every two years.

350 - Mechanics (4 S.H.)

Rectilinear motion, motion in three dimensions, oscillations, central forces, rigid body motion, non inertial reference frame, Lagrangian mechanics. Prerequisites: PHYS 202 or PHYS 222 and MATH 165. Offered every two years.

370 - Optics (4 S.H.)

A study of geometrical optics, the wave theory of light, interference, diffraction, polarization, magneto- and electro-optics, lasers, and holography. Lecture-laboratory course. Prerequisites: PHYS 202 or PHYS 223 and MATH 165. Offered every two years.

399- Internship (1-8 S.H.)

Supervised industrial, business, or government experience designed by the WSU physics advisor, the work supervisor, and the student. Open only to junior or senior physics major or minor. P/NC only. Prerequisite: Department approval. Offered on demand.

400 - Seminars (1-4 S.H.)

This course consists of one or more seminars offered from time to time on a variety of topics in physics. Students may repeat the course under a different topic. Prerequisite: Instructor's permission. Offered on demand.

420 - Control Theory (3 S.H.)

An introduction to the design, analysis techniques, and behavior of linear feedback control systems. Both transfer function and state variable models are used to study the input and output characteristics and interactions of the functional blocks which comprise the system model. Prerequisites: PHYS 202 or PHYS 222 and MATH 270. Offered every two years.

425 - The Physics of Semiconductors (3 S.H.)

A study of the physics of semiconductors, pn junctions and transistors; fabrication of semiconductor devices including integrated circuits; and the electrical characteristics and behavior of these devices. Prerequisite: PHYS 340. Offered every two years.

430 - Electromagnetic Theory I (3 S.H.)

Electrostatics including Gauss's law and Laplace's equation. Magnetostatics. Introduction to Maxwell's equations. Prerequisites: PHYS 202 or PHYS 222 and MATH 270. Offered every two years.

431 - Electromagnetic Theory II (3 S.H.)

A continuation of PHYS 430 with applications of Maxwell's equation to wave guides, optics, and special relativity. Prerequisite: PHYS 430. Offered every two years.

440 - Mathematical Methods in Physics I (3 S.H.)

Partial differential equations of mathematical physics. Orthogonal functions. Fourier series. Prerequisites: PHYS 202 or PHYS 222 and MATH 270. Offered on demand.

441 - Mathematical Methods in Physics II (3 S.H.)

Eigenvalue problems, Sturm-Liouville theory, Matrix theory, numerical techniques, special functions, and Laplace and Fourier transforms. Prerequisite: PHYS 440. Offered on demand.

451 - Quantum Mechanics (3 S.H.)

A continuation of PHYS 223. Interpretation of wave functions. Systems in one dimension. Hermitian operators and angular momentum. Electron spin. Systems in two or three dimensions. Prerequisites: PHYS 223 and MATH 270. Offered every two years.

460 - Undergraduate Research (4 S.H.)

An opportunity for an advanced physics student to work with a faculty member on an independent research project. A written report and oral presentation are required on results of the research. Offered each semester.

490 - Individual Problems in Physics (1-3 S.H.)

An opportunity for the qualified advanced undergraduate to work independently. Topics may include research, development of special skills, selected readings, etc. Prerequisite: Physics advisor's permission. May be repeated to a total of 3 credits. Offered on demand as an arranged class.

AVIATION (PHYS)**200 - Fundamentals of Aviation (3 S.H.)**

An applied science course covering, but not limited to, the principles of physics, earth science, and physiology as they relate to aviation. Offered each semester.

204 - Private Flight Laboratory (3 S.H.)

This course equates to the FAA Practical Test Standards and covers airplane operations and the use of radio for voice communications; emphasis on basic piloting techniques such as stalls, landings, short and soft field operation; and cross-country flight procedures. Student must enroll in course to earn credit. Offered yearly.

205 - Airspace, Communications and Regulations (1 S.H.)

This course complements PHYS 200 and meets the requirements for FAA 141 approval. Subject areas covered include Code of Federal Regulation 14, airspace, ATC Communications, and standard operating procedure. Prerequisite: PHYS 200 or instructor's permission.

300 - Fundamentals of Instrument Flight (4 S.H.)

Provides the student with aeronautical understanding, knowledge and competencies for successful completion of the FAA instrument written knowledge examination. Additional subjects covered in depth are advanced meteorology, integrated and inertial instrument flight and ground systems, national and international airspace, and sophisticated radio communications and navigation. Offered yearly.

301 - Instrument Flight Laboratory (3 S.H.)

This course equates to the FAA Practical Test Standards and covers ground and airplane operations for instrument flight at an advanced level; instrument piloting techniques such as aircraft maneuvers, IFR, departure, en route and approach procedures and ADF, ILS, GPS, and VOR approach techniques and proficiencies. Student must enroll in the course to receive credit. Offered yearly.

380 - Seminars in Aviation Organization (1-3 S.H.)

Seminars on topics relevant to organization and administration of aviation. The series will cover airline, commuter, corporate, federal, and general aviation topics. Prerequisites: Junior standing and/or instructor's permission. May be repeated. Offered yearly.

381 - Corporate Operations (2 S.H.)

This course covers aircraft operations as they relate to U.S. business for both the chief executive officer as well as corporate aviation personnel. Major areas covered are proposals, utilization, operations, insurance, and legal aspects of FAR 91 and 135 operations. Taught by staff and adjunct industry personnel. Prerequisites: PHYS 200 or instructor's permission. Offered every two years.

382 - Airline Operations (2 S.H.)

An overview of the U.S. airline industry covering historical background, regulations, and current operational entities and procedures for U.S. flag carrier airlines. Taught by staff and adjunct industry personnel. Prerequisite: PHYS 381 or instructor's permission. Offered every two years.

383 - Air Traffic Control (3 S.H.)

An overview of the U.S. and Canadian airspace system. Special emphasis on the en route and terminal environment and pilot/controller actions and

responsibilities. Taught by staff and ATC adjunct faculty. Prerequisite: PHYS 200 or instructor's permission. Offered yearly.

384 - Airport Operations (2 S.H.)

A study of airport administrative functions, planning, development, and operations. Special emphasis on regulations, financing, revenue, security, and environmental/economic impacts. Taught by airport operations adjunct faculty. Prerequisites: PHYS 200 or instructor's permission. Offered every two years.

387 - Flight Safety (3 S.H.)

This course covers the certification process for FAR 23 and 25 aircraft. Includes flight deck management objectives and procedures and the study of human factors for flight and ground personnel. Taught by staff and adjunct industry personnel. Prerequisite: PHYS 200 or instructor's permission. Offered every two years.

388 - Legislative and Legal Aspects of Aviation (2 S.H.)

This course covers an overview of the role of governmental bodies, their policies and procedures, on aviation. Includes a brief overview of aviation litigation for airlines, general aviation, and airports. Taught by staff and adjunct industry personnel. Prerequisite: PHYS 200 or instructor's permission. Offered every two years.

401 - Advanced Fundamentals of Aviation (4 S.H.)

Provides the student with aeronautical understanding, knowledge, and competencies that are necessary for successful completion of the FAA commercial pilot written knowledge examination. Additional subjects covered in depth are advanced aerodynamics and performance, gas turbine engines, servo and hydraulic systems, environmental control, safety, and interface of the flight crew and maintenance crews. Offered yearly.

402 - Commercial Flight Laboratory (3 S.H.)

This course equates to the FAA Practical Test Standards and covers all airplane operational areas for commercial flight. Emphasis on advanced piloting techniques for commercial operations such as aircraft maneuvers, takeoffs and landings, passenger comfort, cross-country flight, voice and radio navigation, night operation, primary instrument flight and safety. Students must enroll in this course to earn credit. Offered yearly.

410 - Turbojet-Prop. Transport Seminar (1-3 S.H.)

This course fulfills the FAA's ground requirements for pilots of heavy, sophisticated aircraft. Basic aircraft systems theory, design, function, operation, and procedures are covered in depth. Prerequisite: PHYS 300 and 401 or equivalent. May be repeated. Offered yearly.

411 - Cessna Citation Pilot School (3 S.H.)

This FAA-approved course covers the equipment knowledge, training, and competencies necessary to qualify as pilot or second in command of the Citation I or II jet aircraft. Prerequisites: PHYS 301 and PHYS 402 or instructor's permission. Offered on demand.

412 - F-27 Pilot School-Initial (4 S.H.)

This FAA-approved course covers the equipment, knowledge, training, and competencies necessary to qualify as pilot in command or second in command of the Fairchild or Fokker F-27 as provided under FAR 121. Prerequisites: PHYS 301 and PHYS 402 or instructor's permission. Offered as required.

POLITICAL SCIENCE AND PUBLIC ADMINISTRATION

Minné Hall, Room 120 (507-457-5500; fax 507-457-2621)

www.winona.edu/politicalscience

Darrell Downs (Chairperson)

FACULTY

Matthew Bosworth, Professor; B.A., Johns Hopkins University; M.A., Ph.D., University of Wisconsin-Madison; 1997 –
Karen Csajko, Associate Professor; B.A., M.A., Portland State University; Ph.D., University of California-Berkeley; 1996 –
Darrell Downs, Professor; B.A., B.S., Montana State University; M.S., Oregon State University; Ph.D., Colorado State University; 1992 –
Yogesh Grover, Professor; B.A., M.A., University of Delhi (India); Ph.D., University of Missouri-Columbia; 1988 –
Edward Guernica, Assistant Professor; B.A., San Jose State; M.A., Ph.D., Tulane University; 2004 –
Frederick Lee, Professor; A.B., University of New Orleans; A.M., Ph.D., University of Michigan; 1992 –
Kara Lindaman, Assistant Professor; B.A., M.A., University of Northern Iowa; Ph.D., University of Kansas; 2006 –

PURPOSE

Political science deals with the theory and practice of politics, government, and administration. The essence of political science is to discover how, when, and why people and governments shape public decisions. As an academic discipline, it includes political theory, public law, public administration, American politics and policy (domestic and foreign), and governments and politics of different countries.

The primary objective of the political science curriculum is to prepare students for graduate studies and/or careers in public service, business, or education. The study of political science also provides a strong background for success in law school. Generally, students majoring in political science find that it helps them understand the changing political environment and prepares them to take responsibility in their community, nation, and the world at large. Whether a student is interested in a career in public service or not, the study of politics is a solid preparation for life as a critical thinking adult.

PASS/NO CREDIT (P/NC) COURSES

Except for internships, students must take all courses in the major and minor on a grade-only basis. The P/NC option is available to non-majors for all courses.

DOUBLE MAJORS

For students majoring in both political science and public administration, required courses for one major can be applied to the requirements of the other, but at least 15 semester hours must be non-duplicative.

COURSES FOR POLITICAL SCIENCE AND PUBLIC ADMINISTRATION PROGRAMS

The Department of Political Science and Public Administration offers the following courses for political science and public administration programs.

American Politics

- 120 Introduction to American Politics (3)
- 201 Politics and Violence (3)
- 218 Community Service (3)
- 220 Civil Rights and Civil Liberties (3)
- 221 State and Local Government (3)
- 227 Judicial Process and Politics (3)
- 228 Public Service (3)
- 315 American Political Thought (3)
- 320 Constitutional Law (3)
- P 321 The American Presidency (3)
- P 322 Political Parties and Pressure Groups (3)
- P 330 Race and American Politics (3)
- P 333 Media and Politics (3)
- 340 Environmental Policy (3)
- 341 Health Care Politics and Policy (3)
- 360 American Congress (3)
- 420 Administrative Law (3)
- I 421 The First Amendment (3)
- P 425 Policy Studies (3)
- 426 The Politics of Public Budgeting (3)
- 429 Policy Reform (3)
- 430 Agency Performance (3)

Comparative Politics

- 135 Comparative Political Systems (3)
 - 224 Politics and Society in Latin America (3)
 - 225 Ethnic Conflict and Nationalism (3)
 - 226 Politics and Society in Africa (3)
 - 270 Politics and Society in the Middle East (3)
 - 332 European Political Systems (3)
 - 335 Latin American Political Systems (3)
 - 336 Post-Communist Political Systems (3)
 - 337 Asian Political Systems (3)
 - 343 Human Rights in Theory and Practice (3)
 - 390 Comparative Politics of the Third World (3)
 - P 475 Democratization and Its Challenges (3)
- ### International Politics
- 130 Introduction to International Relations (3)
 - 205 United Nations in World Affairs (3)
 - 342 International Political Economy (3)
 - 346 International Law (3)

- O 347 International Organization (3)
 - 422 American Foreign Policy (3)
 - I 460 North American Relations (3)
 - I 488 Issues in International Politics (3)
- ### Political Theory
- 150 Introduction to Political Theory (3)
 - P 260 Classical Political Thought (3)
 - 315 American Political Thought (3)
 - P 325 Modern Political Theory (3)
 - P 358 Contemporary Political Thought (3)
 - P 450 Feminist Political Theory (3)

Research and Methodology

- O 280 Introduction to Political Analysis (3)
- O 410 Political Research Seminar (3)

Note: Independent Readings (401) and Internship (416) credits may apply toward the major requirements, but internships will be limited to 3 semester credits in Option A, Option B, and the public administration major. Students are allowed to take up to 12 credits for internships, but only 3 credits will count toward the major.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Political Science and Public Administration offers the following flag courses in the University Studies Program:

FLAG

Oral I

- POLS 421 The First Amendment (3)
- POLS 460 North American Relations (3)
- POLS 488 Issues in International Politics (3)

Math/Critical Analysis O

- POLS 280 Introduction to Political Analysis (3)
- POLS 410 Political Research Seminar (3)

Writing P

- POLS 260 Classical Political Theory (3)
- POLS 321 American Presidency (3)
- POLS 322 Political Parties and Pressure Groups (3)
- POLS 325 Modern Political Theory (3)
- POLS 330 Race and American Politics (3)
- POLS 333 Media and Politics (3)
- POLS 347 International Organizations (3)
- POLS 358 Contemporary Political Thought (3)
- POLS 425 Policy Studies (3)
- POLS 450 Feminist Political Theory (3)
- POLS 475 Democratization and Its Challenges (3)

Flag courses that can be used to satisfy political science major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR POLITICAL SCIENCE - GENERAL OPTION A (POLA)

42 S.H. (Minor Required)

REQUIRED COURSES (6 S.H.)

- POLS 120 Introduction to American Politics (3)
- O POLS 280 Introduction to Political Analysis (3)

ELECTIVES (36 S.H.)

Students should note the following two requirements:

- They must take at least 3 credits (one course) from each of the four sub-fields in political science: American politics, comparative politics, international politics, and political theory.
- Of the 36 credits (12 courses) required for electives, at least 15 credits (five courses) must be at the 300- to 400-level.

B.A. MAJOR POLITICAL SCIENCE - INTERNATIONAL STUDIES OPTION B (POLB)

42 S.H. (Minor Required)

This option enables students to get a B.A. degree in political science by specializing in international relations. A degree in political science with an emphasis on international relations may be combined with either a minor or a major in international business, economics or foreign languages to broaden the scope of opportunities after graduation. Most of the requirements for this major can be met by taking electives, although a core of five courses is required.

REQUIRED COURSES - POLS (15 S.H.)

- 120 Introduction to American Politics (3)
- 130 Introduction to International Relations (3)
- 135 Comparative Political Systems (3)
- O 280 Introduction to Political Analysis (3)
- 422 American Foreign Policy (3)

ELECTIVES (27 S.H.)

Students must take the remaining nine courses from International Politics and Comparative Politics sub-fields. No more than three 200-level courses will apply toward the major requirements.

B.A. MINOR - POLITICAL SCIENCE (POLS)

21 S.H.

REQUIRED COURSE (3 S.H.)

- POLS 120 Introduction to American Politics (3)

ELECTIVES (18 S.H.)

Students must take at least one course (3 credits) from three of the

four sub-fields in political science: American politics, comparative politics, international politics, and political theory.

PUBLIC ADMINISTRATION

The Bachelor of Science major and minor in Public Administration are designed to prepare students for an administrative career in public and nonprofit agencies. The core curriculum of this program provides students with the competency areas recommended by the National Association of Schools of Public Affairs and Administration.

This program is uniquely designed to serve students seeking employment in the traditional fields of public service, as well as those intending to pursue graduate study in the more specialized areas of policy analysis and program management. Students in this program are strongly encouraged to work closely with their advisor to select a major/minor combination that serves the student's career goals. See the Department of Political Science and Public Administration for more information and advising.

B.S. MAJOR - PUBLIC ADMINISTRATION (PUBA)

33 S.H. (Minor Required)

REQUIRED COURSES - POLS (33 S.H.)

- 120 Introduction to American Politics (3)
- 221 State and Local Government (3)
- 228 Public Service (3)
- O 280 Introduction to Political Analysis (3)
- 320 Constitutional Law (3)
- O 410 Political Research Seminar (3)
- 416 Internship (minimum of 3)
- 420 Administrative Law (3)
- P 425 Policy Studies (3)
- 426 Politics of Public Budgeting (3)
- 429 Policy Reform (3)

B.S. MINOR - PUBLIC ADMINISTRATION (PUBA)

24 S.H.

REQUIRED COURSES - POLS (24 S.H.)

- 120 Introduction to American Politics (3)
- 221 State and Local Government (3)
- 228 Public Service (3)
- O 280 Introduction to Political Analysis (3)
- O 410 Political Research Seminar (3)
- P 425 Policy Studies (3)
- 426 Politics of Public Budgeting (3)
- 429 Policy Reform (3)

COURSE DESCRIPTIONS (POLS)

120 - Introduction to American Politics (3 S.H.)

A study of the purposes of American government, civil rights, the federal system, the powers and functions of the three branches of government, political parties and interest groups, and contemporary problems. Offered each semester.

130 - Introduction to International Relations (3 S.H.)

A general introduction to the major concepts and theories employed to analyze world affairs, and to the behavior of major actors involved—states, international organizations, and multinational corporations. Offered each semester.

135 - Comparative Political Systems (3 S.H.)

Comparative study of different political systems with an emphasis on the frameworks used to compare them, and the concepts used to analyze and describe politics in different countries. Also includes case studies. Offered each semester.

150 - Introduction to Political Theory (3 S.H.)

This course is an introduction to the study, reading, and analysis of political texts, designed for students who do not have much familiarity with politics or theory, but are interested in investigating enduring questions of political thought, such as: What is freedom? What is the relationship between politics and conflict? What does it mean to be a member of a polity? What is justice? Offered yearly.

199 - First-Year Seminar (1-3 S.H.)

An open discussion of some political topics of current interest. Discussion centers around causes and possible remedies of some of the maladies of modern society. The different alternatives are discussed with an eye toward acquiring a better understanding of the problems. May be taken for up to 3 semester hours.

201 - Politics and Violence (3 S.H.)

A study of the modern and enduring questions about violence, its origins, causes, and its cures. This course explores violence from a political science as well as from an interdisciplinary perspective. Offered each semester.

205 - The United Nations in World Affairs (3 S.H.)

This course deals with the goals, structure, and functions of the United Nations and the way it deals with international issues of war, peace, and development. Offered every two years.

218 - Community Service (3 S.H.)

Democratic theory calls for participation of citizens not only in decision-making but also in community affairs. Students will be offered the opportunity to be involved in their community by volunteering their services and time to not-for-profit organizations as a community service. Such participation would foster community asset building and be beneficial to both the student volunteer and the community at large.

220 - Civil Rights and Civil Liberties (3 S.H.)

A survey of current controversies regarding civil rights and civil liberties, such as the right to privacy, freedom of speech, affirmative action, sexual harassment, gay rights, etc. Recommended: POLS 120.

221 - State & Local Government (3 S.H.)

An examination of the structure and policies of state and local governments in the U.S. and the relationships among national, state, and local governments in the areas of education, welfare, criminal justice, economic development, and environmental protection.

224 - Politics & Society in Latin American (3 S.H.)

A study of the impact of factors such as religion, wealth, natural resources, modern ideologies, and nationalism on the lives of individuals, groups, and countries of Latin America and their politics.

225 - Ethnic Conflict and Nationalism (3 S.H.)

Since the end of the Cold War, there has been an increase in nationalism and ethnic conflict throughout the world. This course analyzes this increasingly important international phenomenon, focusing on the causes and the characteristics of nationalism, the international consequences of what might appear to be national problems, and the prospects of conflict resolution and political reform in areas suffering from these problems. Offered yearly.

226 - Politics & Society in Africa (3 S.H.)

A study of the political cultures of African nations north and south of the Sahara. A study of the impact of factors such as religion, wealth, natural resources, geographic location, and ethnic mix, modern ideologies on the lives of individuals and nations and on the politics of the African nations. Offered fall semester.

227 - Judicial Process & Politics (3 S.H.)

This course provides an overview of the American legal process from a political perspective, covering basic court structure, legal actors, criminal and civil procedures, judicial impact, and comparative court systems. Prerequisite: POLS 120 or instructor's permission. Offered yearly.

228 - Public Service (3 S.H.)

The theory and practice of public service and administration. The emphasis is on political processes as they affect administrative policy and problem solving in public and non-profit organizations. Prerequisite: POLS 120. Offered yearly.

260 - Classical Political Thought (3 S.H.)

What is politics? This course looks at Greek and Christian thinkers who first considered this question, from Sophocles to Plato to St. Augustine. Offered every two years.

270 - Politics and Society in the Middle East (3 S.H.)

A study of the impact of factors such as religion, wealth, natural resources, traditional ideologies, and modern ideologies on the lives of individuals and nations and on politics in the countries of the Middle East and among them. Offered yearly.

280 - Introduction to Political Analysis (3 S.H.)

An introduction to political research. Topics include approaches and methods used in political research, framing research questions, developing and testing hypotheses, evaluating research, defining concepts, measuring variables, making observations, analyzing data, and presenting research findings. It is recommended that students complete this course before enrolling in 300- or 400-level courses. Prerequisite: POLS 120 or instructor's permission. Offered yearly.

315 - American Political Thought (3 S.H.)

An examination of the role of ideas in shaping American politics. Covering major political movements in the U.S. including revolutionary thought, constitutionalism, populism, pragmatism, socialism, conservatism, communitarianism, and feminism. Prerequisite: POLS 120.

320 - Constitutional Law (3 S.H.)

Judicial function in constitutional cases; division of powers between the nation and the states, and within the national government; powers of the

President, limitations on the powers of government, separation of powers; protection of individual rights. Prerequisite: POLS 120.

321 - American Presidency (3 S.H.)

A study of the institution of the presidency, the gradual growth of formal and informal tools of presidential power, the influence that different presidents have brought to the office, the significance of presidential style and character, recruitment patterns for the presidency, and various suggestions to reform the institution. Prerequisite: POLS 120.

322 - Political Parties & Pressure Groups (3 S.H.)

Development, characteristics, organization, and politics of the major American political parties. Includes an examination of the nominating process, party campaigns and finances, elections, voting behavior, and the role and techniques of interest groups. Prerequisite: POLS 120.

325 - Modern Political Theory (3 S.H.)

A study of the political ideas central to liberalism and its critics. Focus will be on Hobbes, Locke, Rousseau, and Marx. Offered every two years.

330 - Race & American Politics (3 S.H.)

A study of the impact, effects, and consequences of race and racism in American politics. Emphasis is placed on the origins, definitions, and political consequences of race and racism within American politics. Prerequisite: POLS 120 or instructor's permission. Offered yearly.

332 - European Political Systems (3 S.H.)

A comparative study of the ideological, social, economic, and institutional developments of European (East and West) domestic politics and the European Union. Emphasis is placed on the interaction of developments between the domestic and supranational levels of governance. Prerequisite: POLS 135 or instructor's permission. Offered every two years.

333 - Media and Politics (3 S.H.)

An examination of the role, process and power of the mass media in American politics. Includes an examination of media impact and effects at the individual, group, institutional, and cultural levels in American politics. Prerequisite: POLS 120 or instructor's permission.

335 - Latin American Political Systems (3 S.H.)

A comparative study of the political development of South American, Central American, and Caribbean countries. Emphasis is placed on cultural, institutional, and economic factors of their development. Prerequisite: POLS 135 or instructor's permission. Offered every two years.

336 - Post Communist Political Systems (3 S.H.)

A comparative study of transitions from communist to liberal political and economic systems, and an analysis of unique problems of conversion from totalitarian systems to democracy, and from command economies to market economies. The course also includes discussion of countries that did not make the above transition. Prerequisite: POLS 135 or instructor's permission. Offered every two years.

337 - Asian Political Systems (3 S.H.)

A comparative study of the political systems in Asia with an emphasis on the structure of governments, the extent of their effectiveness and the role of non-governmental actors: army; political parties; economic, social, and cultural groups in politics. Variable focus on either the major powers like China, Japan, and India or the Asia Pacific countries and the factors responsible for their economic dynamism. Prerequisite: POLS 135 or instructor's permission. Offered every two years.

340 - Environmental Policy (3 S.H.)

A seminar in environmental policy analysis. Students examine and assess a variety of global, national, local, and inter-governmental environmental problems and governmental efforts in response to these problems. Special emphasis is placed on air and water pollution, erosion, toxic wastes, species loss, and population growth.

341 - Health Care Politics & Policy (3 S.H.)

An analysis of the politics of health care. Special emphasis is placed on the formulation of health care policy and policy reform in the United States; however, health care systems of other industrialized nations and developing nations are also examined.

342 - International Political Economy (3 S.H.)

An introduction to the relationship between international politics and international economics and the theories of international political economy. The topics include the following: the politics of international trade, investment, and foreign aid; the consequences of the multi-national corporations on international relations and their political role; economic foreign policy-making and its implications for national and international politics. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

343 - Human Rights in Theory and Practice (3 S.H.)

Human rights are those rights possessed by individuals by virtue of being human. They are distinct from civil rights, which are guaranteed by civil societies. This course seeks to identify the basic human rights of individuals as human beings, the evolution of these rights, the philosophical foundations of those rights, and the legal remedies available to victims of violations.

The course discusses the roles of national and international communities in protecting human rights including the establishment of a permanent criminal court to prosecute human rights violations.

346 - International Law (3 S.H.)

The nature and sources of international law; jurisdiction of states over persons and territory; recognition of states and governments; law of the sea; principle of state responsibility; law of treaties; and transnational legal problems. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

347 - International Organizations (3 S.H.)

An analysis of the background organization, aims, activities, and accomplishments of the United Nations and its specialized agencies. A consideration of the factors affecting the success or failure of world organizations. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

358 - Contemporary Political Thought (3 S.H.)

This is the third part of a three-part survey course on "The History of Political Thought" series offered in the department. This course studies major contemporary thinkers in the canon, such as Nietzsche, Foucault, Arendt, Camus, and Rawls. Offered every two years.

360 - American Congress (3 S.H.)

An examination of the role of Congress in shaping policy and representing constituents. Topics include the organization of Congress, Congressional leadership, voting coalitions, and proposals for reform. Prerequisite: POLS 120.

390 - Comparative Politics-Third World (3 S.H.)

A comparative study of the political ideological, social, and economic development in selected Third World countries. Countries covered may vary each time the course is offered but will include examples from the African, Asian, and Latin American continents. Prerequisite: POLS 135 or instructor's permission.

401 - Independent Readings in Political Science (1-3 S.H.)

Readings in an area of political science of particular interest to the student. Credit arranged.

410 - Political Research Seminar (3 S.H.)

Capstone experience that allows students to do original primary research using the various primary research tools and approaches used in the study of practical phenomena and processes. Emphasis is placed on problem-solving and critical thinking. Students have a capstone experience in which they apply knowledge gained in this and other courses to an original research problem. Survey research techniques are studied, and a practical survey project is undertaken. Prerequisite: POLS 380. Offered yearly.

416 - Internship Program (1-12 S.H.)

Provides practical experience in local, state, and national government and public administration (limited enrollment). Credit arranged. (Cannot apply toward a graduate degree. Only three credits count toward major.)

420 - Administrative Law (3 S.H.)

An exploration of the law of the administrative process: legislative, executive, and judicial control of administrative action; the formal administrative process; and administrative discretion with due consideration to the Federal Administrative Procedure Act. Prerequisite: POLS 120; recommended prerequisite: POLS 320.

421 - The First Amendment (3 S.H.)

A seminar class on one of the most contentious constitutional amendments. Topics include freedom of speech, free exercise of religion, separation of church and state, and freedom of association. Prerequisites: POLS 120 and POLS 320 or instructor's permission.

422 - American Foreign Policy (3 S.H.)

A study of contemporary United States foreign policy. The course includes an analysis of threats and issues originating from the external world and facing America, and the suitable American response, responsibilities, and commitments. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

425 - Policy Studies (3 S.H.)

An introduction to the evaluation of public policy in the United States. Students assess the process and substance of policy on various topics such as pollution, poverty, crime, illness, and violence. Prerequisite: POLS 120. Offered every two years.

426 - Politics of Public Budgeting (3 S.H.)

An examination of the politics of budgeting at the state, local, and national level. Consideration is given to program planning, inter-governmental relations, the government and the economy, and reforms in budgetary systems. Prerequisites: POLS 120 and POLS 228.

429 - Policy Reform (3 S.H.)

Strategies and problems of making, implementing, and changing public policy. Discussion addresses policy stakeholders as they are involved in developing and reforming public policy. Prerequisite: POLS 120. Offered every two years.

430 - Agency Performance (3 S.H.)

The civil service movement, public personnel systems, and contemporary strategies to manage personnel for higher levels of performance.

Prerequisites: POLS 120 and POLS 228.

450 - Feminist Political Theory (3 S.H.)

This course investigates different perspectives in feminist political thought. Students will consider psychological, Marxist, radical, liberal, utopian, and French Feminist arguments, in order to understand the ways that political theorists have wrestled with the question of woman/women. Offered every two years.

460 - North American Relations (3 S.H.)

This course examines the relations among the three countries of North America: Canada, Mexico, and the United States. The examination of these relations involves the applicable theories of regional cooperation and conflict with special emphasis on integration. The course will also develop an understanding of the evolution of the current state of relations among the three. Focus will be on trade relations, the institutions of NAFTA, security issues, migration, the potential of building a regional community (along political, social, and economic lines), citizen perceptions, and overall development. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

475 - Democratization and Its Challenges (3 S.H.)

The emphasis of this course is on the wave of democratization that is sweeping the world and the challenges that the new democracies face in consolidating themselves. This course covers the theory of democracy and the institutional, cultural, and socio-economic challenges that countries face as they seek to make the transition from dictatorship to democracy. Prerequisite: POLS 135 or instructor's permission. Offered every two years.

488 - Issues in International Politics (3 S.H.)

The purpose of the course is to enable students to have an opportunity to discuss a variety of contemporary global issues, which may not be covered in a regular course such as terrorism, religious fundamentalism, human rights and state sovereignty, and ethno-nationalism. Topics vary from year to year, depending upon their prominence or the instructor's judgment that they should receive consideration. Prerequisite: POLS 130 or instructor's permission. Offered every two years.

499 - Seminar (1-3 S.H.)

The subject matter is arranged by the instructor before the course is offered. Students can repeat the course without limitation on the number of credits as long as the subject matter is different.

PRE-PROFESSIONAL SEQUENCES

Pre-professional sequences are not degree programs (e.g. major or minor) at WSU. These programs are preparatory for a degree at another college or university. WSU offers pre-professional sequences in dentistry, engineering, law, medicine (allopathic and osteopathic), optometry, pharmacy, physician assistant, physical therapy, podiatry, and veterinary medicine.

PRE-DENTISTRY

Pasteur Hall, Room 230 (507-457-5272)

Dr. David Essar, Advisor

RECOMMENDED COURSES

This program has been planned especially for students expecting to enter the School of Dentistry at the University of Minnesota. However, this program also meets the needs of at least 90 percent of U.S. dental schools. Most entering dental students have a bachelor's degree. Students planning to enter dental schools other than the University of Minnesota should consult the catalog of their chosen schools. A complete list of all dental schools in the United States as well as links to the specific programs can be found at <http://www.adea.org/DMS/Instlinks/default.htm>. All pre-dentistry students are encouraged to consult with the advisor to help plan their program. Most pre-dentistry students follow either the Allied Health option or the Cell and Molecular option as described under the Biology Department's programs.

Students must take the Dental Admission Test no later than October of the academic year prior to the planned entrance date into the dental school of choice.

ENG	111	College Reading and Writing (4)
Upper-division English intensive writing courses (3- 6 S.H.):		
ENG	210	Advanced Expository Writing (3) AND/OR
ENG	222	Introduction to Creative Writing (3)†
CMST	191	Introduction to Public Speaking (3)
BIOL	241, 242	Basics of Life, Organismal Diversity (8)
MATH	120	Precalculus and MATH 140 Applied Calculus OR
MATH	160, 165	Calculus I, II (8)
CHEM	212, 213	Principles of Chemistry I, II (8)
CHEM	350, 351	Organic Chemistry I, II (9)
BIOL	201	Human Anatomy (4)
PHYS	201, 202	General Physics I, II (8)
PSY	210	Introduction to Psychological Science (3)
CHEM	400, 401	Biochemistry I, II (7)

† The University of Minnesota School of Dentistry requires 8 semester hours of English with an emphasis on the intensive writing component.

ELECTIVES

Electives should be chosen to give students a broad liberal arts education within the limits of time available. Electives from the following areas are suggested: sculpturing, cell biology, genetics, immunology, microbiology, histology, accounting, computer science, and business.

PRE-ENGINEERING

Stark Hall, Room 203 (507-457-5685)

Department of Engineering Advisor

The following courses are recommended for a pre-engineering sequence. However, it is strongly recommended that students seek the advice of an advisor from the Department of Engineering for specific course recommendations and class schedules.

Chemistry - CHEM

- 212 Principles of Chemistry I (4)
- 213 Principles of Chemistry II (4)

Computer Science - CS

- 234 Algorithms and Problems Solving I (4) OR ENGR 210 (3)

Mathematics - MATH

- 160 Calculus I (4)
- 165 Calculus II (4)
- 260 Multivariable Calculus (4)
- 270 Differential Equations and Linear Algebra (4)

Physics - PHYS

- 221 University Physics I (4)
- 222 University Physics II (4)
- 302 Electrical Circuits and Systems (3)

Engineering - ENGR

- 102 Introduction to Engineering (2)
- 182 Engineering Graphics and Design (2)
- 210 Computer Applications in Engineering (3) OR CS 234 (4)
- 250 Statics (3)
- 260 Mechanics of Materials (3)
- 270 Dynamics (3)
- 300 Thermodynamics (3)

English - ENG

- 111 College Reading and Writing (4)

University Studies Courses**PRE-LAW**

Minné Hall, Room 209 (507-457-5411)

Dr. Kurt Hohenstein, Advisor

University law schools require completion of a bachelor's degree or its equivalent before entering law school. It is, therefore, suggested that interested students follow a program that provides a breadth of knowledge with in-depth study in areas that promote critical thinking and written and oral communication skills. Many pre-law students major in English,

*"Additional Requirements" course as defined in Item 3, page 18

history, law and society, paralegal, political science, or economics. Other departmental majors also provide an excellent background for law school.

All students interested in pre-law are encouraged to contact the pre-law advisor concerning questions on majors, minors, grade point averages, internship and volunteer activities, law school admission tests, personal statements, and law schools in the United States.

PRE-MEDICINE

(ALLOPATHIC AND OSTEOPATHIC)

Pasteur Hall, Room 220 (507-457-5271)

http://bio.winona.edu/biohp/acad_deg.htm

Dr. Ed Thompson, Advisor (Biology)

Pasteur Hall, Room 350 and 342 (507-457-2476 and 507-457-5294)

<http://www.winona.edu/chemistry/premednew.htm>

Dr. Thomas Nalli and Dr. Sara Hein, Advisors (Chemistry)

With few exceptions, admission into a medical school requires a bachelor's degree but does not require a specific undergraduate major. Each pre-medical student should, therefore, choose a major in which he or she has a strong interest while working closely with a pre-medical advisor to be certain that prerequisite courses for medical schools are completed. In the Biology Department, most pre-medical students choose the Cell and Molecular option. In the Chemistry Department, most pre-medical students choose the Biochemistry Option.

Admission to the University of Minnesota-Twin Cities Medical School, Mayo School of Medicine, and the University of Minnesota-Duluth Medical School requires completion of a four-year degree which includes:

Biology with lab (2 semesters/1 year)

General chemistry with lab (2 semesters/1 year)

Organic chemistry with lab (2 semesters/1 year)

Calculus (1 semester)

Physics with lab (2 semesters/1 year)

Biochemistry (1 semester)

English (2 semesters/1 year)

Social and behavioral sciences (4 semesters/2 years)

These same requirements are applicable to the majority of both allopathic (MD) and osteopathic (DO) medical schools in the United States. Pre-medical students should seek the advice of a pre-medical advisor during their first semester at WSU, and they should consult the catalogs of the medical schools of their choice for more specific requirements. The Medical College Admissions Test (MCAT) should be taken no later than August prior to the year in which applications will be submitted. MCAT application and AMCAS packets are available online; the pre-medical advisors will help students access these applications.

RECOMMENDED COURSES

Note: ENG 111, CHEM 212 and 213, and BIOL 241 and 242 should be taken during the first year of college.

English

ENG 111 College Reading and Writing (4)

Biology

BIOL *241, *242 Basics of Life, Organismal Diversity (8)

BIOL 201, 323 Human Anatomy (4), General Physiology (4)

P BIOL 308 Cell Biology (3)

O BIOL 310 Genetics (3)

BIOL 409 General Microbiology (4)

Mathematics and Statistics

MATH 160 Calculus I (4) OR

MATH 140 Applied Calculus (3)

STAT 305 Biometry (3)

Chemistry

CHEM *212, *213 Principles of Chemistry I, II (8)

CHEM 350, 351 Organic Chemistry I, II (9)

P CHEM 400 Biochemistry I (4)

CHEM 401 Biochemistry II (3)

Physics

PHYS *201, *202 General Physics I, II (8) OR

PHYS *221, *222, 223 University Physics I, II (8)

Psychology

PSY *210 Introduction to Psychological Science (3)

PSY 250 Developmental Psychology (3)

300-400 level Humanities (3)

300-400 level Psychology (3)

OTHER COURSES TO COMPLETE REQUIRED CREDIT

Students should consult with their advisor for those courses necessary to complete a B.S. or B.A. degree.

PRE-OPTOMETRY

Pasteur Hall, Room 219

Dr. Frances Ragsdale, Advisor

The course of study is designed according to the graduate school chosen by the student. All applicants must have completed at least three years of college work. The Optometry Admissions Test is required for admission to a professional optometry school. This test is usually given in February and October. Most pre-optometry students follow the pre-medical curriculum with a major in Biology, either the Allied Health option or the Cell and Molecular option. Students should meet early with an advisor to plan their programs of courses.

PRE-PHARMACY

Chemistry Department

Pasteur Hall, Room 350 and 342 (507-457-2476 and 457-5294)

<http://www.winona.edu/chemistry/prepharm/default.htm>

Dr. Thomas W. Nalli and Dr. Sara Hein, Advisors

This program meets the requirements of most pharmacy colleges but especially those of the University of Minnesota and the University of Wisconsin. Students planning to attend other schools should consult the respective catalogs.

Biology - 8 or 11 S.H.

For the University of Minnesota-Twin Cities

BIOL 201 Human Anatomy (4)

BIOL 209 Microbiology (3)

BIOL 241 Basics of Life (4)

For the University of Wisconsin-Madison

BIOL 241 Basics of Life (4)

BIOL 242 Organismal Diversity (4)

Chemistry - 17 S.H.

CHEM 212 Principles of Chemistry I (4)

CHEM 213 Principles of Chemistry II (4)

CHEM 350 Principles of Organic Chemistry I (4)

CHEM 351 Principles of Organic Chemistry II (5)

Mathematics and Physics - 12 S.H.

MATH 160 Calculus I (4)

PHYS 201 General Physics I (4) OR PHYS 221 University Physics I (4)

PHYS 202 General Physics II (4) OR PHYS 222 University Physics II (4)

Language Skills - 4 or 10 S.H.

For the University of Minnesota-Twin Cities

ENG 111 College Reading and Writing (4)

ENG 210 Advanced Expository Writing (3) OR another upper-level English course (3)

CMST 191 Introduction to Public Speaking (3)

For the University of Wisconsin-Madison

ENG 111 College Reading and Writing (4)

Social Sciences - 9 S.H.

ECON 201 Principles of Microeconomics (3)

PSY 210 Introduction to Psychological Science (3)

SOC 150 Introduction to Sociology (3)

Ethnic Studies - 3 S.H.

For the University of Wisconsin-Madison

SOC 340, ENG 220, HIST 220, OR HIST 235

Students must choose additional elective courses from the social sciences and the humanities. Students should consult with their advisor for recommendations on these electives. Students not meeting the prerequisites for MATH 160 must take additional lower-level math courses. Students exempted from ENG 111 must elect higher-level English courses.

PRE-PHYSICAL THERAPY

Admission into a graduate school of physical therapy requires a bachelor's degree. Each pre-physical therapy student should, therefore, choose an area in which to major that provides a background of skills and competencies and allows application to and successful admission into a physical therapy program upon graduation from WSU. The Department of Biology and the Department of Health, Exercise and Rehabilitative Sciences have advisors available to assist students in planning their programs of study for pre-physical therapy.

Biology

Pasteur Hall, Room 220 (507) 457-5271
http://bio.winona.edu/biohp/acad_deg.htm
 Dr. Edward Thompson, Advisor

Admission to a graduate-level physical therapy program is very competitive; the minimum requirements are:

- Biology: 12 S.H., including a complete introductory course in the principles of biology and advanced coursework in biology, which builds upon the introductory courses.
- Chemistry: 12 S.H., consisting of a complete introductory course in the principles of chemistry and organic chemistry.
- Physics: 8 S.H., consisting of a complete introductory course.
- Psychology: 6 S.H.
- Human Anatomy: 3 S.H.
- Human Physiology: 3 S.H.
- Statistics: 3 S.H.
- Mathematics: 3 S.H. of college trigonometry or higher (calculus is usually required).
- English composition and literature: 8 S.H.
- A GPA of 3.5 or better, a GRE (general test) of 1000 (verbal and quantitative).
- A genuine interest in people and the health of others, especially as shown by about six months of involvement (volunteer or otherwise) in patient care and/or research at a health care facility.

All physical therapy schools require upper-division courses such as histology, endocrinology, genetics, microbiology, parasitology, molecular biology, neuroscience, cell biology, cell physiology, embryology, biochemistry, kinesiology, and physiology of exercise. All of these upper-level science courses have chemistry or biology prerequisites. It is expected that applicants will exceed the minimum admission requirements in several of the above subject categories. It is strongly suggested that students consider career-related courses such as biomechanics, pharmacology, and pathophysiology whenever possible.

Most pre-physical therapy students at WSU major in either the Biology program's Allied Health option or Cell and Molecular option; both options are described in the Biology Department section on page 58. These biology major programs do not require a minor and provide the student with extensive training in the life and physical sciences as well as mathematics. With the biology major, the student is eligible to apply to master's and doctorate physical therapy programs.

When they arrive on campus, students who are interested in entering a physical therapy program after graduation should meet with the pre-physical therapy advisor, Dr. Thompson, to plan their programs of study. Pre-physical therapy students are encouraged to apply to the graduate school of their choice early in their senior year.

Health, Exercise and Rehabilitative Sciences

Memorial Hall, Room 103 (507-457-5219)
www.winona.edu/hers/
 Email: gkastello@winona.edu
 Dr. Gary Kastello, Advisor

The Department of Health, Exercise and Rehabilitative Sciences (HERS) provides additional opportunities for pre-physical therapy majors via the Movement Science option (page 129). Without exception, admission into physical therapy requires a bachelor's degree. The bachelor's degree needs to meet prerequisites for a graduate physical therapy program. These prerequisites include a well-rounded offering of courses from the natural and life sciences, movement science, and nursing. The Movement Science major is specifically designed to meet the prerequisites for master's and doctoral physical therapy programs. In addition to the core courses in Health, Exercise and Rehabilitative Sciences, each student is required to develop an appropriate movement science research project. The specifically designed curriculum coupled with undergraduate research experience places these students in an excellent position for matriculation into the physical therapy graduate program of their choice.

Dr. Gary Kastello is available to advise students on career opportunities in physical therapy. Dr. Kastello has an M.S. in Exercise Physiology, a Ph.D. in Biological Science, and two years of teaching experience in a Physical Therapy Program.

The required courses within the HERS Movement Science option are as follows:

Health, Exercise and Rehabilitative Sciences - HERS (44-47 S.H.)

- 204 Personal and Community Health (3)
- 205 Nutrition for Lifetime Wellness (3)

- 235 Professional Issues in Exercise Science (3)
- 280 Techniques in Fitness Programming (2)
- 291 Prevention and Care of Athletic Injuries (2)
- 314 Anatomical Kinesiology (2)
- 340 Physiology of Exercise (4)
- 360 Nutrition for the Physically Active (3)
- 364 Practicum in Movement Science (1-3)
- 370 Mechanical Kinesiology (3)
- 380 Lab Methods in Exercise Science (3)
- 389 Strength and Conditioning Principles (3)
- 390 Movement Science Research and Design (3)
- 403 Epidemiology (3)
- 412 Movement Science Data Collection (3)
- 445 Medical Aspects of Exercise (3)

Physical Education and Sport Science - PESS (3 S.H.)

- 300 Motor Learning (3)

Biology - BIOL (12 S.H.)

- 211 Anatomy and Physiology I (4)
- 212 Anatomy and Physiology II (4)
- 241 Basics of Life (4) OR
- 242 Organismal Diversity (4)

Nursing - NURS (4 S.H.)

- 360 Pharmacology (1)
- 366 Pathophysiology (3)

Mathematics and Statistics (7 S.H.)

- STAT 110 Statistics (3)
- MATH 120 Precalculus (4)

Psychology - PSY (12 S.H.)

- 210 Introduction to Psychological Science (3)
- 250 Developmental Psychology (3)
- 420 Abnormal Psychology (3)

Chemistry - CHEM (8 S.H.)

- 212 Principles of Chemistry I (4)
- 213 Principles of Chemistry II (4)

Sociology - SOC (3 S.H.)

- 150 Introduction to Sociology (3)

Computer Sciences - CS (3 S.H.)

- 130 Introduction to BASIC Programming (3) OR
- 116 Web Technology (3) (Preferred)

PRE-PHYSICIAN ASSISTANT

Pasteur Hall, Room 230 (507) 457-5272
 Dr. David Essar, Advisor

The course of study is designed according to the school chosen by the student. A complete list of accredited physician assistant programs can be found at <http://www.aapa.org/pgmlist.php3>. Most pre-physician assistant students follow the pre-medical curriculum with a major in biology, either the Allied Health option or the Cell and Molecular option. Most physician assistant programs require a bachelor's degree for admission. Students should meet early with an advisor to plan their programs of courses.

PRE-PODIATRY

Pasteur Hall, Room 220, (507) 457-5271
http://bio.winona.edu/biohp/acad_deg.htm
 Dr. Edward Thompson, Advisor

With few exceptions, podiatry schools require completion of a bachelor's degree or its equivalent before admission. Therefore, each pre-podiatry student should choose an area of interest in which to major. However, because entrance requirements vary among podiatry schools, the course of study will be specifically designed according to the graduate school the student chooses. Most pre-podiatry students follow the pre-medical curriculum with a major in biology, either the Allied Health option or the Cell and Molecular option. Students should meet early with an advisor to plan their programs of study.

PRE-VETERINARY MEDICINE

Pasteur Hall, Room 236, (507) 457-5855
http://bio.winona.edu/biohp/acad_deg.htm
 Dr. Emmanuel Brako, Advisor

This program is designed for entry into the University of Minnesota (U of M) College of Veterinary Medicine. All applicants must have completed at least three years of college work. A degree in biology or chemistry fits best with the required courses, but other degrees are acceptable.

All applicants must take the Graduate Record Examination (GRE). Applicants must also apply through the Veterinary Medical College Application Service (VMCAS), and they must meet the application deadline of October 1. For general admission and other useful information, applicants are encouraged to visit the VMCAS website at www.aavmc.org; then click on VMCAS. Students planning to apply to other schools of veterinary medicine should consult the entry requirements of their chosen veterinary schools. Students should meet early with an advisor to plan their programs of study.

REQUIRED COURSES

These courses fulfill the entrance requirements of the University of Minnesota School of Veterinary Medicine. These courses do not constitute a degree. For degree requirements, see the Biology Program or Chemistry Program requirements in this catalog.

Biology

- BIOL *241, *242 Basics of Life, Organismal Diversity (8)
- O BIOL 310 Genetics (3)
- BIOL 409 General Microbiology (4)

Chemistry

- CHEM *212, *213 Principles of Chemistry I, II (8)
- CHEM 350, 351 Organic Chemistry I, II (9)
- CHEM 400 Biochemistry (4)

Communication Studies

- CMST 191 Introduction to Public Speaking (3)

English

- ENG 111 College Reading and Writing (4)

Mathematics

- MATH 120 Precalculus (4) OR MATH 160 Calculus I (4)

Physics

- PHYS *201, *202 General Physics I, II (8)

ELECTIVES

STAT 110 (3 S.H.), Fundamentals of Statistics, is not required, but is recommended by the University of Minnesota College of Veterinary Medicine.

12 to 18 elective credits to be chosen from the two groups below:

- History and Social Sciences (6-9 credits): Economics (recommended), geography, history, political science, psychology, social science, and sociology courses.
- Arts and Humanities (6-9 credits): Art, literature, music, philosophy, theater, religion, and foreign language literature courses. The U of M College of Veterinary Medicine does not accept introductory and intermediate language courses as arts and humanities courses. (Additional courses are required for students who do not earn a bachelor's degree at WSU; see the *U of M College of Veterinary Medicine Catalog*.)

PROFESSIONAL STUDIES

Outreach and Continuing Education Department
Somsen Hall, Room 109 (507-457-5080)
Jenny Lamberson (Advisor)

PURPOSE

This program allows students to pursue individualized academic interests and personal/professional goals within the framework of an academically sound Bachelor of Arts degree program. It is an excellent alternative for the mature student who wants to build on past experience and design his or her own degree program for current or future needs. It offers students a great deal of flexibility and allows for intellectual growth in a variety of academic areas.

Professional Studies majors are advised by personnel within the Outreach and Continuing Education Department. When declaring the major, students must submit a statement of their goals and objectives for the major; this statement will be reviewed by the advisor and retained in the student's file.

B.A. MAJOR PROFESSIONAL STUDIES: GENERAL OPTION (PSGE)

48 S.H. Upper-Division Courses (300- and 400-level)

This program allows students to create a major utilizing several departments to meet their particular educational goals. Students may declare up to two minors within the requirements of this major.

- PS 399 Internship (3-6)
- PSY 305 Theories of Personality
- PSY 325 Social Psychology
- PSY 330 Psychology and the Law
- PSY 425 Organizational Psychology
- SOC 423 Race Relations and Minority Groups
- SOC 425 Social Change and Social Movements
- SOC 437 Sociology of Organizations

B.A. MAJOR PROFESSIONAL STUDIES: LEADERSHIP OPTION (PSLE)

48 S.H. upper-division courses (300- and 400-level)

This program allows students to focus their major coursework in one or more areas of leadership knowledge and skills. Students may declare up to two minors within the requirements of this major. The Leadership Option requires that students complete 48 credits of upper-division coursework of which 21 credits must be selected from the following list of approved core electives that pertain to various aspects of leadership.

REQUIRED COURSES (21 S.H.)

Select 21 S.H. from the following:

- BUED 350 Quality of Work Life (3)
- BUED 360 Interpersonal Business Relations (3)
- BUED 412 Team Building (1-3)
- BUSA 326 Business and the Future (3)
- CE 432 Stress Management (3)
- CMST 366 Organizational Communication (3)
- CMST 371 Discussion and Small Group Dynamics (3)
- CMST 387 Interpersonal Communication (3)
- MGMT 325 Organizational Dynamics (3)
- MIS 362 Management Information Systems (3)
- MKTG 300 Principles of Marketing (3)
- MCOM 340 Public Relations Cases
- OM 334 Operations Management
- OM 464 Project Management

ELECTIVES

27 credits of upper-division courses (300- or 400-level)

REQUIREMENTS FOR PSGE AND PSLE MAJORS

For a checklist of the University's graduation requirements, see page 23. For the Professional Studies majors/minor, students must:

- Complete the standard University Studies Program, 48 upper-division credits, and electives to reach a minimum of 128 credits. It is expected that all course prerequisites will be completed.
 - Complete all University Studies flag course requirements.
 - Submit a statement of goals and objectives for the major; this statement will be retained in the student's file.
- A maximum of 9 credits applying to the major may be taken on a P/NC basis. All other WSU policies apply.

B.A. MINOR - PROFESSIONAL STUDIES (PS)

21 S.H.

This program allows students to create a minor utilizing several departments to meet their particular educational goals or to create a minor from departments in which a minor is not currently available. The credits in the Professional Studies minor must not duplicate any other courses in the student's program and cannot count any place except in the minor.

REQUIRED COURSES

- 15 semester hours must be upper-division courses (300- and 400-level)
- 6 semester hours may be any level

ADDITIONAL REQUIREMENTS

Students declaring the Professional Studies minor must have on file a statement of goals and objectives for the minor.

COURSE DESCRIPTIONS (PS)**399 - Internship (3-6 S.H.)**

Internship for Professional Studies majors who have completed a minimum of 64 credit hours including at least 21 hours of upper-division credits. May be taken for grade or pass/no credit. Prerequisite: Departmental approval.

**B.A. MAJOR PROFESSIONAL STUDIES:
AVIATION MAINTENANCE MANAGEMENT
OPTION (PSAM)**

Degree program: 128 S.H.; Certification pending: 138 S.H.
(No Minor Required)

Pasteur Hall, Room 114D (507-457-5260)

George Bolon (Advisor)

FACULTY

George Bolon, Professor, Physics; B.S., M.S., Oregon State University; Ph.D., University of Utah; 1968 –

PURPOSE

The Professional Studies Aviation Maintenance Management Option prepares students to manage systems and technicians within the aviation maintenance industry. Graduates with this option can meet the needs of air carriers, the federal government, and corporate and commercial aviation.

This option is open to students who have completed the aviation maintenance program at the Minnesota State College-Southeast Technical (Red Wing); however, other students may petition for admission. Forty credits can be transferred from the technical college and applied toward this option.

There are six aspects to this degree program: (1) University Studies, (2) management core, (3) advanced aviation courses, (4) computer understanding and application, (5) the upper-division electives, and (6) technical college transfer credits, which are limited to 40 credits.

UNIVERSITY STUDIES (47 S.H.)**Basic Skills (12 S.H.)**

Arts and Sciences Core (23 S.H.)

Humanities (6 S.H.)

Natural Sciences (8 S.H.)

CHEM 212 Principles of Chemistry (4)

PHYS 201 General Physics I (4)

Social Science (6 S.H.)

PSY 210 Introduction to Psychological Science (3)

ECON 201 Principles of Microeconomics (3)

Fine and Performing Arts (3 S.H.)

Unity and Diversity (12 S.H.)

Critical Analysis (3 S.H.)

Science and Social Policy (3 S.H.)

Global or Multicultural Perspectives (3 S.H.)

Contemporary Citizenship or Democratic Institutions (3 S.H.)

USP Flag Requirements (12 S.H.)**MANAGEMENT (18 S.H.)**

O BUSA 220 Business Statistics (3)

MKTG 300 Principles of Marketing (3)

BUSA 301 Business Law I (3)

MGMT 315 Principles of Management (3) OR

P MGMT 317 Management of Human Resources (3)

OM 334 Production/Operations Management (3)

MIS 362 Management Information Systems (3)

AVIATION (12 S.H.)

PHYS 200 Fundamentals of Aviation (3)

PHYS 205 Airspace, Communications and Regulations (1)

PHYS 383 Air Traffic Control (3)

PHYS 387 Flight Safety (3)

PHYS 388 Legislative and Legal Aspects (2)

COMPUTER APPLICATION (6 S.H.)

CS 130 Introduction to BASIC Programming (3) OR

MIS 312 Business Computer Programming (3)

Any computer science elective and/or

MIS 202 Microcomputers in Business (3)

UPPER-DIVISION ELECTIVES (5 S.H.)

These electives must be approved by AWS faculty advisor.

TECHNICAL COLLEGE TRANSFER (40 S.H.)**ADDITIONAL REQUIREMENTS FOR CERTIFICATION
(10 S.H.)**

STAT 110 Fundamentals of Statistics (3) OR

BUSA 320 Intermediate Business Statistics (3)

PHYS 202 General Physics II (4)

MATH 140 Applied Calculus (3)

PSYCHOLOGY

Phelps Hall, Room 231 (507-457-5435)

www.winona.edu/psychology

Peter Miene (Chairperson)

FACULTY

Richard A. Deyo, Professor; B.S., Viterbo College; M.A., Ph.D., Bowling Green State University; 1990 –

Carrie Fried, Associate Professor; B.S., Iowa State University; M.S., Ph.D., University of California; 1999 –

John Jobanson, Associate Professor; B.S., University of South Dakota; M.A., University of Nebraska-Omaha; Ph.D., University of Nebraska; 1999 –

Mary S. Kesler, Professor; B.M.Ed., M.A., Ph.D., University of Kansas-Lawrence; 1987 –

Kristi Lane, Professor; B.A., University of North Carolina; M.A., Ph.D., George Peabody College of Vanderbilt University; 1980 –

Gloria Marmolejo, Professor; B.S., National Autonomous University of Mexico; M.S., Ph.D., University of Wisconsin-Madison; 1994 –

Peter K. Miene, Professor; B.A., University of Kansas-Lawrence; Ph.D., University of Minnesota-Twin Cities; 1992 –

Charles Schreiber, Assistant Professor; B.A., Pitzer College; Ph.D., University of California, Berkeley; 2005 –

Susan B. Sefkow, Professor; B.A., Yale University; M.S., Ph.D., University of Massachusetts-Amherst; 1978 –

Jessica Siebenbruner, Assistant Professor; B.A., M.A., University of Minnesota; Ph.D., University of Minnesota-Twin Cities; 2007 –

Janette P. Williams, Professor; B.A., Northwestern University; M.A., Ph.D., University of Illinois; 1987 –

PURPOSE

Psychology is the science of behavior, including mental processes. The department's goal is to foster students' understanding of the many factors that influence behavior, the methods employed by psychologists to identify such factors and the means by which behavior can be modified. Students are attracted to the discipline because they wish to become professional psychologists, plan to pursue careers in fields that emphasize interpersonal skills, or want to better understand themselves as well as others.

Those majoring in psychology can choose between Option A and Option B. Option A is attractive because its semester-hour requirement allows students to combine a major in psychology with one or more additional majors or minors. Option B is available for those preferring to concentrate their studies in psychology for a more in-depth experience.

Students must consult with a Psychology Department advisor to plan a major in psychology. All psychology majors are strongly encouraged to take Statistics (PSY 231), Experimental Psychology (PSY 308), and Experimental Psychology Lab (PSY 309) as early as possible in their educational career. The particular elective courses students take, along with their sequencing, depends upon their background, special interests, and goals.

CAREER OPTIONS

Students majoring in psychology who do not plan on graduate study receive a liberal arts education and are qualified for a wide variety of vocations that involve an understanding of human behavior, including careers in human services, technical and/or laboratory work, and business.

Students can prepare for graduate study in psychology by completing either Option A or B. An advanced degree in psychology allows the pursuit of many different kinds of careers, including but not limited to the following: clinical or counseling psychologist, child psychologist, school psychologist, industrial/organizational psychologist, rehabilitation counselor, experimental psychologist, and college professor.

SCHOLARSHIPS

The Psychology Department offers two scholarships. Contact the department for additional information.

- Kerry Williams Memorial Psychology Scholarship: Junior psychology majors may apply for this scholarship. Applications are taken early in the spring semester.
- Ardis Serafin Young Scholarship: Students in psychology or biology may apply for this scholarship, which is designed to support an advanced student research project. Preference is given to projects that focus on health-related issues; however, projects in other areas will also be considered.

PASS/NO CREDIT (P/NC) COURSES

Except for independent study, PSY 400, majors and minors must take all psychology courses on a grade-only basis. The P/NC option is available in PSY 210 for non-psychology majors and minors.

COURSE REPETITION POLICY

Students may not enroll in any psychology course more than three times whether due to official withdrawal (W) or a grade less than "C."

ADDITIONAL GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for psychology majors/minors are as follows:

- A minimum WSU overall cumulative GPA of 2.50 is required for graduation with a psychology major.
- A minimum GPA of 2.50 is required of majors in all grade-only psychology courses.
- In psychology courses, grades lower than a "C" do not count toward the psychology major.
- Students cannot substitute a first- or second-year course (100- or 200-level or equivalent) taken at another school for a similar course offered at the junior or senior level (300- or 400-level) at WSU.
- No more than 3 S.H. credits of general introductory psychology transferred to WSU can be credited toward a psychology major or minor.
- No more than 6 S.H. credits in developmental psychology (child, adolescent, adult, lifespan, etc.) transferred to WSU can be credited toward a psychology major or minor.
- Transfer students must complete at least 18 S.H. in psychology at WSU for the Option A major, 25 S.H. for the Option B major, and 12 S.H. for the psychology minor.
- No more than 6 S.H. credits of PSY 400 may count toward a psychology major and 3 S.H. toward a psychology minor.
- Online courses may not substitute for upper-division core courses in psychology.

WSU-ROCHESTER

The Option A psychology major and the psychology minor are available through the 2+2 Program at WSU-Rochester (page 42).

HONORS IN PSYCHOLOGY

Students have the option of completing additional requirements in order to graduate with Honors in Psychology. Students completing the requirements have it noted on their transcript. Students are responsible for applying to the Department Chairperson through their academic advisor and meeting all departmental requirements for graduation with Honors in Psychology. The requirements for Honors in Psychology are:

1. Declaration of a major in psychology.
2. Active membership in Psi Chi, the National Honorary Society in Psychology.

3. Completion of a research paper based upon a project completed in PSY 400 or PSY 408.
4. Presentation of the research results at an appropriate conference.
5. A recommendation for Honors in Psychology from the Psi Chi advisor, the student's research advisor, and the student's academic advisor.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Psychology Department offers the following flag courses in the University Studies Program:

FLAG

Oral (I)

- PSY 309 Experimental Psychology Lab (2)
- PSY 311 Careers in Psychology (1)
- PSY 431 Counseling and Clinical Psychology (3)

Math/Critical Analysis (O)

- PSY 231 Statistics (3)

Writing (P)

- PSY 350 Psychological Testing and Measurement (3)
- PSY 434 History and Systems of Psychology (3)

Flag courses that can be used to satisfy psychology major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - PSYCHOLOGY: OPTION A (PSYA)

35 S.H. (Minor Required)

REQUIRED COURSES - PSY (17 S.H.)

- 210 Introduction to Psychological Science (3)
- O 231 Statistics (3)
- 308 Experimental Psychology (3)
- I 309 Experimental Psychology Lab (2)
- P 350 Psychological Testing and Measurement (3)
- P 434 History and Systems of Psychology (3)

ELECTIVES (18 S.H.)

Psychology electives to total at least 18 S.H.

B.A. MAJOR - PSYCHOLOGY: OPTION B (PSYB)

50-51 S.H. (No Minor Required)

CORE REQUIRED COURSES (17 S.H.)

- 210 Introduction to Psychological Science (3)
- O 231 Statistics (3)
- 308 Experimental Psychology (3)
- I 309 Experimental Psychology Lab (2)
- P 350 Psychological Testing and Measurement (3)
- P 434 History and Systems of Psychology (3)

FOUNDATION/DISTRIBUTION REQUIREMENTS

(12-13 S.H.)

Cluster A: Select at least two of the following (6 S.H.):

- 250 Developmental Psychology (3)
- 305 Theories of Personality (3)
- 325 Social Psychology (3)
- 420 Abnormal Psychology (3)

Cluster B: Select at least two of the following (6-7 S.H.):

- 301 Introduction to Learning (3)
- 303 Brain and Behavior (3)
- 369 Cognitive Psychology (3 or 4)
- 410 Sensation and Perception (3)

ELECTIVES (15 S.H.)

Psychology electives to total at least 15 S.H. These may include courses from Clusters A and B taken beyond the above requirements.

ADDITIONAL REQUIREMENTS (6 S.H.)

Students must take an additional English course and an additional statistics course from the list provided:

English – ENG (3 S.H.)

- 210 Advanced Expository Writing (3) OR
- 211 Writing in Communities (3) OR
- P 439 Technical Writing (3)

Statistics – STAT (3 S.H.)

- 310 Intermediate Statistics (3) OR
- 360 Regression Analysis (3), OR
- 365 Experimental Design and Analysis (3) OR an approved substitute

B.A. MINOR - PSYCHOLOGY (PSY)

21 S.H.

REQUIRED COURSES (3 S.H.)

- PSY 210 Introduction to Psychological Science (3)

ELECTIVES (18 S.H.)

Psychology electives to total at least 18 S.H.

COURSE DESCRIPTIONS (PSY)

210 - Introduction to Psychological Science (3 S.H.)

A broad introduction to psychology: the science of human behavior and mental processes, focusing on its questions, methods, research findings, theories, and applications. Offered each semester.

231 - Statistics (3 S.H.)

An overview of the theories, procedures, and applications of descriptive, correlational, and inferential statistics in the behavioral sciences. Topics include central tendency, variability, correlation, linear regression, parametric and non-parametric tests of significance. Prerequisites: PSY 210 and completion of Math/Statistics Basic Skills Requirement. Grade only. Offered each semester.

250 - Developmental Psychology (3 S.H.)

A survey of the patterns of change and stability in human behavior from conception to death. Theories and research pertaining to growth and change in physical, cognitive, personality, and social functioning across the life span are examined. Prerequisite: PSY 210. Grade only. Offered each semester.

275 - Psychology of Women and Gender (3 or 4 S.H.)

A survey of scientific research into the nature of female behavior contrasted with male, including implications for modern living. Topics include gender stereotypes; gender development/typing; gender comparisons in social, personality, and cognitive areas, education and work, love relationships, sexuality, mental and physical health issues, and violence. Prerequisite: PSY 210. May be offered with a discussion/writing lab (4 S.H.) or without (3 S.H.). Grade only. Offered each semester.

298 - Health Psychology (3 S.H.)

Explores psychological factors in optimal maintenance of health, treatment of illness and recovery from or adjustment to ongoing health problems. Theories, research methods, and clinical applications from the biopsychosocial context as applied to health psychology are examined. Prerequisite: PSY 210. Grade only. Offered yearly.

301 - Introduction to Learning (3 S.H.)

Behavioral, associative, and cognitive theories of learning and memory are reviewed. Topics include reinforcement, punishment, extinction, generalization, discrimination, observational learning, and motivation. Prerequisite: PSY 210. Grade only. Offered yearly.

303 - Brain and Behavior (3 S.H.)

A survey of how neuron physiology directs behavior. Topics include a discussion of functional neuroanatomy as applied to the study of emotion, consciousness, social behavior, feeding, and memory. Also includes a discussion of neurological and psychological disorders and the diseases of aging. Prerequisite: PSY 210. Grade only. Offered yearly.

305 - Theories of Personality (3 S.H.)

A survey of major theoretical perspectives. Personality theory, research, and assessment are considered from a variety of viewpoints including the psychodynamic, behavioral, dispositional, and phenomenological perspectives. Prerequisite: PSY 210. Grade only. Offered each semester.

308 - Experimental Psychology (3 S.H.)

Introduction to scientific methods and research techniques in psychology. Prerequisites: PSY 210, PSY 231 and concurrent enrollment in PSY 309. Grade only. Offered each semester.

309 - Experimental Psychology Lab (2 S.H.)

A laboratory class to accompany PSY 308 (Experimental Psychology). Students will gain experience in designing, conducting, analyzing, and reporting the results of experimental research in psychology. Prerequisites: PSY 210, PSY 231, and CMST 191. Concurrent enrollment in PSY 308 is required. Grade only. Offered each semester.

311 - Careers in Psychology (1 S.H.)

An introduction to and examination of career options for students of psychology and related disciplines. Topics include job opportunities for those with a bachelor's degree in psychology and how to prepare for and choose graduate programs. Prerequisites: 9 credit hours in psychology and CMST 191. Grade only. Offered each semester.

325 - Social Psychology (3 S.H.)

Overview of theories and research in social psychology. Topics include social cognition, the self, stereotyping and prejudice, attitudes and persuasion, interpersonal relationships, and group behavior. Prerequisite: PSY 210. Grade only. Offered each semester.

330 - Psychology and the Law (3 S.H.)

Psychological analysis of the legal system, focusing on perception, memory, and decision-making processes by individuals in the system. Topics include eyewitnesses, expert witnesses, the identification and evaluation of suspects, jury trials, capital punishment, and current topics. Prerequisite: PSY 210. Grade only. Offered each semester.

335 - Human Factors Psychology (3 S.H.)

An examination of psychological principles applied to the relationship between technology and human capabilities in the design and operation of both human-machine systems and environments in which humans live, work, and play. Specific topics include human perceptual and motor capabilities, machine displays and controls, and workspace design. Prerequisite: PSY 210. Grade only. Offered yearly.

350 - Psychological Testing and Measurement (3 S.H.)

Principles and practice of psychological measurement. Topics include basic statistical concepts; reliability and validity; widely used ability, personality, and interest tests and their application in educational, employment, clinical and basic research settings; social and legal issues arising from test use. Prerequisites: PSY 210, PSY 231, ENG 111. Grade only. Offered each semester.

360 - Personnel Psychology (3 S.H.)

Analysis and review of applied psychology in the field of work including job analysis, personnel selection, performance evaluation, training design and evaluation, job design, human engineering, fatigue, safety and physical working conditions. Prerequisite: PSY 210. Grade only. Offered yearly.

369 - Cognitive Psychology (3 or 4 S.H.)

Contemporary scientific approaches to understanding human mental activity—the acquisition, storage, retrieval, and use of knowledge. Topics include pattern recognition, attention, memory, concept formation, language, imagery, reasoning, problem-solving, and decision-making. Both theory and applications to other disciplines and everyday life are addressed. Prerequisite: PSY 210. May be offered with a lab (4 S.H.) or without (3 S.H.). Grade only. Offered yearly.

400 - Independent Study or Research (1-3 S.H.)

Independent study or research for credit under the guidance of a faculty member with prior permission. Can be repeated. Teaching assistantships and field experience may be available but only on a P/NC basis. Only 6 S.H. credits of PSY 400 may count toward a psychology major. Only 3 S.H. may count toward the psychology minor. Prerequisites: PSY 210 and as determined by the instructor. Offered each semester.

408 - Advanced Experimental Psychology (3 S.H.)

Theory and methods of advanced research techniques in psychology. Individual student research projects are conducted. Prerequisites: PSY 210, PSY 231, PSY 308, and PSY 309. Grade only. Offered yearly.

410 - Sensation and Perception (3 S.H.)

A careful consideration of how we come to know about our world through our senses. Emphasis on vision and audition, including clinical aspects. Also addresses taste, smell, and skin senses including pain. Both theory and applications to other disciplines and everyday life are addressed. Prerequisite: PSY 210. Grade only. Offered yearly.

418 - Behavioral Pharmacology (3 S.H.)

An analysis of the psychological, sociological, and physiological factors related to pharmacological treatment of psychological disorders and chemical dependency. Additionally, a discussion of traditional medicine and drug development is included. This course does not meet teacher certification. It is designed for non-education majors. Prerequisites: PSY 210 and PSY 303. Grade only. Offered every two years.

420 - Abnormal Psychology (3 S.H.)

The origins, development, and treatment of abnormal behavior. Topics include mood, anxiety, and schizophrenic disorders as well as selected topics, which may include somatoform and dissociative disorders, life-span related disorders, substance use disorders, organic disorders, psychological aspects of illness, and prevention. Prerequisites: PSY 210 and 3 additional S.H. in psychology. Grade only. Offered each semester.

421 - Cognitive Behavior Therapy (3 S.H.)

Current principles, research methods, and therapeutic interventions for behavioral change are discussed as applied to the behavior of individuals and groups in mental health settings, schools, hospitals, and interpersonal situations. Prerequisites: PSY 210 and PSY 420. Grade only. Offered every two years.

423 - Psychopathology of Childhood (3 S.H.)

Examines classification of disorders in children and adolescents. Core topics include mood, anxiety, and psychotic disorders. Selected topics may include eating disorders, psychosomatic disorders, autism, psychosis, phobias, developmental deviations. Therapeutic issues are discussed. Prerequisites: PSY 210, PSY 250 and PSY 420. Grade only. Offered yearly.

424 - Women and Mental Health (3 S.H.)

Diagnosis and treatment are discussed with mood disorders as a central focus, followed by themes in therapy selected from topics such as anger, autonomy, identity, integration of marriage and career, lesbianism, poverty, consciousness raising, and gender role development. Traditional and alternative therapeutic approaches are discussed in light of socioeconomic factors affecting women. Current issues related to women's needs are addressed. Prerequisites: PSY 210 and 6 S.H. in psychology and PSY 275 (or WAGS 148) or instructor's permission. Grade only. Offered yearly.

425 - Organizational Psychology (3 S.H.)

An analytical survey of theory and research in organizational socialization, decision-making, motivation, leadership and the use of power and authority, communication, organizational change and development, and the evaluation of organizational effectiveness. Prerequisite: PSY 210. Grade only. Offered yearly.

430 - Forensic Psychology (3 S.H.)

A seminar examining issues at the intersection of clinical psychology and the legal system. Topics include criminal psychology, insanity and competency, risk assessment, the psychology of victims, issues involving children, civil law issues, and other current topics. Prerequisite: PSY 210. PSY 330 is recommended, but not required. Grade only. Offered yearly.

431 - Counseling and Clinical Psychology (3 S.H.)

Issues of clinical and counseling practice include ethics, theoretical perspectives, clinical research, diversity, and managed care. Practice in interviewing strategies is included, and career choices are examined. Prerequisites: PSY 210 and PSY 420. Grade only. Offered yearly.

433 - Neuroscience (4 S.H.)

A survey of contemporary theories and research methods in neuroscience. Topics include a discussion of functional neuroanatomy as applied to the regulation of homeostasis, motor systems, cognitive processing, and a discussion of advanced topics in the areas of motor, neurological, and psychological disorders. Lecture and laboratory. Prerequisites: 9 S.H. in psychology including PSY 303 or 9 S.H. in biology. Grade only. Offered yearly.

434 - History and Systems of Psychology (3 S.H.)

A historical overview of psychology and its antecedents are considered to provide a richer understanding of contemporary psychology as an evolving, conceptual system. Majors are encouraged to complete all other core requirements before registering in PSY 434. Prerequisite for non-majors: ENG 111, minimum of 12 S.H. in psychology. Prerequisites for majors: ENG 111, PSY 210, PSY 231, PSY 308, and a minimum of two other courses in psychology (6 S.H.). Grade only. Offered each semester.

498 - Seminar in Psychology (3 S.H.)

A variable-topic course involving in-depth study of a specialized subject area within psychology. Can be repeated with different topics. Prerequisites: PSY 210 and as determined by the instructor. Grade only. Offered yearly.

RECREATION, TOURISM AND THERAPEUTIC RECREATION

Memorial Hall, Room 122 (507-457-5200; Fax: 507-457-5606)

Lorene S. Olson (Chairperson)

FACULTY

Lorene Olson, Professor; B.S., M.S., University of Wisconsin-La Crosse; Ph.D., University of New Mexico; 1989 –

James Reidy, Associate Professor; B.S., M.S., Ed.D., Oklahoma State University; 2000 –

Roger Riley, Professor; B.S., M.S., University of Wisconsin-La Crosse; Ph.D., Texas A&M University; 2000 –

Dave Wright, Associate Professor; B.S., University of Sydney/Goulburn Teacher's College; M.S., Ph.D., University of Oregon; 2005 –

PURPOSE

The Department of Recreation, Tourism and Therapeutic Recreation exists within the College of Education. Through traditional as well as experiential methods, the faculty prepare majors to become recreation, tourism, and therapeutic recreation (RTTR) professionals. The RTTR major leads to a non-teaching Bachelor of Science degree. In addition, the department offers numerous RTTR courses, which fulfill the two-semester hour University Studies requirement for Physical Development and Wellness.

CAREER OPPORTUNITIES

Recreation and Tourism (RT)

Graduates in the recreation and tourism major are qualified to obtain entry-level positions in the following settings:

- Nonprofit or voluntary agencies (e.g., YMCA-YWCA, Scouts)
- Private settings that require memberships (e.g., golf or tennis clubs)
- Military recreation
- Commercial or "for-profit" agencies (e.g., theme parks, fitness centers)
- Public, corporate, campus or correctional recreation
- Adventure-based outdoor programs and adventure travel/outfitting companies
- Federal programs (e.g., U.S. Forest Service, National Parks Service, Bureau of Land Management)

Therapeutic Recreation (TR)

Graduates in the therapeutic recreation major are qualified to obtain entry-level positions in the following settings:

- Special rehabilitation centers for persons with physical disabilities
- Mental health facilities that treat a variety of psychological impairments
- Nursing homes and retirement centers
- Residential centers that care for persons with developmental disabilities
- Some TR specialists also find employment in schools, half-way houses, community recreation programs, or correctional institutions

DEPARTMENT PROGRAMS

- B.S. Major: Recreation, Tourism and Therapeutic Recreation. Students in this major may elect the recreation and tourism track or the therapeutic recreation track. While a minor is not required for the RTTR programs, many students elect to complete both tracks and/or add an additional minor such as adventure tourism or coaching.
- B.S. Minor: Adventure Tourism. This is an interdisciplinary program sponsored by the RTTR Department.

TRAVEL STUDY OPPORTUNITIES

Within the department's interdisciplinary Adventure Tourism (ADVT) minor, travel/study opportunities are offered in Australia, New Zealand, Costa Rica, and the Northern Plain states. Students are not required to be RTTR majors or ADVT minors to take advantage of these programs. Students should see the department chairperson for details.

PASS/NO CREDIT (P/NC) COURSES

Except for internships, students majoring or minoring in RTTR programs must take all courses in the major, minor, and options on a grade-only basis. Courses offered for pass/no credit-only or grade-only are so designated in the course descriptions. If no grading method is listed for a particular course in the course descriptions, the course may be taken for either grade or pass/no credit.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Recreation, Tourism and Therapeutic Recreation offers the following flag courses in the University Studies Program:

FLAG

Oral I

RTTR 414 Recreational Leadership (3)

Math/Critical Analysis O

RTTR 393 Evaluation in Recreation, Tourism, and TR (3)

Writing P

RTTR 326 Organization and Administration of Recreation (3)

RTTR 426 Recreation Facilities and Area Design (3)

Flag courses that can be used to satisfy RTTR major/minor requirements are identified in the lists of required courses and electives in this section.

B.S. MAJOR - RECREATION, TOURISM AND THERAPEUTIC RECREATION (RTTR)

(No Minor Required)

This major is designed to prepare students for professional leadership roles in a variety of public, commercial, clinical, community, and natural-resource settings where recreational and/or therapeutic recreation services are offered.

Within the major, students may select the Recreation and Tourism (RT) Track and/or the Therapeutic Recreation (TR) Track. Students who graduate with the Therapeutic Recreation Track are qualified to sit for the National Council for Therapeutic Recreation Certification (NCTRC) examination. See page XX for information about career opportunities available to graduates of both these options.

ADMISSION TO THE MAJOR

To be admitted to the Recreation, Tourism and Therapeutic Recreation (RTTR) program, a student must fulfill one of the following requirements:

- Be admitted to Winona State University as an entering freshman or transfer student
- Have a minimum 2.0 cumulative GPA as a currently enrolled student.

Denial of Admission

Students may be denied admission to the RTTR major for failure to meet any of the WSU or RTTR admissions requirements.

ACADEMIC STANDING

To be eligible for an internship, a student must have a 2.50 GPA overall as it appears on the DARS (Degree Audit Reporting System) report at the end of the semester preceding the internship experience.

ASSISTANCE/RETENTION PLAN

Students identified by the RTTR faculty as needing assistance in academic, personal or professional domains are required to attend a review meeting initiated by the advisor and called by the Department Chairperson. An assistance plan will be developed; the plan will likely draw upon the services of such units as the Counseling Center, the Writing Center, Student Support Services, and the Advising and Retention Office.

WARNING AND SUSPENSION POLICY

Students must be in good standing at the end of each academic year to remain enrolled in the RTTR program. Students not in good standing will be notified of their status at their advisory session. Students must complete an assistance plan to remain in the program; otherwise, they are suspended from the program.

Reinstatement Policy

Students may apply for reinstatement to the program, one semester after receiving a notice of suspension.

Appeals

Students who are suspended from the RTTR program may submit a written appeal for readmission to the department chairperson. If the appeal is denied, the student may appeal in person to the WSU Academic Review Committee.

TRACK A: RECREATION AND TOURISM (RT)

64-68 S.H.

RTTR COURSES REQUIRED BY TRACK A AND TRACK B (37-39 S.H.)

- 203 Recreation Programming (3)
- 229 Foundations of Recreation and Leisure Studies (3)
- 239 Outdoor Pursuits (3)
- 245 Therapeutic Recreation and Services (3)
- P 326 Organization and Administration of Recreation (3)
- 350 Legal and Financial Aspects of Recreation (3)
- O 393 Evaluation in Recreation, Therapeutic Recreation & Tourism (3)
- 399 Internship in Recreation and Tourism or Therapeutic Recreation (10-12)
- I 414 Recreational Leadership (3)
- P 426 Recreation Facilities and Area Design (3)

RTTR REQUIREMENTS FOR TRACK A ONLY (22 S.H.)

- 222 Resource Applications in Program Delivery for Recreation, Tourism, and Therapeutic Recreation (3)
 - 290 Foundations of Tourism (3)
 - 302 Adventure Travel and Tourism Development (3)
 - 339 Wilderness Ethics, Safety and Survival (3)
 - 398 Practicum in Recreation/Therapeutic Recreation (3)
 - 421 Outdoor Education and Interpretive Services (3)
- Plus 4 S.H. of any 100-level physical education activity courses OR RTTR 417 Special Topics in Recreation, Tourism, and Therapeutic Recreation (1-3)

INTERDISCIPLINARY REQUIREMENTS FOR TRACK A

5-7 S.H.

Biology/Geography (3-4 S.H.)

- GEOG 270 Geography of Tourism (3) OR
- * BIOL 104 Environment, Society, and Conservation (3) OR
- BIOL 203 Natural History (4)

Theatre and Dance/Music (2-3 S.H.)

- * THAD 141 Oral Interpretation (3) OR
- THAD 239 Creative Dramatics for Children (2) OR
- MUS 324 Recreational Music (2)

Recreation and tourism students are encouraged to take additional coursework related to the natural environment, business concepts, public speaking, marketing, historical and social aspects of American culture, and the use of technology and statistical analysis.

TRACK B: THERAPEUTIC RECREATION (TR)

(67-69 S.H.)

RTTR COURSES REQUIRED BY TRACK A AND TRACK B (37-39 S.H.)

- 203 Recreation Programming (3)
- 229 Foundations of Recreation and Leisure Studies (3)
- 239 Outdoor Pursuits (3)
- 245 Therapeutic Recreation and Services (3)
- P 326 Organization and Administration of Recreation (3)
- 350 Legal and Financial Aspects (3)
- O 393 Evaluation in Recreation, Therapeutic Recreation, and TR (3)
- 399 Internship in Recreation and Tourism or Therapeutic Recreation (10-12)
- I 414 Recreational Leadership (3)
- P 426 Recreation Facilities and Area Design (3)

RTTR REQUIREMENTS FOR TRACK B ONLY (12 S.H.)

- 332 Leisure and Aging in Therapeutic Recreation (3)
- 342 Intervention Techniques in Therapeutic Recreation (3)
- 468 Programming in Therapeutic Recreation (3)
- 475 Trends and Issues in Therapeutic Recreation (3)

ADDITIONAL REQUIREMENTS FOR TRACK B (18 S.H.)

Psychology – PSY (6 S.H.)

- 250 Developmental Psychology (3)
- 420 Abnormal Psychology (3)

Biology – BIOL (4 S.H.)

- * 211 Anatomy and Physiology (4)

Section I: Counselor Education/Health, Exercise and Rehabilitative Sciences (6 S.H.)

Psychology/Sociology

Note: Select from two disciplines. Courses selected in this section are in addition to University Studies.

Counselor Education – CE

- 220 Emotions and Behavior (3)

Health, Exercise and Rehabilitative Sciences – HERS

- 340 Physiology of Exercise (4)

Psychology – PSY

- 210 Introduction to Psychological Science (3)
- 303 Brain and Behavior (3)
- 305 Theories of Personality (3)
- 325 Social Psychology (3)

Sociology – SOC

- * 150 Introduction to Sociology (3)
- 205 Social Interaction (3)
- 212 The Family (3)
- 216 Social Problems (3)

Section II: Biology/Physical Education and Recreation/Music (2 S.H.) (Any combination)

Biology – BIOL

- 171 Medical Terminology (1)
- 172 Medical Terminology (1)

Recreation, Tourism, and Therapeutic Recreation – RTTR

- 417 Special Topics in Recreation, Tourism or Therapeutic Recreation (1-3)

PREPARATION FOR THE NCTRC EXAMINATION

Therapeutic recreation students are strongly encouraged to take additional biology, sociology, psychology, and health promotion courses to fill their University Studies requirements. Through such courses, therapeutic recreation students gain additional exposure to content areas included in their National Council for Therapeutic Recreation Certification (NCTRC) examination.

In addition to completing the TR curriculum outlined above, students who choose to sit for the NCTRC examination after graduation must meet specific non-curricular eligibility requirements related to their ability to provide professional and competent performance of TR services. Students can obtain more information about the NCTRC examination certification requirements from any TR faculty member.

B.S. MINOR - ADVENTURE TOURISM (ADVT)

27 S.H.

Adventure tourism is a rapidly expanding segment of the travel and tourism industry, fueled by a societal need to escape routine lifestyles. People who provide adventure tourism services are likely to engage tourists in such activities as rock and mountain climbing, spelunking, river rafting, whitewater canoeing, trekking, wilderness camping, snow-shoeing and a variety of other pursuits in which the participant is challenged by the natural environment. Students who pursue this minor develop a repertoire of skills related to planning, marketing, and providing successful adventure tourism programs and services.

REQUIRED COURSES (27 S.H.)

Select a total of 27 credits from the following:

Geography - GEOG

270 Geography of Tourism (3)

Marketing - MKTG

† 333 Topics in Marketing (3)

336 Services Marketing (3)

337 Qualitative Research Methods (3)

† 399 Internship Experience (3)

Recreation, Tourism and Therapeutic Recreation - RTTR

239 Outdoor Pursuits (3)

240 Outdoor Pursuits II (3)

265 Leisure in Different Cultures (3)

290 Foundations of Tourism (3)

302 Adventure Travel and Tourism Development (3)

339 Wilderness Ethics, Safety, and Survival (3)

350 Legal and Financial Aspects (3)

390 Tourism Planning (3)

393 Evaluation in Recreation, Therapeutic Recreation, and TR (3)

396 Leadership and Group Dynamics: An Experiential Education Approach (3)

† 398 Practicum in Recreation and Tourism or Therapeutic Recreation (3)

(May be repeated once for credit within this program)

† 417 Special Topics in Recreation, Tourism or Therapeutic Recreation (1-3)

(May be repeated once for credit within this program)

421 Outdoor Education and Interpretive Services (3)

† Course content must relate to tourism and be pre-approved by the ADVT advisor.

COURSE DESCRIPTIONS (RTTR)**144 - Contemporary Activities (1 S.H.)**

This course introduces the student to varied contemporary, movements-based activities. A variety of activities will be introduced as a means of encouraging movement and expanding the student's leisure interest profile. May be repeated for credit under different subtitle..

203 - Recreational Programming (3 S.H.)

This course provides an introduction to recreational and sports programming and leadership concepts. Grade only.

222 - Resources and Applications in Program Delivery for Recreation, Tourism and Therapeutic Recreation (3 S.H.)

Students develop resource applications for program delivery in recreation, tourism, and therapeutic recreation including the creation of newsletters, brochures, business cards, database and budget management, and agency websites. Prerequisite: RTTR 203. Grade only.

229 - Foundations of Recreation and Leisure Studies (3 S.H.)

History and development of recreation, and principles, and philosophies of leisure. Modern-day concepts of leisure will also be addressed. Grade only.

239 - Outdoor Pursuits (3 S.H.)

An overview of the theory and practice of adventure/challenge education. Processing skills included. Classroom as well as experiential involvement. Additional fee. Challenge by choice philosophy. Grade only.

240 - Outdoor Pursuits II (3 S.H.)

Use of the environment for year-round adventure recreation activities and learning of advanced camping/canoeing and/or kayaking and/or rafting skills. Several day- to month-long camping experiences. Additional fee. Grade only.

245 - Therapeutic Recreation and Services (3 S.H.)

History, philosophy, theories, and professionalism of therapeutic recreation. Factors influencing service delivery and models of service delivery will also be addressed. Grade only.

265 - Leisure in Different Cultures (3 S.H.)

The purpose of this course is to introduce students to different cultures through travel study. Applies only to travel education programs offered through RTTR and the ADVT minor. Repeatable for credit when students enroll in different travel/study programs. Grade only.

290 - Foundations of Tourism (3 S.H.)

This course will explore the tourism system and expose the students to the delineations of tourists and tourism enterprises, travel trends, governmental and non-governmental roles, transportation providers, and destination services and attractions. Attention will also be given to the impacts of tourism. Grade only.

302 - Adventure Travel and Tourism Development (3 S.H.)

An overview of the rapidly growing adventure tourism industry, and its relation to the field of recreation and leisure studies. Course emphasis will be placed on adventure tourism and national and international "eco-tourism," which promotes cultural and environmental sensitivity. Field trip is an additional fee. Grade only.

326 - Organization and Administration of Recreation (3 S.H.)

Principles of supervision and administration as applied to tourism/outdoor/recreation and therapeutic recreation settings. Prerequisites: RTTR 229 and RTTR 245. Grade only.

332 - Leisure and Aging in Therapeutic Recreation (3 S.H.)

Leisure needs and perceptions of the elderly. Implications for therapeutic recreation services in clinical and community settings. Prerequisite: RTTR 245. Grade only.

339 - Wilderness Ethics, Safety, and Survival (3 S.H.)

Students will examine the elements of ethical wilderness trip planning, low impact activities, and select appropriate gear and equipment for trip safety. Survival and rescue skills will also be examined in this course. Grade only.

342 - Intervention Techniques in Therapeutic Recreation (3 S.H.)

Helping strategies, processes and techniques utilized by the therapeutic recreation specialist. Prerequisite: RTTR 245. Grade only.

350 - Legal and Financial Aspects (3 S.H.)

Legislation, liability, and legal matters concerning recreation services; technical and behavioral aspects of budgeting; traditional and recent methods of financial park and recreation operations. Prerequisites: RTTR 229 and RTTR 245. Grade only.

390 - Tourism Planning (3 S.H.)

Tourism planning involves maximizing benefits and minimizing negative impacts for local and regional tourism destinations. Student will be exposed to and understand positive and negative impacts of tourism; the need for resource inventories; the matching of resources with particular visitors, superstructure, and infrastructural needs; and the service quality necessary for visitor satisfaction and repeat visitation. Offered on travel study program only. Grade only.

393 - Evaluation in Recreation, Tourism, and TR (3 S.H.)

The procedures and applications of social science research and evaluation methods are applied to recreation settings. Course content includes design, methods of data collection, interpretation, and presentation of the data. Emphasis is given to evaluation techniques used by recreation professionals. Grade only.

396 - Leadership and Group Dynamics: An Experiential Education Approach (3 S.H.)

As a member of a travel study group for an extended period of time, participants in this experientially based course will have a rich opportunity to observe, apply, synthesize, and reflect upon readings and personal experiences pertinent to leadership and group dynamics issues. Offered on travel study programs only. Grade only.

398 - Practicum in Recreation and Tourism or Therapeutic Recreation (3 S.H.)

This course offers an opportunity to learn by experience and further professional development under the careful guidance of experienced professionals and college supervisors. May be repeated once for credit in a different setting. Prerequisite: Must have completed RTTR 229 and 245 and have consent or special permission of department.

399 - Internship in Recreation and Tourism or Therapeutic Recreation (1-12 S.H.)

The application of skill, knowledge and concepts necessary for planning, organizing and conducting recreation and leisure services. Permission and 2.50 GPA overall as it appears on the DARS (Degree Audit Reporting System) report at the end of the semester preceding the internship experience. Therapeutic Recreation interns also must obtain a copy of their intern supervisor's current NCTRC certification certificate. Interns must complete a 12 (or more) consecutive week, 480-hour placement under the supervision of a qualified recreation specialist. Prerequisite: Senior standing in the RTTR major and completion of recreation core courses, or instructor's permission. P/NC only.

412 - Independent Study in Recreation, Tourism or Therapeutic Recreation (1-3 S.H.)

Opportunity to work independently. Prerequisites: Junior or senior standing, preparation of proposed outline and major advisor's permission. Grade only.

414 - Recreational Leadership (3 S.H.)

A study of leadership principles, leadership techniques, and leadership theories. Required recreation leader competencies and group dynamic issues also will be addressed. Prerequisites: Sophomore, preferably higher standing; RTTR 229 and RTTR 245. Grade only.

417 - Special Topics in Recreation, Tourism or Therapeutic Recreation (1-3 S.H.)

Typically offered on a workshop basis. Subject matter determined by department. Course may be repeated when offered with different subject matter, content, and title. Grade only.

421 - Outdoor Education and Interpretive Services (3 S.H.)

Exploration of the out-of-doors as a medium to enhance cognitive, affective, and psychomotor learning for persons of all ages. Outdoor recreation as a component of outdoor education is also addressed. Grade only.

426 - Recreation Facilities and Area Design (3 S.H.)

Principles and procedures related to the design, operation, and care of leisure resources, areas and facilities. Prerequisites: Sophomore, preferably with higher standing; RTTR 229 and RTTR 245. Grade only.

450 - Travel Study in Costa Rica (2 S.H.)

Will focus on student-based field research to assist the municipalities of Playa Dominical and Playa Uvita to develop their natural resources, tourism products, and associated services. Students will engage in inventorying natural resources, gathering data about tourism demand and supply, and constructing a database to help local officials make better tourism-related decisions. Prior to the study, students will be exposed to basic tourism and natural resources development concepts that have applications in Playa Dominical and Playa Uvita. Post-study work will focus on report development and the assessment of other tourism products and services in Costa Rica. Grade only.

468 - Programming in Therapeutic Recreation (3 S.H.)

An overview of functional problems commonly associated with various diseases and/or disabling conditions. Therapeutic recreation program development, implementation, and modification considerations. Prerequisites: Sophomore or, preferably, higher standing; RTTR 229 and RTTR 245. Grade only.

475 - Trends and Issues in Therapeutic Recreation (3 S.H.)

Professional concerns and implication related to contemporary trends and issues in the field of therapeutic recreation. Internship site selection, assessment techniques, and national exam criteria also will be addressed. Prerequisites: Junior or, preferably, senior standing; RTTR 229, RTTR 245, and RTTR 342. Grade only.

RESIDENTIAL COLLEGE

Lourdes Hall (507-457-2500)

Ronald Elcombe, Director

FACULTY

Linda D'Amico, Associate Professor; B.S., M.A., Ph.D., Indiana University; 2000 –

Daniel Eastman, Professor; B.A., Western Washington University; M.F.A., Wayne State University; M.F.A., Bard College; 1989 –

Ronald Elcombe, Professor; B.S., University of Minnesota-Twin Cities; M.M., Mankato State University; Ph.D., The Union Institute; 1991 –

PURPOSE

The mission of the Residential College is to provide an enhanced learning environment for highly motivated students to promote excellence in the achievement of their undergraduate education within a living and learning community.

The Residential College offers students a unique educational opportunity in a residential setting. Students are encouraged to discover the love of learning, tolerance for individual differences, and benefits of a liberal arts education by developing their talents through participation in a topical interdisciplinary curriculum that emphasizes in-class and extracurricular learning. The relaxed residential environment of the Residential College creates an atmosphere of collaborative learning. In addition to living and learning communities, Residential College students have the opportunity to participate in a variety of co-curricular activities. The Residential College is located in Lourdes, Maria, and the Tau Center residence halls.

COURSE DESCRIPTIONS (RESC)

140 - Topics in the Humanities (3. S.H.)

This course is designed to explore the nature and scope of the human experience. It will explore the search for meaning and value in human life by examining its expression in cultural forms and texts, literature, and the arts. The topics will vary and will often take an interdisciplinary approach to the subject. RESC 140 is in the University Studies Arts and Sciences Core Humanities category.

143 - Experience and Expression (3. S.H.)

This course is designed to provide an opportunity for creative expression through a significant experiential/studio component. It will introduce the student to the creative process and develop basic skills and aesthetic awareness. The topics will vary and will often take an interdisciplinary approach to the subject. RESC 143 is in the University Studies Arts and Sciences Core Fine and Performing Arts category.

150 - Insights and Implications (3 S.H.)

In this course, students will have an opportunity to integrate the perspectives and information offered in interdisciplinary clusters of courses. Students will also apply those perspectives and information in discussions and a term project focused on a contemporary issue related to the cluster theme. Course topics will vary. RESC 150 is in the University Studies Unity and Diversity Contemporary Citizenship category.

151 - Concepts and Context (3 S.H.)

This course is designed to provide an opportunity for developing skill in the critical analysis of concepts and issues facing us in today's world. It will introduce the student to a systematic approach to the analysis of current issues. The topics will vary and will often take an interdisciplinary approach to the subject. Depending upon the topic, this course may be used to satisfy the University Studies Unity and Diversity Critical Analysis category.

301 – Resident Assistant Development (2 S.H.) (Repeatable as RESC 302)

This course will offer students in leadership positions an opportunity to expand their leadership skills through a series of classroom experiences. The seminar-style course will have three distinct phases. The first phase will focus on the development of the individual. The second phase centers on group development. The final phase will have the student look at community development, not only in the college setting, but also in non-academic settings. May be repeated for credit using the course number RESC 302 (Resident Assistant Development).

SOCIAL SCIENCE/HISTORY (Secondary Social Studies Teaching)

Minné Hall, Room 212, (507) 457-5400

Email: mlindaman@winona.edu

Matthew Lindaman, Program Director

FACULTY

Matthew Lindaman, Assistant Professor; B.A., M.A., University of Northern Iowa; Ph.D., University of Kansas, 2002 –

PURPOSE

This program is designed for prospective middle level and high school teachers. WSU established the major to meet the secondary social studies teacher certification requirements for the state of Minnesota.

Students who wish to teach high school-level history or government or geography or another social science field need to complete this program and the other requirements for a so-called “broad field” teaching license for secondary social studies. Minnesota and other surrounding states do not offer secondary-level licenses to teach only history or any of the other traditional social science disciplines by themselves.

PASS/NO CREDIT (P/NC) COURSES

All courses must be taken on a grade-only basis. Courses taken at either WSU or another institution on a pass/no credit basis do not count toward fulfillment of the program requirement.

GRADE AND GPA REQUIREMENTS

Coursework must receive a grade of “C” or better to count toward fulfillment of the program requirements. Students must achieve a GPA in program courses of 2.75 or better to successfully complete the major.

EDUCATION DEPARTMENT COURSES & OTHER REQUIREMENTS FOR TEACHING LICENSURE

Students should consult the Education Department section of this catalog (page 90) and the Education Department office (Gildemeister Hall, Room 152) for information concerning:

- The Professional Education Sequence of education courses required of students who wish to become licensed as 5-12 (middle and high school) teachers. These courses require formal admission to the teacher education program. (See page 91, “Admission to the WSU Teacher Education Program.”) The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.
- The admission process required to enter the Professional Education Sequence.
- Other required courses outside the Education Department (such as HERS 204, Personal and Community Health, and work in the field of special education).
- Other requirements that students must complete in order to qualify for a Minnesota social studies teaching license.

Social science/history students will have an opportunity to acquire the experience with educational technology required for a Minnesota teaching license in EDUC 331, Teaching Social Studies in Secondary Schools. Students who need to complete the University Studies program should consult the Social Science/History Program Director concerning the required Flag courses.

B.S. MAJOR - SOCIAL SCIENCE/HISTORY (Secondary Social Studies Teaching) (SSHT)

81-83 S.H. (No Minor Required)

REQUIRED COURSES (66-68 S.H.)

Anthropology (3 S.H.)

SOC 340 Social-Cultural Anthropology (3)

Economics (6 S.H.)

* ECON 201 Principles of Microeconomics (3)

* ECON 202 Principles of Macroeconomics (3)

Geography (12 S.H.)

* GEOG 110 World Regional Geography (3)

GEOG 211 Economic Geography (3)

* GEOG 212 Physical Geography (3)

* GEOG 213 Cultural Geography (3)

History (12 S.H.)

Two of the following:

* HIST 150 U.S. History to 1865 (3)

* HIST 151 U.S. History Since 1865 (3)

* HIST 214 The Mississippi River in U.S. History

AND select two of the following:

* HIST 120 Western Civilization to 1500 (3)

* HIST 121 Western Civilization, 1500-1815 (3)

* HIST 122 Western Civilization, 1815-Present (3)

Political Science (9 S.H.)

* POLS 120 Introduction to American Politics (3)

* POLS 130 Introduction to International Relations (3)

One of the following:

POLS 135 Comparative Political Systems (3)

* POLS 150 Introduction to Political Theory (3)

POLS 228 Public Service (3)

Psychology (3 S.H.)

* PSY 210 Introduction to Psychological Science (3)

Sociology (3 S.H.)

* SOC 150 Introduction to Sociology (3)

Social Psychology (3 S.H.)

One of the following:

* SOC 205 Social Interaction (3) OR

* PSY 325 Social Psychology (3)

Research Methods (6-8 S.H.)

† HIST 298 Historical Methods and Historiography (3)

AND select one of the following:

POLS 380 Political Research I - Secondary (3) OR

SOC 376 Introduction to Social Research (3) OR

† PSY 308 Experimental Psychology (3); PSY 309 Experimental Psychology Lab (2)

Global Perspectives (3 S.H.)

Note: Students in the program will complete the University Studies global or multicultural perspectives requirements by taking one of the following courses:

† HIST 123 East Asian Civilization (3)

† HIST 165 Latin American History (3)

† HIST 170 African Civilization (3)

Education (3 S.H.)

EDUC 331 Teaching Social Studies in Secondary Schools (3)

†Course may be used to satisfy certain Unity and Diversity requirements in the University Studies Program.

ELECTIVES (18 S.H.)

Students complete a concentration of 18 semester hours at the 300- or 400-level in one of the following disciplines: economics, geography, history, political science, psychology, or sociology. The course selections are subject to the Program Director's approval.

SOCIAL WORK

Minné Hall, Room 228 (507-457-5420)

University Center Rochester, ST-128 (507-280-5049)

www.winona.edu/socialwork/

John Burdick (Chairperson)

FACULTY

John E. Burdick, Professor; B.A., Allegheny College; M.S.W., State University of New York-Buffalo; 1984 –

Arlen Carey, Assistant Professor; B.A., M.A., Ph.D., University of Texas-Austin; M.S.W., University of Central Florida, Orlando; 2004 –

Ruth A. Charles, Associate Professor; B.A., Gordon College; M.S.W., Ph.D., Syracuse University; 1997 –

John W. Collins, Professor; B.A., Tarkio College; M.S., University of Minnesota; Ph.D., Saint Louis University; 1993 –

Cathy Jo Faruque, Associate Professor; B.S., Winona State University; M.S.W., San Diego State University; Ph.D., North Central University; 1997 –

Carole Madland, Associate Professor; M.S.W., University of Tennessee-Nashville; B.A., Ph.D., Washington University (St. Louis, Missouri); 1991 –

Robert Jay Palmer, Assistant Professor; B.S., California State University Fullerton; M.S.W., California State University Long Beach; 2007 –

PURPOSE

The WSU Bachelor of Social Work (BSW) degree program prepares students for beginning, generalist professional Social Work practice. The program is fully accredited by the Council on Social Work Education. The Social Work program serves students on both the Winona and Rochester campuses.

In many states, a license is required to practice Social Work, and a Bachelor of Social Work (BSW) degree from an accredited Social Work program is required for licensure. Students who graduate with a BSW degree are eligible for advanced standing when applying to most graduate schools. Advanced standing allows BSW graduates to waive some graduate level courses while working on a Master of Social Work (MSW) degree. Therefore, BSW graduates can finish most MSW programs in one year; however, the requirements vary from one institution to another.

ADMISSION

Admission to the Bachelor of Social Work program is a procedure separate from WSU admission and from major declaration. The BSW admission process takes place during the second semester of the student's sophomore year. Specific eligibility requirements in addition to the academic requirements for both admission and retention must be met. The application materials containing the requirements, instructions, deadlines, and forms can be found in the *Social Work Handbook* and online at www.winona.edu/socialwork/.

Required foundation courses are to be completed prior to admission to the social work program. Students will not be admitted to the program unless they satisfy the department's admission requirements by the end of the semester in which they apply. (Spring semester applicants have until the end of the next summer session to satisfy admission requirements.) Admission is competitive; therefore, some applicants may not be admitted. Social work faculty members are available to assist prospective social workers with the admission process. First-year and sophomore students interested in the social work major are advised to become well informed regarding the courses required for admission to the social work program. Admission into the program is limited to a specific number of students and is based on satisfactory completion of required courses and evaluation scores obtained in the admission process. Acceptance into the BSW program is the prerequisite for SOCW 365 and SOCW 370; it is also a prerequisite for enrollment in all required social work courses except SOCW 340 and SOCW 350.

Students must have a "C" or better and an overall GPA of 2.5 in all five foundation courses, ENG 111, CMST 191, and a satisfactory evaluation in SOCW 350. In addition, students must complete the statistics requirement (STAT 110 or PSY 231) with a "C" or better. Admission is based on fulfillment of the course requirements specified above and the evaluation score obtained during the BSW acceptance process. Students should contact their advisor for further information on this process.

Academic Standards

Students must have a "C" or better and an overall GPA of 2.5 in all courses considered for BSW Program admission. In addition, students must also maintain a 2.5 GPA and a "C" or better in all courses required within the major.

Student Association of Social Workers (SASW)

Membership offers students the opportunity to organize and act on social issues of concern to students at the local level as well as the state and national levels. In addition, SASW provides a social network for the students. SASW is available to students on the Rochester and Winona campuses. Membership is strongly encouraged.

PASS/NO CREDIT (P/NC) COURSES

Except for field experiences and internships, students must take all courses on a grade-only basis. Only grades of "C" or better in courses offered in the department can be used to meet major and minor requirements.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Social Work offers the following flag courses in the University Studies Program:

FLAG

Oral I

SOCW 340 Introduction to Social Work and Social Welfare (3)

Math/Critical Analysis O

SOCW 410 Analysis of Social Welfare Policy (3)

Writing P

SOCW 390 Social Work Research: Process & Skills (3)

SOCW 480 Integrative Social Work Seminar (3)

Flag courses that can be used to satisfy social work major/minor requirements are identified in the lists of required courses and electives.

BACHELOR OF SOCIAL WORK (SOCW)

(CSWE Accredited)

64 S.H. (No Minor Required)

REQUIRED FOR ADMISSION TO BSW PROGRAM**English (4 S.H.)**

ENG 111 College Reading and Writing (4)

Oral Communication (3 S.H.)

CMST 191 Introduction to Public Speaking (3)

REQUIRED FOUNDATION COURSES (21 S.H.)**SOCIAL SCIENCES (15 S.H.)****Psychology (6 S.H.)**

PSY 210 Introduction to Psychological Science (3)

PSY 250 Developmental Psychology (3)

Sociology (3 S.H.)

SOC 150 Introduction to Sociology (3)

Social Work (6 S.H.)

I SOCW 340 Introduction to Social Work and Social Welfare (3)

SOCW 350 Field Experience (3)

NATURAL SCIENCES**Biology (3 S.H.)**

* BIOL 117 Human Biology (3)

STATISTICS**Statistics (3 S.H.)**

* STAT 110 Fundamentals of Statistics (3) OR

O PSY 231 Statistics (3)

REQUIRED COURSES - SOCW (43 S.H.)**Research (3 S.H.)**

P 390 Social Work Research Process and Skills (3)

Diversity Component (3 S.H.)

355 Multicultural Issues (3) OR

435 Social Work Practice with Diverse Populations (3)

Social Work (37 S.H.)

365 Social Work Practice I - Ethics and Interviewing (3)

370 Human Behavior in the Social Environment (3)

380 Social Welfare Policy I (3)

385 Social Work Practice II - Families and Groups (3)

400 Social Work Practicum Preparation (4)

O 410 Analysis of Social Welfare Policy (3)

415 Social Work Practice III - Organizations and Communities (3)

475 Social Work Senior Practicum (12)

P 480 Integrative Social Work Seminar (3)

Note: SOCW 475 is an extended application of practical experience within a social service agency; registration is restricted to senior social work majors.

COURSE DESCRIPTIONS (SOCW)

Note: All courses in the major, minor, options, concentrations and licensures must be taken on a grade-only basis except internships and field experiences.

340 - Introduction to Social Work and Social Welfare (3 S.H.)

This course looks at the profession of social work and U.S. social welfare policy, both historically and in the present. Grade only. Offered each semester on the Winona campus; offered in the spring semester only on the Rochester campus.

355 - Multicultural Issues (3 S.H.)

This course prepares participants to critically examine salient multicultural issues in our community and society. Students will acquire a foundational understanding of key concepts including culture, multiculturalism, assimilation, pluralism, citizenship, immigration, and refugee status. They will also gain appreciation for how these concepts reflect global processes and impact community members' lives and society.

365 - Social Work Practice I - Ethics and Interviewing (3 S.H.)

The first of three practice courses to prepare students as generalist practitioners able to provide services and intervene for change at all systems levels. Values, ethics, and interviewing skills with diverse populations stressed. Prerequisite: Admission to the Social Work program. Limited to 25 students. Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

370 - Human Behavior and the Social Environment (3 S.H.)

This course offers an introduction to systems theory in understanding human behavior. The major focus is the theoretical perspectives of human

behavior in the social environment and the relationships of these to social work practice intervention. Prerequisite: Admission to the program. Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

380 - Social Welfare Policy (3 S.H.)

American social welfare policy has shaped the nature of income maintenance, health, education, employment, and housing in the U.S. Concepts of equality, adequacy, and efficiency as well as dignity and community are used to evaluate the nature and structure of social welfare policies. Prerequisite: Admission to the program or instructor's permission. Grade only. Offered each semester on the Winona campus; offered in the spring semester only on the Rochester campus.

385 - Social Work Practice II - Families and Groups (3 S.H.)

This course is a continuation of Social Work Practice I (SOCW 365). It looks at generalist practice skills needed in assessment and to affect change utilizing a strengths perspective. Students learn to utilize these skills working with groups, families, and individuals of different backgrounds and cultures. Prerequisites: SOCW 365 and admission to the program. Grade only. Offered each semester on the Winona campus; offered in the spring semester only on the Rochester campus.

390 - Social Work Research: Process and Skills (3 S.H.)

This is an introductory course in social work research. The focus is on the relationships, process, and skills which are used to evaluate social work practice. The students work in groups with a variety of human service organization practitioners to gather data to answer research questions related to the organization. Prerequisite: SOCW 365 and admission to the program. Corequisite: Winona campus—SOCW 385; Rochester campus—SOCW 365. Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

400 - Practicum Preparation (4 S.H.)

This course aims to facilitate students' preparation for the practicum experience. The course includes development of interview skills, resumé building, selection of a practicum placement site, development of a learning contract, and preparation of a capstone research project. Prerequisites: Admission in the program and completion of (or in the process of completing) all course work for graduation except the Practicum and Seminar (SOCW 475). Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

410 - Analysis of Social Welfare Policy (3 S.H.)

The focus of this course is the ideology and content of social welfare policy, the process by which it is developed, its implications for social work practitioners at all levels, and methods of affecting change. Prerequisites: Admission to the program and successful completion of SOCW 380. Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

415 - Social Work Practice III — Organizations and Communities (3 S.H.)

This is the final of the practice courses designed to prepare students as generalist practitioners able to provide services to client systems at all levels. The focus of this course is on the evaluation and termination processes of planned change, crisis intervention, and macro skills of intervention. Prerequisites: Admission to the program and successful completion of SOCW 385. This course is taken concurrently with SOCW 400. Grade only. Offered each semester on the Winona campus; offered in the fall semester only on the Rochester campus.

420 - Child Welfare (3 S.H.)

This course looks at the problems vulnerable children face and the skills, policies, and programs needed to serve them. Prerequisite: SOCW 340 or instructor's permission. Grade only.

425 - Law and Social Work (3 S.H.)

This course is an overview of the law, the legal system, the hearing process, and the role of social workers in the legal arena. Prerequisite: SOCW 340 or instructor's permission. Grade only.

430 - Aging: Policies and Services (3 S.H.)

This course covers the problems faced by elders and the policies and programs created to help elders. Prerequisite: SOCW 340 or instructor's permission. Grade only.

435 - Social Work Practice with Diverse Populations (3 S.H.)

This course is designed to introduce social work students to the field of social work and diverse populations. This course focuses on social work practice with individuals, families, groups, organizations, and communities with an emphasis on transcultural practice. Variables of race, ethnicity, gender, class, and sexual orientation are all considered as they relate to generalist social work practitioners. This course will examine individual and institutional racism, sexism, classism, and homophobia. Prerequisite: SOCW 340. Grade only.

440 - Variable Topics in Social Work (1-6 S.H.)

A seminar course that analyzes topics and problems from the social work

perspective. (Topics will be chosen by the instructor and announced before registration.) Grade only.

445 - Globalization of Social Welfare (3 S.H.)

This course challenges the dominant paradigms that shape our increasingly small world. Examines the social consequences of international economic development and trade policies in social welfare and practice, and what can be done to prevent the erosion of the quality of life in our communities as a result of economic globalization. The course presents alternative paradigms for international and community economic development and suggests some of the roles for social work professionals as facilitators and partners in projects and processes of community empowerment across the globe. Prerequisite: SOCW 340. Grade Only.

450 - Independent Studies in Social Work (1-3 S.H.)

Intended to aid the student who has a special area of interest that goes beyond formal course limits. By arrangement. Grade only. Offered each semester.

460 - Special Projects in Social Work (1-3 S.H.)

For the student interested in pursuing an independent research project in social work. By arrangement. Grade only. Offered each semester.

480 - Integrative Social Work Seminar (3 S.H.)

This course provides the opportunity for students to integrate social work

theory with the external world through in-depth discussions of their practice experiences and research projects. Corequisite: To be taken concurrently with SOCW 475. Grade only. Offered each semester and summer on one or both campuses.

SOCIAL WORK FIELD COURSES

Note: All field courses require an additional fee to cover malpractice liability insurance.

350 - Field Experience I (3 S.H.)

This course provides students with an experience in a human service agency through 120 hours of volunteer service. Students meet regularly to share information about their respective placements. Prerequisite or corequisite: SOCW 340. May be taken twice for credit. P/NC only.

475 - Social Work Senior Practicum (12 S.H.)

Field placement in selected social service agencies under professional instruction. Includes the development and completion of a learning contract and a research project. Prerequisite: Satisfactory completion of all coursework required in the social work major. Corequisite: To be taken concurrently with SOCW 480. P/NC only.

SOCIOLOGY

Minné Hall, Room 228 (507-457-5420)

Criminal Justice: www.winona.edu/criminaljustice/

Sociology: www.winona.edu/sociology/

Mark Norman (Chairperson)

FACULTY

Brian Aldrich, Professor; A.B., Lewis and Clark College; M.S., Ph.D., University of Wisconsin-Madison; 1976 –

Ervin G. Bublitz, Professor; B.A., St. Mary's College (Minnesota); B.S., M.S., Winona State University; Ph.D., University of Utah; 1970 –

Jennifer J. Nargang Chernega; Assistant Professor; B.A., Concordia College (Minnesota); M.A., Ph.D., Loyola University (Chicago); 2007 –

Helen Dachelet, Associate Professor; B.A., B.S., M.S., Winona State University; Psy.D., University of St. Thomas; 1996 –

James R. Kobolt, Associate Professor; B.A., M.P.A., Park College; 2000 –

Paul J. Munson, Associate Professor; B.A., Augustana; M.A., University of Denver; J.D., University of Denver; 1999 –

J. Mark Norman, Professor; B.A., M.S., St. Cloud State University; Ph.D., South Dakota State University; 1996 –

Todd Paddock, Assistant Professor; B.S., University of Michigan; M.S., Cornell University; Ph.D., Indiana University; 2004 –

R. Stephen Schwartz, Professor; B.S., M.S., University of Oklahoma; Post-Graduate Certificate, University of Zambia (University of London, external); Ph.D., University of Iowa; 1973 –

PURPOSE

Sociology and criminal justice students who complete one of these programs are well prepared for professional employment in administrative and management positions in the private and public sectors, law enforcement and corrections, social welfare and casework, and graduate school.

PASS/NO CREDIT (P/NC) COURSES

Except for field experiences and internships, students must take all courses on a grade-only basis. Only grades of "C" or better in courses offered in the department can be used to meet major and minor requirements.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Sociology offers the following Sociology flag courses in the University Studies Program:

FLAG

Oral I

SOC 405 Models and Strategies of Intervention (3)

SOC 474 Intervention with Families (3)

SOC 491 Community Policing & Administration (3)

SOC 499 Senior Seminar in Sociology (3)

Math/Critical Analysis O

SOC 376 Introduction to Social Research (3)

Writing P

SOC 377 Sociological Theory and Methods (3)

SOC 378 Laboratory in Social Research (3)

SOC 404 Law Enforcement Investigation and Communication (3)

SOC 407 Offender Assessment and Management (3)

SOC 418 Criminal Law and Procedure (3)

SOC 435 Family Roles and Relationships (3)

SOC 440 Sociology of Dying and Death (3)

SOC 450 Sociology of Aging (3)

Flag courses that can be used to satisfy sociology major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - SOCIOLOGY (SOC)

43 S.H. (Minor Required)

Sociology examines how social experiences shape beliefs and behavior. As one of the social sciences, sociology stresses the use of scientific research methods and theories to study human social behavior in a wide variety of settings. Thus, the sociology major is designed to provide multiple opportunities for students to study how larger social processes influence thoughts and actions. The required courses are also designed to provide experience in building and testing theory as well as in collecting and evaluating data. Well-developed communication and research skills are highly valued in a variety of professions for which an education in sociology is desirable.

The program goals are (1) to develop knowledge and skills in foundation areas of sociology (basic concepts, sociological theory, research methods, and statistics); (2) to provide opportunities to apply the sociological perspective to asking, understanding, and explaining sociological questions; (3) to provide knowledge in one or more specialized areas within sociology; (4) to develop an understanding of the internal diversity of U.S. society and

its place within the international context; (5) to develop an understanding of the nature and effects of social inequality; and (6) to develop career and/or graduate school readiness.

The B.A. Sociology program not only contributes to the overall liberal arts education of students, it also teaches valuable analytical skills that include understanding and appreciating the experiences of diverse groups in society, identifying the various causes of social problems, and the application of quantitative and qualitative reasoning. These skills prepare students for a wide variety of careers including business, government, human services, criminal justice, law, and public and private research. The program emphasizes developing these skills through the integration of classroom study with supervised field instruction in a wide variety of placements.

ADMISSION REQUIREMENTS

1. Students must complete the B.A. Sociology foundation courses with a grade of "C" or higher.
2. Complete the program admission application form.

FOUNDATION COURSES TO BE COMPLETED PRIOR TO ADMISSION

English

† ENG 111 College Reading and Writing (4)

Sociology

SOC 150 Introduction to Sociology (3)

Statistics/Psychology

STAT 110 Fundamentals of Statistics (3) AND

STAT 115 Laboratory in Statistics (1) OR

O PSY 231 Statistics (3)

† Required for admission; however, the credits are not counted in the 43 credit hours needed in the major.

RETENTION AND GRADUATION REQUIREMENTS

Retention and graduation from the program requires that students meet the following requirements:

1. Maintain a minimum, cumulative GPA of 2.5 in all B.A. sociology courses taken at WSU.
2. Complete all sociology courses with a grade of "C" or higher.

B.A. SOCIOLOGY - GENERAL OPTION (SOC)

43 S.H. (Minor Required)

The following requirements are in addition to the foundation courses:

- O SOC 376 Introduction to Social Research (3)
 P SOC 377 Theory and Methods in Sociology (3)
 SOC 460 Internship (12)

ELECTIVES (18-19 S.H.)

Courses selected within the student's chosen area must come from the 300-level and above, be selected in consultation with the advisor, and contribute to meeting the goals of the sociology program.

B. A. SOCIOLOGY MAJOR - FAMILY STUDIES OPTION (SOCF)

43 S.H. (Minor Required)

In addition to the foundation courses, the following are also requirements:

- SOC 212 The Family (3)
 O SOC 376 Introduction to Social Research (3)
 SOC 412 Sexuality in American Society (3)
 P SOC 435 Family Roles and Relationships (3)
 P SOC 450 Sociology of Aging (3)
 SOC 460 Internship (12)
 SOC 470 Mediation and Conflict Resolution (3)
 I SOC 474 Intervention with Families (3)

ELECTIVES (3-4 S.H.)

Must be selected from 300-level and above in sociology.

B.A. SOCIOLOGY MAJOR - GERONTOLOGY STUDIES OPTION (SGER)

43 S.H. (Minor Required)

In addition to the foundation courses, the following are also requirements:

- O SOC 212 The Family (3)
 O SOC 376 Introduction to Social Research (3)

- SOC 434 Medical Sociology (3) or
 P SOC 435 Family Roles and Relationships (3)
 P SOC 440 Sociology of Dying and Death (3)
 P SOC 450 Sociology of Aging (3)
 SOC 460 Internship (12)
 I SOC 474 Intervention with Families (3)

ELECTIVES (3-4 S.H.)

Must be selected from 300-level and above in sociology.

B. A. SOCIOLOGY MAJOR - HUMAN SERVICES OPTION (SOCH)

43 S.H. (Minor Required)

In addition to the foundation courses, the following are also requirements:

- SOC 314 Juvenile Delinquency (3)
 SOC 334 Sociology of Education (3)
 O SOC 376 Introduction to Social Research (3)
 SOC 434 Medical Sociology (3)
 P SOC 435 Family Roles and Relationships (3)
 SOC 438 Health and Human Service Organizations (3)
 P SOC 450 Sociology of Aging (3)
 SOC 460 Internship (12)

ELECTIVES (3-4 S.H.)

Must be selected from 300-level and above in sociology.

B.A. SOCIOLOGY MINOR - GERONTOLOGY (SGER)

27 S.H.

REQUIRED COURSES (18 S.H.)

- SOC 150 Introduction to Sociology (3)
 SOC 385 or SOC 386 Field Experience (1-6)
 SOC 434 Medical Sociology (3)
 P SOC 435 Family Roles and Relationships (3)
 P SOC 440 Dying and Death (3)
 P SOC 450 Sociology of Aging (3)

Note: Field experience is required for sociology students and all other students except nursing students. This is not meant as a substitute for SOC 460. Equivalency credit may be granted; see coordinator of the gerontology minor (R. S. Schwartz).

ELECTIVES (9 S.H.)

Recommended electives are to be selected from 300-level or above in consultation with an advisor.

- SOC 340 Social-Cultural Anthropology (3)
 SOC 350 Population Analysis (3)
 SOC 412 Sexuality in American Society (3)
 SOC 421 Urban Sociology (3)
 SOC 425 Social Change and Social Movements (3)
 SOC 431 Social Class and Power (3 S.H.)
 SOC 438 Health and Human Services Organizations (3)

Other electives may be considered. See the coordinator of the gerontology program.

B.A. MINOR - SOCIOLOGY (SOCG)

18 S.H.

REQUIRED COURSES (9 S.H.)

- SOC 150 Introduction to Sociology (3)
 SOC 205 Social Interaction (3)
 SOC 216 Social Problems (3)

ELECTIVES (9 S.H.)

Electives within the department must total 9 S.H. and be selected from 300-level or above in sociology.

B.S. MAJOR - SOCIOLOGY: CRIMINAL JUSTICE (SCJC; SCJL)

62-63 S.H. No Minor Required

ADMISSION REQUIREMENTS

The B.S. Sociology: Criminal Justice major is designed to prepare students (1) for entry-level positions in criminal justice and (2) for entry into a number of graduate programs such as criminal justice, corrections, police administration, and other related disciplines. Students who wish to major in criminal justice must make application for admission into the program by obtaining a *Criminal Justice Student Handbook* from the WSU Bookstore. The handbook includes specific requirements and application procedures. In addition to completing an application form, each student is responsible for meeting the following requirements.

ADMISSION AND ACADEMIC STANDARDS

1. Completion of ENG 111 or equivalent with grade no lower than a "C."
2. Completion of the four (4) admissions courses with a minimum GPA of 2.50 and with grades no lower than "C." There are no exceptions to this requirement.

Note: Although law violations are not included in the program's admission standards, students should be aware that law violations may limit employment opportunities.

RETENTION REQUIREMENTS

Once admitted to the program, students must demonstrate acceptable progress in order to remain in good standing. Acceptable progress is defined as meeting the following retention requirements:

1. Students must maintain a 2.50 cumulative GPA for all courses taken in the Criminal Justice Program at WSU.
2. Students must complete all coursework in the criminal justice program without a grade lower than a "C." If a student completes a course with a grade lower than "C," the student must repeat the course.
3. Students must maintain their portfolio at a level acceptable to their faculty advisor and must complete their portfolio prior to graduation. (The portfolio is a representation of the student's knowledge base and skills; it includes research papers, report writing, videotapes, etc.). Students should consult with their individual faculty advisors.

REQUIRED COURSES FOR BOTH TRACKS (30-31 S.H.)

Sociology/Psychology

- SOC 150 Introduction to Sociology (3)
- SOC 210 Introduction to Criminal Justice (3)
- SOC 205 Social Interaction (3) OR
- * PSY 210 Introduction to Psychological Science (3)

Political Science

- * POLS 120 Introduction to American Politics (3)

Note: A student must apply to the Criminal Justice Program upon completion of all 100- and 200-level courses listed above.

Statistics/Psychology

- STAT 110 Fundamentals of Statistics (3) AND
- STAT 115 Laboratory in Statistics (1) OR
- O PSY 231 Statistics (3)

Sociology

- SOC 314 Juvenile Delinquency (3)
- SOC 315 Criminology (3)
- O SOC 376 Introduction to Social Research (3)
- P SOC 418 Criminal Law and Procedure (3)
- SOC 423 Race Relations and Minority Groups (3)

Notes:

1. STAT 110 is not a prerequisite for admission to the Criminal Justice program.
2. Computer skills are a necessary requirement for employment in the profession of criminal justice. It is strongly recommended that the student complete a computer science course.
3. The student must also be admitted to the Criminal Justice program in order to enroll in any 400-level or track course.
4. Note that all field courses have an additional fee to cover malpractice liability insurance.

TRACK SPECIALIZATION

Upon application to the criminal justice program, students select one or

both of the specialization tracks. If both tracks are selected, the student must complete two separate internships: one in corrections (SOC 461, Criminal Justice Internship, Corrections) and one in law enforcement (SOC 462, Criminal Justice Internship, Law Enforcement). See required courses for corrections and law enforcement below.

LAW ENFORCEMENT OPTION (SCJL)

32 S.H.

REQUIRED COURSES (21 S.H.)

- P SOC 404 Law Enforcement Investigation and Communication (3)
- SOC 417 Operations and Procedures in Law Enforcement (3)
- I SOC 491 Community Policing and Administration (3)
- SOC 462 Criminal Justice Internship Law Enforcement (12)

ELECTIVES (11 S.H.)

11 S.H. at the 300- or 400-level within the department

- SOC 420 Minnesota Criminal Code (3)

Note: Successful completion of SOC 420 is required for POST (Peace Officer Standards & Training) certification in Minnesota. Students seeking peace officer licensure in the state of Minnesota must successfully complete SOC 420 in addition to the summer skills component.

CORRECTIONS OPTION (SCJC)

32 S.H.

REQUIRED COURSES (24 S.H.)

- SOC 355 Corrections (3)
- I SOC 405 Models and Strategies of Intervention (3)
- SOC 406 Probation and Parole (3)
- P SOC 407 Offender Assessment (3)
- SOC 461 Criminal Justice Internship, Corrections (12)

ELECTIVES (8 S.H.)

8 S.H. at the 300- or 400-level within the department

COURSE DESCRIPTIONS (SOC)

All courses in the major, minor, options, concentrations, and licensures must be taken on a grade-only basis except internships and field experiences.

SOCIOLOGY

150 - Introduction to Sociology (3 S.H.)

An introduction to sociology as a social science concerned with the systematic study of human society; consideration of individuals, groups, and relationships. Grade only. Offered each semester.

205 - Social Interaction (3 S.H.)

A study of human interactions and relations among people, how social situations affect behavior, how people acquire the ability to interact as members of society, and the methods used to study human interaction. Recommended prerequisite: SOC 150. Grade only. Offered each semester.

212 - The Family (3 S.H.)

Analysis of the family as a group—historical, cultural, and institutional aspects including the analysis of group processes. Recommended prerequisite: SOC 150. Grade only. Offered each semester.

216 - Social Problems (3 S.H.)

The nature, characteristics and proposed solutions for selected social problems. Recommended prerequisite: SOC 150. Grade only. Offered each semester.

334 - Sociology of Education (3 S.H.)

An analysis of the American educational system in terms of its functions, formal and informal organization, and effects on social stratification and change. A selection of contemporary educational issues will be considered from a sociological perspective. Prerequisite: SOC 150. Grade only. Offered every two years.

340 - Social-Cultural Anthropology (3 S.H.)

The cross-cultural and comparative examination of different cultures with emphasis on the varieties and ranges of human behavior. Prerequisite: SOC 150. Grade only. Offered yearly.

350 - Population Analysis (3 S.H.)

Ways in which demographic factors (births, deaths, and migration) explain variations in social structures and processes. Examination of causes and consequences of current population growth at the regional, national, and international levels. Prerequisite: SOC 150. Grade only. Offered yearly.

376 - Introduction to Social Research (3 S.H.)

An introductory course in the use of social research methods. Basic knowledge and skills are developed in all phases of the social research process. Sections of this course are taught by sociology and criminal justice faculty. Prerequisite: SOC 150 and for B.A. Sociology majors, STAT 110 or PSY 231. Limited to 30 students. Grade only. Offered each semester.

377 - Sociological Theory and Methods (3 S.H.)

The examination of major schools of sociological theory with consideration of the interrelationship of theory with research methods. Prerequisites: SOC 150, STAT 110 or PSY 231, SOC 376 and admission to the B.A. Sociology program. Limited to 25 students. Grade only. Offered yearly.

378 - Laboratory in Social Research (3 S.H.)

A "hands-on" experience in the collection and interpretation of research data and the preparation of an empirical research report. Prerequisites: SOC 150, STAT 110 or PSY 231, SOC 376, SOC 377 and admission to the B.A. Sociology program. Limited to 25 students. Grade only. Offered yearly.

385 - Field Experience (1-6 S.H.)

An introductory field experience designed to acquaint students with professional responsibilities in an organization relevant to sociological practice. Prerequisites: SOC 150, STAT 110 or PSY 231, SOC 376, and admission to the B.A. Sociology program. P/NC only. Arranged.

386 - Field Experience-Gerontology (1-6 S.H.)

This takes place in a supervised environment in which the student is relevantly involved with selected aspects of social gerontology and working with the aged population. P/NC only. Arranged.

411 - Sociology of Religion (3 S.H.)

Comparative study of religious beliefs, institutions, and symbols and their roles in different societies. Prerequisite: SOC 150. Grade only. Offered every three years.

412 - Sexuality in American Society (3 S.H.)

An extensive review of recent research in the area with specific emphasis on behavioral and cultural aspects of sexuality. Prerequisite: SOC 150. Limit to 25 students. Grade only. Offered yearly.

421 - Urban Sociology (3 S.H.)

Growth, structure, and function of cities, spatial patterning, neighborhoods, and ethnic groups; social life of city dwellers and urban social change at the regional, national and international level. Prerequisite: SOC 150. Grade only. Offered yearly.

424 - Ethical Issues in Criminal Justice (3 S.H.)

Consideration of selected ethical issues in criminal justice organizations. Emphasis is on examining various ethical systems of practitioners and relations with various publics. Students will be given moral dilemmas and will consider their individual value system. Grade only. Offered yearly.

423 - Race Relations and Minority Groups (3 S.H.)

This course examines race and ethnic relations. It explores the concepts pertaining to such relations, e.g., discrimination, minorities, prejudice. It looks at the theories which attempt to explain prejudice and discrimination. It looks at the various minority groups from both current and historical perspectives. Finally, the course looks at oppression and the impact of oppression on people's lives. Prerequisite: SOC 150. Grade only. Offered each semester.

425 - Social Change and Social Movements (3 S.H.)

An examination of the processes through which values, norms, institutions, stratification systems, and social relationships are altered over time; the role of social movements in promoting or resisting these changes. Prerequisite: SOC 150. Grade only. Offered every three years.

428 - Small Towns and Non-Metro Regions (3 S.H.)

The study of the social organization of the non-metropolitan towns and regions in the U.S. and selected other countries. Prerequisite: SOC 150. Grade only. Offered every three years.

430 - Political Sociology (3 S.H.)

The organization of power into political structures and the social dynamics of this process. Prerequisite: SOC 150. Grade only. Offered every two years.

431 - Social Class and Power (3 S.H.)

Social classes, their membership, and their use of social, economic, and political power. Prerequisite: SOC 150. Offered periodically.

434 - Medical Sociology (3 S.H.)

Social factors associated with the incidence and treatment of illness and the social organization of medical institutions and distribution of medical services. Prerequisite: SOC 150. Grade only. Offered periodically.

435 - Family Roles and Relationships (3 S.H.)

Specific study of family roles, communication patterns, decision-making, and interpersonal relationships. Limited to 25 students. Prerequisites: SOC 150 and SOC 212. Grade only. Offered yearly.

437 - Sociology of Organizations (3 S.H.)

Analysis of patterns, regularities, design, and behavior of organizations in different environments and societies. Prerequisite: SOC 150. Grade only. Offered yearly.

438 - Health and Human Services Organizations (3 S.H.)

Analysis of patterns, regularities, design, and behavior in organizations providing health and human services. Prerequisite: SOC 150. Grade only. Offered yearly.

440 - Sociology of Dying and Death (3 S.H.)

An examination of various aspects of dying and death from a sociological perspective. Emphasis is on dying and death in American society; however, a cross-cultural perspective is included. Prerequisite: SOC 150. Grade only. Offered yearly.

450 - Sociology of Aging (3 S.H.)

Gerontology is the analytical examination of the aging process. Using a sociological perspective, this course studies the changing roles of the aged, problems confronting the aged, and other important issues. Prerequisite: SOC 150. Grade only. Offered yearly.

455 - Family Violence (3 S.H.)

Analysis and study of family violence in America. Emphasis is on understanding causes and effects of interpersonal violence. Students will examine the response of the criminal justice system to the dilemma surrounding family violence. Grade only. Offered yearly.

460 - Internship (1-12 S.H.)

An intensive, professionally supervised placement within an organization relevant to sociological practice. Emphasis is on the student assuming professional responsibilities and applying relevant knowledge and skills within the organization where they are placed. Prerequisites: SOC 150, STAT 110 or PSY 231, SOC 376, SOC 377, and admission to the B.A. Sociology program. P/NC only. Arranged.

470 - Mediation and Conflict Resolution (3 S.H.)

The course will provide an introduction to conflict management and mediation as a facilitative process for alternative dispute resolution. Basic theoretical frameworks related to conflict management will be covered and mediation skills will be developed. Prerequisites: SOC 150, senior standing in SOC/SW/CJ, and instructor's permission. Grade only. Offered yearly.

474 - Intervention with Families (3 S.H.)

This course provides an introduction to intervention with families involving home, school, and community resources in the facilitation of support and problem solving. Theoretical frameworks, research, and skills are covered. Prerequisite: SOC 150. Grade only. Offered every two years.

499 - Senior Seminar in Sociology (3 S.H.)

A culminating experience for senior sociology majors designed to synthesize, integrate, and assess what students have learned with respect to the stated goals of the B.A. Sociology program. Prerequisites: SOC 150, STAT 110 or PSY 231, SOC 376, SOC 377, admission to the B.A. Sociology program and senior standing. Grade only. Offered yearly.

SOCIOLOGY TOPICS AND INDEPENDENT STUDIES COURSES

480 - Variable Topics in Sociology (1-3 S.H.)

A seminar course on selected topics and problems from the sociological perspective (subject to be chosen by instructor and announced before registration.) Prerequisite: 12 credits of sociology or instructor's permission. Grade only. Offered on demand.

485 - Independent Readings in Sociology (1-3 S.H.)

Intended to aid the student who has a special area of interest that goes beyond formal course limits. By arrangement.

487 - Special Projects in Sociology (1-3 S.H.)

For the student interested in pursuing an independent research in sociology. Grade only. By arrangement.

CRIMINAL JUSTICE

210 - Introduction to Criminal Justice (3 S.H.)

An introductory examination of the criminal justice system from a practitioner's perspective. This course provides an applied framework for the study of criminal justice by examining and analyzing the agencies of justice and the procedures they use to identify and manage criminal and juvenile offenders. Grade only. Offered each semester.

314 - Juvenile Delinquency (3 S.H.)

In-depth analysis of juvenile delinquency, its development, control, treatment, and prevention. Prerequisites: SOC 150, SOC 210, SOC 315 and/or instructor's permission. Limited to 30 students. Grade only. Offered each semester.

315 - Criminology (3 S.H.)

An analysis of the theory and measurement of crime. Prerequisites: SOC 150, SOC 210 and/or instructor's permission. Limited to 30 students. Grade only. Offered each semester.

355 - Corrections (3 S.H.)

An analysis of the systems and functions of corrections including the areas of administration of programs and security. Limited to 30 students.

Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Grade only. Offered each semester.

387- Field Experience Corrections (1-6 S.H.)

An introductory experience designed to acquaint students with the structure, processes, and policies involved in professional human services agencies. Open to Sociology-Criminal Justice majors only. May be repeated once. Arranged placement. Prerequisite: SOC 150. P/NC only. Offered each semester.

388- Field Experience Law Enforcement (1-6 S.H.)

An introductory experience designed to acquaint students with the structure, processes, and policies involved in professional human services agencies. Open to Sociology-Criminal Justice majors only. May be repeated once. Arranged placement. Prerequisite: SOC 150. P/NC only. Offered each semester.

404 - Law Enforcement Investigation and Communication (3 S.H.)

This course is designed to introduce the student to law enforcement investigative and communication processes. The course identifies the four sources of investigative information, and provides practice in interviewing, interrogation, and investigative report writing. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 15 students. Grade only. Offered each semester.

405 - Models and Strategies of Intervention (3 S.H.)

An in-depth study of therapeutic methodologies and skills used in the correctional services. Emphasis is on assisting individual clients and small groups with behavioral and cognitive changes. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 20 students. Grade only. Offered each semester.

406 - Probation and Parole (3 S.H.)

This course is designed to introduce the criminal justice student to the responsibilities of probation and parole officers. This course provides knowledge of probation and parole services, skill building in supervision of offenders and practical writing skills. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 25 students. Grade only. Offered each semester.

407 - Offender Assessment and Management (3 S.H.)

This course addresses the knowledge and skills required in assessing offender custody and program needs as well as the management of offenders in institutions and the community. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 20 students. Grade only. Offered each semester.

417 - Operations and Procedures in Law Enforcement (3 S.H.)

Operational and procedural requirements in law enforcement including community relations, testifying and criminal investigation, the police subculture, use of force, ethics, and patrol activities. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission.

Limited to 30 students. Grade only. Offered each semester.

418 - Criminal Law and Procedure (3 S.H.)

Analysis and study of substantive criminal law and procedure from arrest through sentencing. The criminal process is examined in terms of legal steps and decision-making. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 30 students. Grade only. Offered each semester.

420 - Minnesota Criminal Code (3 S.H.)

This course deals with an analysis of the Minnesota Criminal Code and review of POST requirements. Limited to students seeking POST certification. Limited to 20 students. Prerequisites: Admission to the Sociology-Criminal Justice Law Enforcement track, SOC 418, and instructor's permission. Grade only. Offered yearly.

461 - Criminal Justice Internship Corrections (1-12 S.H.)

An intensive, professionally supervised placement in a selected criminal justice organization for the purpose of providing the student with an experience that integrates knowledge, methodology, and skills in a practical setting. Prerequisites: Admission to the Sociology-Criminal Justice program; at least junior standing; and/or instructor's permission. P/NC only. Offered each semester.

462 - Criminal Justice Internship Law Enforcement (1-12 S.H.)

An intensive, professionally supervised placement in a selected criminal justice organization for the purpose of providing the student with an experience that integrates knowledge, methodology, and skills in a practical setting. Prerequisites: Admission to the Sociology-Criminal Justice program; at least junior standing; and/or instructor's permission. P/NC only. Offered each semester.

478 - Seminar in Criminal Justice (1-3 S.H.)

An integrated examination of the problem areas in the present criminal justice system and an analysis of potential solutions. Limited to 20 students. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Grade only. Offered yearly.

490 - Correctional Administration (3 S.H.)

An analysis of current topics in correctional administration. A survey of theories or management styles will be examined. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 20 students. Grade only. Offered every other year.

491 - Community Policing and Administration (3 S.H.)

This course is designed to assist the student in identifying and implementing a community policing philosophy using contemporary law enforcement organizational management processes. Prerequisites: Admission to the Sociology-Criminal Justice program and instructor's permission. Limited to 25 students. Grade only. Offered each semester.

SPECIAL EDUCATION

Gildemeister Hall, Room 221 (507-457-5535; fax: 507-457-2483)

www.winona.edu/specialeducation

Carol Long (Chairperson)

FACULTY

Carol A. Long, Associate Professor; B.S., M.A., Ph.D., University of Missouri-Columbia, 1993 –

Jeanne Danneker, Assistant Professor; B.S., Winona State University, M.S., University of Wisconsin-La Crosse, Ph.D., University of Wisconsin-Madison, 2007 –

SPECIAL EDUCATION (SPED)

WSU offers two undergraduate programs and two graduate programs leading to full K-12 licensure by the State of Minnesota:

- Learning Disabilities K-12 Licensure (109 credits)
- Developmental Disabilities, (Mild/Moderate/Severe/Profound) K-12 Licensure (121 credits)

REQUIREMENTS FOR MAJORING IN SPECIAL EDUCATION (LD, DD)

It is of critical importance that applicants to the program see a Special Education advisor immediately upon making the decision to major in Special Education. This is true for double majors as well.

REQUIREMENTS FOR APPLICATION AS A SPECIAL EDUCATION MAJOR

1. 2.75 GPA for at least 30 credits.
2. "B" or better in ENG 111 and CMST 191.
3. "C" or better in MATH 100 or higher mathematics. (STAT 110 recommended by the Special Education Department)
4. Completion of the Reading, Math, and Writing sections of the Pre-Professional Skills Test (PPST) before applying to the program.
5. Attend an Education Department admission meeting, and complete an Application to Teacher Education.
6. Attend a Special Education admission meeting.
7. Complete a Special Education Department application form, essay, and interview.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Special Education offers the following flag courses in the University Studies Program:

FLAG

Oral I

- SPED 441 Practicum B Developmental Disabilities (15)
- SPED 446 Practicum B Learning Disabilities (15)

Flag courses that can be used to satisfy special education major/minor requirements are identified in the lists of required courses and electives later in this section.

B.S. - SPECIAL EDUCATION, LEARNING DISABILITIES K-12 LICENSURE (SELD)

I. UNIVERSITY STUDIES (See page 18.)

Basic Skills (13 S.H.)

- ENG 111 College Reading and Writing (4) [Grade of B or better required]
- CMST 191 Introduction to Public Speaking (3) [Grade of B or better required]
- MATH 100 or higher mathematics (3) [Grade of C or better required] (STAT 110 recommended by SPED Department)
- HERS 204 Personal and Community Health (3)

Arts and Sciences Core (22 S.H.)

- † Humanities elective (3)
- † Humanities elective (3)
- Social Science: PSY 210 Introduction to Psychological Science (3)
- Social Science Elective: SPED 400 Education of Exceptional Children/Youth (3)

- † Natural Science elective (with lab) (4)

- † Natural Science elective (3)

- † Fine and Performing Arts elective (3)

Unity and Diversity (12 S.H.)

- † Critical Analysis elective (3)
- † Science and Social Policies elective (3)
- † Global Studies/Multicultural: EDUC 308 Human Relations and Student Diversity (admission to Teacher Education required)
- † Contemporary Citizenship/Democratic Institutions elective (3)
- † Course to be chosen from the University Studies list of approved courses.

II. PROFESSIONAL EDUCATION SEQUENCE

(Minimum 16 S.H.; admission to Teacher Education required.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 304 Human Development and Learning: Middle Level and K-12 (4) OR

- EDUC 305 Human Development and Learning: Secondary (4)

- EDUC 308 Human Relations and Student Diversity (3)
[see also global studies/multicultural above]

- O EDUC 311 Instructional Planning and Assessment: Middle Level and K-12 (3) OR

- O EDUC 312 Instructional Planning and Assessment: Secondary (3)

- P EDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)

- P EDUC 459 The Professional Educator (3)

III. SPECIALTY COURSES (minimum 16 S.H.)

- EDUC 328 Teaching Reading and Language Arts I (3) AND

- EDUC 329 Teaching Reading and Language Arts II (3) AND

- EDUC 429 Secondary Reading and Teaching Strategies (4) OR

- SPED 414 Multisensory/Comprehensive Language Arts Instruction I (5) AND

- SPED 415 Multisensory/Comprehensive Language Arts Instruction II (5)

- EDUC 334 Teaching Mathematics in the Elementary School (3)

- SPED 425 Inclusion in Regular Classrooms (3)

IV. LICENSURE COURSES (admission to Special Education required)

Learning Disabilities (36 S.H.)

- SPED 400 Education of Exceptional Children/Youth (3)
[sophomore status required; see also social science requirement above.]

- SPED 405 Student Management Systems (3)

- SPED 410 Introduction to Assessment/Methods (3)

- SPED 411 Practicum A (3)

- SPED 420 Special Education Administrative Procedures (3)

- SPED 430 Characteristics of Students with Disabilities (3)

- SPED 445 Assessment/Methods for Students with Learning Disabilities (3)

- I SPED 446 Practicum B-Learning Disabilities (15)

Note: SPED 410 and SPED 411 must be taken concurrently.

B.S. - SPECIAL EDUCATION, DEVELOPMENTAL DISABILITIES K-12 LICENSURE (SEDD)

I. UNIVERSITY STUDIES (See page 18.)

Basic Skills (13 S.H.)

- ENG 111 College Reading and Writing (4)
[Grade of "B" or better required]

- CMST 191 Introduction to Public Speaking (3)
[Grade of "B" or better required]

- MATH 100 or higher mathematics (3) [Grade of "C" or better required]
(STAT 110 recommended by SPED Department)

- HERS 204 Personal and Community Health (3)

Arts and Sciences Core (22 S.H.)

- † Humanities elective (3)

- † Humanities elective (3)

- Social Science: PSY 210 Introduction to Psychological Science (3)

- Social Science Elective: SPED 400 Education of Exceptional Children/Youth (3)

- † Natural Science elective (with lab) (4)

- † Natural Science elective (3)

- † Fine and Performing Arts elective (3)

Unity and Diversity (12 S.H.)

- † Critical Analysis elective (3)

- † Science and Social Policies elective (3)

- † Global Studies/Multicultural: EDUC 308 Human Relations and Student Diversity (admission to Teacher Education required)

- † Contemporary Citizenship/Democratic Institutions elective (3)

† Course to be chosen from the University Studies list of approved courses.

II. PROFESSIONAL EDUCATION SEQUENCE

(Minimum 16 S.H.; admission to Teacher Education required.)

Notes:

1. These courses require formal admission to the teacher education program. (See page 91, "Admission to the WSU Teacher Education Program.")
2. The College of Education plans to restructure some program offerings in 2007-2008. As a result, the content, numbering, and/or credit hours for Professional Education Sequence courses will likely be revised after this catalog goes to print. To obtain the latest course requirements, please refer to the current program sheets, which are available from the department office or online at www.winona.edu/education/advising.

- * EDUC 304 Human Development and Learning: Middle Level and K-12 (4) OR

- EDUC 305 Human Development and Learning: Secondary (4)

- EDUC 308 Human Relations and Student Diversity (3)
[see also global studies/multicultural above]
- O EDUC 311 Instructional Planning and Assessment: Middle Level and K-12 (3) OR
- O EDUC 312 Instructional Planning and Assessment: Secondary (3)
- P EDUC 449 Middle Level Philosophy, Organization and Interdisciplinary Planning (3)
- P EDUC 459 The Professional Educator (3)

III. SPECIALTY COURSES (minimum 16 S.H.)

- EDUC 328 Teaching Reading and Language Arts I (3) AND
EDUC 329 Teaching Reading and Language Arts II (3) AND
EDUC 429 Secondary Reading and Teaching Strategies (4) OR
SPED 414 Multisensory/Comprehensive Language Arts Instruction I (5) AND
- SPED 415 Multisensory/Comprehensive Language Arts Instruction II (5)
- EDUC 334 Teaching Mathematics in the Elementary School (3)
- SPED 425 Inclusion in Regular Classrooms (3)

IV. LICENSURE COURSES (admission to Special Education required)

Developmental Disabilities (48 S.H.)

- SPED 400 Education of Exceptional Children/Youth (3)
[sophomore status required; see also social science requirement above]
- SPED 405 Student Management Systems (3)
- SPED 407 Management Techniques for Severe Developmental Disabilities (3)
- SPED 408 Functional Skills Development (3)
- SPED 409 Medical Aspects of Developmental Disabilities (3)
- SPED 410 Introduction to Assessment/Methods (3)
- SPED 411 Practicum A (3)
- SPED 420 Special Education Administrative Procedures (3)
- SPED 430 Characteristics of Students with Disabilities (3)
- SPED 431 Language/Sensory Stimulation (3)
- SPED 440 Assessment/Methods for Students with Developmental Disabilities (3)
- I SPED 441 Practicum B-Developmental Disabilities (15)

Note: SPED 410 and SPED 411 must be taken concurrently.

COURSE DESCRIPTIONS (SPED)

400 - Education of Exceptional Children/Youth (3 S.H.)

An overview to assist human service professionals in understanding the educational, vocational, and other transitional needs of individuals who are speech impaired, learning disabled, emotionally disturbed, behaviorally disordered, deaf, blind, mentally disabled, physically disabled, health impaired, or gifted. IDEA, ADA, and Section 504 as well as parent participation are stressed. Grade only. Offered each semester and summer.

405 - Student Management Systems (3 S.H.)

A study of management systems used in modern preschool through high school education settings with emphasis upon preventive, proactive techniques. Both regulated and unregulated management systems for regular education and special education students are taught. Enrollees may choose to obtain certification from the National Crisis Prevention Institute as a result of course completion. Grade only. Offered each semester.

407 - Management Techniques for Severe Developmental Disabilities (3 S.H.)

Management of extremely challenging behavior problems (e.g., self-stimulation, self-injurious behavior, ritualistic behavior, severe attention deficits, etc.). Included are less severe behaviors which inhibit acquisition, maintenance, and generalization of newly learned skills. It is part of a 12-credit corequisite sequence with SPED 408, 409, and 431. Advance application and departmental permission to enroll. Prerequisites: SPED 400, 405, 420. Grade only.

408 - Functional Skills Development (3 S.H.)

Methods and materials utilized in teaching functional skills to persons with severe handicaps. Motor-physical mobility, self-help/care, independent living, self-sufficiency, pre-employment, and daily living skills are emphasized. Objective is to develop skills that may be used in self-care and assistive care environments. It is part of a 12-credit corequisite sequence with SPED 407, 409, and 431. Advance application and departmental permission to enroll. Prerequisites: SPED 400, 405, 420. Grade only.

409 - Medical Aspects of Developmental Disabilities (3 S.H.)

Emphasis is placed upon acquiring knowledge in the medical aspects of severe disability which assist the teacher in communicating with the medical profession and other caregivers in a multidisciplinary setting. The learning

of first-response techniques that increase the safety of all students/clients is also emphasized. It is part of a 12-credit corequisite sequence with SPED 407, 408, and 431. Advance application and departmental permission to enroll. Prerequisites: SPED 400, 405, 420. Grade only.

410 - Introduction to Assessment/Methods (3 S.H.)

An introduction to the basic components of Special Education assessment, curriculum, instruction, and IEP development. Standardized and informal assessment procedures and their relationship to direct instruction are emphasized. Prerequisites: SPED 400, 405, EDUC 304 or 305 or equivalent, EDUC 311 or 312 or equivalent; methods courses in math and reading recommended. Concurrent enrollment in SPED 411; departmental permission to enroll. Grade only. Offered twice yearly.

411 - Practicum A (3 S.H.)

Practical application and guided practice in effective teaching procedures for students with disabilities. Involves placement in a special education classroom or inclusive setting daily for three to four hours. Prerequisites: Admission to the Special Education program; SPED 400, 405, EDUC 304 or 305 or equivalent, EDUC 311 or 312 or equivalent; methods courses in math and reading recommended. Concurrent enrollment in SPED 410; advance application, departmental permission to enroll. P/NC only. Offered twice yearly.

414 - Multisensory/Comprehensive Language Arts Instruction I (5 S.H.)

The first of a two-course sequence (SPED 414 and 415) in literacy methods. This first course examines the integration of reading, writing, listening, and speaking competencies in a unified literacy curriculum for learners from kindergarten through grade 12. Instructional emphasis is placed upon learning the sound/symbols associations for all levels of written language including the multisensory essential teaching techniques in literacy instruction based on the original work of Orton and Gillingham. Instruction encompasses linguistic rules and the structure of English from elementary to the highest levels of vocabulary, and matching appropriate instructional strategies with the present knowledge of learners and their language learning capabilities. A required supervised practicum is integral to the course. WSU students enrolled in this course must demonstrate mastery of the skills learned by teaching students with reading difficulties under supervised conditions. This two-course sequence meets the Minnesota Board of Teaching reading competency requirements. Prerequisites: None. Grade only. Offered yearly.

415 - Multisensory/Comprehensive Language Arts Instruction II (5 S.H.)

The second of a two-course sequence (SPED 414 and SPED 415) in literacy methods extends the examination of reading, writing, listening, speaking, and viewing competencies into all areas of language arts. The focus will be on applying multisensory teaching techniques based on the original work of Orton and Gillingham to all the areas needed for literacy competencies: word decoding and encoding, comprehension skills, written expression skills, vocabulary development, and knowledgeable use of grammar. This will also include assessment of an individual's specific instructional needs and ways to adapt instruction of essential concepts to fit those needs at all levels of literacy required by learners from kindergarten through high school. A required supervised practicum is integral to the course. WSU students enrolled in this course must demonstrate mastery of the skills learned by teaching students with reading difficulties under supervised conditions. This two-course sequence meets the Minnesota Board of Teaching reading competency requirements. Prerequisites: SPED 414. Grade only. Offered yearly.

420 - Special Education Administrative Procedures (3 S.H.)

An overview of special education delivery including finances, legislation, philosophic considerations, least restrictive approaches, parent involvement, and due process safeguards. Local, state and federal rules and regulations are studied as are federal legislation including IDEA, ADA, and Section 504. Prerequisite or corequisite: SPED 400. Grade only. Offered each semester.

425 - Inclusion in Regular Classrooms (3 S.H.)

Procedures for modification of the regular classroom curriculum and instruction to meet the individual needs of students with disabilities. Special attention is paid to professional collaboration with regular educators. Prerequisites: SPED 400, 405, 420, and acceptance in the Special Education Program. Grade only. Offered yearly.

430 - Characteristics of Students with Disabilities (3 S.H.)

This course is designed to provide the student with an understanding of the characteristics of students who are developmentally disabled, learning disabled, or emotionally/behaviorally disordered. Implications for planning instruction and issues related to the field of Special Education are identified. Grade only. Offered each semester.

431 - Language/Sensory Stimulation (3 S.H.)

Methods and procedures for the stimulation, development, and augmentation of communication skills among the severely disabled. Included are alternative communication methods such as basic signing and technological augmentation that will assist the severely disabled in participating in less restrictive environments and their own care. It is part of a 12-credit corequisite sequence with SPED 407, 408, and 409. Advance application and departmental permission to enroll. Prerequisites: SPED 400, 405, 420. Grade only.

440 - Assessment/Methods for Students with Developmental Disabilities (3 S.H.)

Knowledge and skills for professional entry-level assessment and program development/adaptation for students with developmental disabilities including transition and paraprofessional supervision. Offered yearly. Prerequisites: SPED 400, 405, 410, 411, 420, 425, and 430; departmental permission to enroll. May be taken before or concurrently with SPED 441. Grade only.

441 - Practicum B Developmental Disabilities (15 S.H.)

Demonstration of competencies by the student teacher in professional entry-level knowledge and skills in assessment and program development/adaptation for students with developmental disabilities in all-day, supervised school settings. Student teaching experience is full-time daily for a full semester. Admission to the special education major required. Advance application and departmental permission to enroll. Prerequisites: Concurrent or previous enrollment in SPED 440, formal application at least two semesters prior to enrollment. All university studies, professional sequence, and methods courses except SPED 440 must be taken before Practicum B. P/NC only. Offered each semester.

445 - Assessment/Methods for Students with Learning Disabilities (3 S.H.)

Advanced skills and understanding of academic, processing and behavioral assessments, curriculum and instruction programs for students with learning disabilities. Prerequisites: SPED 410, concurrent enrollment in SPED 446, and departmental permission to enroll. May also be taken before SPED 446. Grade only. Offered each semester.

446 - Practicum B Learning Disabilities (15 S.H.)

Demonstration of competencies by the student teacher in professional entry-level knowledge and skills in assessment and program development/adaptation for students with learning disabilities in all-day, supervised school settings. Student teaching experience is full-time daily for a full semester. Prerequisites: Concurrent or previous enrollment in SPED 445, formal application at least two semesters prior to enrollment. All university studies, professional sequence, and methods courses except SPED 440 must be taken before Practicum B. Admission to the special education major required. Advance application and departmental permission to enroll. P/NC only. Offered each semester.

490 - Seminar/ Workshop (1-3 S.H.)

The subject matter to be developed by the Special Education Department and instructor prior to the workshop or seminar. Students may repeat the course without limitation on the number of credits as long as the subject matter is different. Grade only. Offered on demand.

499 - Individual Study (1-3 S.H.)

Opportunity for the qualified advanced undergraduate and graduate student to work independently. Topics may include research, development of special projects, selected readings, etc. Time arranged. Prerequisites: Major advisor's permission. May be repeated. Offered each semester.

THEATRE AND DANCE

Performing Arts Center, Room 215 (507-457-5230)

www.winona.edu/thad

_____ (Chairperson)

FACULTY

Gretchen Cohenour, Professor; B.A., Rockford College; M.F.A., University of Wisconsin-Madison; 1989 –

Vivian Fusillo, Professor; B.A., Marymount College; M.A., Stephen F. Austin State University; 1968 –

Sharon Mansur, Assistant Professor; B.A., Connecticut College; M.F.A., George Mason University; C.M.A., Laban/Bartenieff Institute of Movement Studies; 2005 –

Peggy Sannerud, Assistant Professor; B.S., Northwestern University; M.F.A., University of Minnesota-Twin Cities; 2003 –

PURPOSE

The Department of Theatre and Dance (THAD) offers the B.A. major in theatre and minors in theatre and dance.

- The liberal arts theatre major offers cognitive, creative, and practical classes that integrate the study of theory and history into performance. The program develops kinesthetic, cognitive, and creative understanding as well as skills such as keen perception, imaginative problem-solving, concentration, and respect for craft, which are important to original work in all fields.
- The theatre minor trains students to produce and present material effectively through the medium of performance.
- The dance minor provides an opportunity for students in any discipline to use the dance experience to enhance body/mind integration and to gain access to creative potential through the art of movement.

Theatre majors take coursework in acting, directing, theatre history, design, and technical production, and then demonstrate their artistic ability by presenting Senior Capstone Production work as a performer, designer, or director. In addition, students may arrange to do independent study with a faculty member or gain hands-on experience in the professional world through an internship. Students who are interested in theatre and dance have ample opportunity to practice their craft under the guidance of experienced faculty. In a recent year, the department's productions gave 200 students the opportunity to fill nearly 350 performance, design, and crew roles.

Department alumni have successfully built careers in fields ranging from professional theatre to high school and college teaching to marketing analysis, county court management, and small business ownership. In response to a recent survey, alumni report an average career satisfaction of 3.40 on a 4.00 scale.

PASS/NO CREDIT (P/NC) COURSES

Except for the THAD Showcase, internships, and practica, students must take all courses in their THAD major and minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit-only or grade-only basis are so designated in the course descriptions.

THAD SHOWCASE (THAD 090) AND LAB/PRODUCTION CREW REQUIREMENTS

Theatre major students are normally required to enroll in THAD 090 (THAD Showcase) every semester, and to graduate, they are required to earn a grade of "P" in the course six times during their academic career unless excused by the department chairperson. Dance and theatre minor students are normally required to earn a grade of "P" in the course four times unless excused by the department chairperson; one of the dance minor's enrollments must be in the student's final semester.

Theatre major and minor students enrolled in a course eligible for that major or minor are also required to complete a specified number of hours of work on a Main Season production crew during the semester. All students cast in a Main Season production have the same responsibility. Some THAD courses carry additional production responsibilities; see Course Descriptions for details.

THAD MAJORS AND MINORS

1. Theatre majors may minor in dance, but they may not minor in theatre.
2. New students who intend to major in theatre or minor in dance are strongly encouraged to consult with a THAD Department faculty member before registering for courses in their first semester. Failure to do so may delay graduation by a year. Continuing theatre majors are required to confer with their departmental advisor before registering for classes each semester.
3. Students majoring in theatre are required to complete THAD 291 six (6) times with a grade of "C" or better. Theatre minors are required to complete THAD 291 twice. If students believe they should be excused from all or a portion of this requirement, they must petition the department faculty for an exemption. This petition must be filed in the semester during which the student first declares his/her major or minor.
4. Students are strongly encouraged to take ENG 111 and CMST 191 in the first year and are required to complete these courses with a grade of "C" or better before enrolling in Writing flag and Oral flag THAD courses. HIST 121 is required prior to enrollment in THAD 210 or THAD 310.
5. Satisfactory completion of all prerequisite courses is required before a student may enroll in subsequent courses in the theatre major. ("Satisfactory completion" is defined as "completion with a grade no lower than "P" or "C.")
6. The THAD web page contains the most recent curriculum updates; refer to the web page for revisions made since the printing of this catalog.

TRANSFER STUDENTS

1. Theatre majors and minors transferring to WSU with an Associate in Arts degree will be exempted from 50% of the THAD 090 and THAD 291 requirements listed above.
2. In order to graduate from WSU with a theatre major, a transfer student must complete at least 15 credits of WSU Theatre and Dance Department coursework numbered 300 or above.

ADDITIONAL GRADUATION REQUIREMENTS

For a checklist of the University's graduation requirements, see page 23. Specific requirements for THAD majors are as follows:

1. Earn a grade of "C" or better in each course taken for the theatre major.
2. Earn a GPA of 2.5 or better in the theatre major.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use Flag courses to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Department of Theatre and Dance offers the following flag courses in the University Studies Program:

FLAG

Oral I

- THAD 307 Design II Scenery and Costumes (3)
THAD 309 Design II Lighting and Sound (3)

Math/Critical Analysis O

- THAD 321 Play Directing (3)

Writing P

- THAD 210 Theatre History and Dramatic Literature I (3)
THAD 310 Theatre History and Dramatic Literature II (3)

Flag courses that can be used to satisfy Theatre and Dance major/minor requirements are identified in the lists of required courses and electives in this section.

B.A. MAJOR - THEATRE (THTR)

44 S.H. (Minor Required)

REQUIRED COURSES - THAD (41 S.H.)

- 090 Showcase (0; enrollment with a grade of "P" required each semester any other major course is taken unless excused by the department chairperson)
107 Introduction to Technical Theatre (2)
119 Play Analysis (3)
131 Performance I (3)
207 Design Communication (3)
P 210 Theatre History/Dramatic Literature I (3)
231 Performance II (3)
291 Rehearsal and Performance (1; 6 S.H. required)
I 307 Design II Scenery and Costumes (3) OR
309 Design II Lighting and Sound (3)
P 310 Theatre History/Dramatic Literature II (3)
O 321 Play Directing (3)
331 Performance III (3)
395 Topics (1-3; 2 S.H. required)
490 Capstone Production Project (3)
495 Theatre Senior Seminar (1)

ADDITIONAL REQUIREMENTS (3 S.H.)

- * HIST 121 Western Civilization, 1500-1815 (3)

PORTFOLIO REQUIREMENT

The Theatre major curriculum has a portfolio requirement, which is met by satisfactory completion of the requirements of THAD 495 Theatre Senior Seminar.

B.A. MINOR - THEATRE (THTR)

19 S.H.

REQUIRED COURSES - THAD (16 S.H.)

- 090 Showcase (0; enrollment with a grade of "P" required each semester any other major course is taken unless excused by the department chairperson)

- 107 Introduction to Technical Theatre (2)
119 Play Analysis (3)
131 Performance I (3)
207 Design Communication (3) OR
231 Performance II (3)
P 210 Theatre History/Dramatic Literature I (3) OR
P 310 Theatre History/Dramatic Literature II (3)
291 Rehearsal and Performance (1; 2 S.H. required)

ELECTIVES (3 S.H.)

3 S.H. from 300- or 400-level THAD courses for which prerequisites have been met.

B.A. MINOR - DANCE (DANC)

26 S.H.

REQUIRED COURSES - THAD (17 S.H.)

Theory (9 S.H.)

- † 090 THAD Showcase (0)
115 Dance Appreciation (3)
131 Performance I (3)
322 Dance Composition (3)

†Four enrollments in THAD 090 THAD Showcase (0 S.H.) with a grade of "P" are required. One of these enrollments must be in the student's final semester, when the student will assemble the required portfolio (see "Portfolio Requirement" on page 211).

TECHNIQUE (8 S.H.)

Must include at least 5 S.H. in either ballet or modern dance from the following list. Each technique class may be repeated once for credit.

THAD Courses:

- 157 Ballet I (1)
257 Ballet II (2)
357 Ballet III (2)
457 Ballet IV (2)
155 Modern Dance I (1)

- 255 Modern Dance II (2)
 355 Modern Dance III (2)
 455 Modern Dance IV (2)
 153 Jazz Dance I (1)
 253 Jazz Dance II (2)

ELECTIVES (9 S.H.)

Biology – BIOL

- * 211 Anatomy and Physiology I (4)

Health, Exercise and Rehabilitative Sciences – HERS

- 205 Nutrition for Lifetime Wellness (3)
 291 Prevention/Care of Athletic Injuries (2)
 370 Kinesiology/Biomechanics (4)

Theatre and Dance – THAD

- 107 Introduction to Technical Theatre (2)
 137 Dance Repertory I (1-2)
 141 Oral Interpretation (3)
 151 Tap Dance (1)
 215 Introduction to Laban Movement Analysis (3)
 231 Performance II (3)
 237 Dance Repertory II (1-2)
 295 Making Interdisciplinary Connections (3)
 331 Performance III (3)
 315 Dancing Through History (3)
 337 Dance Repertory III (1-2)
 399 Internship (1-16)
 437 Dance Repertory IV (1-2)
 499 Independent Studies in THAD (1-8)

Note: Each Dance Repertory class (THAD 137, 237, 337, 437) may be repeated twice for credit for a total of 2-4 S.H.) In addition, advanced THAD dance technique courses may be used as electives if not taken to fulfill requirements in the “Technique” category.

Physical Education and Sport Science – PESS

- 112 Folk/Square Dance (1)
 120 Ballroom Dance (1)
 137 Fencing (1)
 144 Contemporary Activities (1) (Yoga or Pilates or Tai Chi sections only)
 199 Lifetime Fitness (2)

Music – MUS

- 114 World Music (3)

Philosophy – PHIL

- 280 Philosophy of Art (3)

PORTFOLIO REQUIREMENT

Upon declaring a dance minor, students should schedule a “portfolio appointment” with Professor Gretchen Cohenour, PAC Room 212 (457-5665). Dance minors are required to document their development while at WSU by maintaining chronological videotapes of their work and other supporting written and visual materials, organized in portfolio form. The completed portfolio must be submitted for faculty review by April 1 in the year of graduation or by November 1 for mid-year graduates.

COURSE DESCRIPTIONS (THAD)

090 - THAD Showcase (0 S.H.)

Once-weekly sessions present creative work in theatre and dance courses, critiques of productions, discussions of professional, educational, and employment issues. Repeatable: Grade of “P” in 6 enrollments normally required of theatre majors; 4 of theatre minors and dance minors. P/NC only. Offered each semester.

100 - Theatre Activities (1 S.H.)

Active participation in a major theatre or dance production as performer or in box office, scenic studio, or costume studio. Course is intended for non-theatre majors; may be repeated up to 6 S.H. Offered each semester.

107 - Introduction to Technical Theatre (2 S.H.)

Study of non-performance aspects of theatre for theatre and teaching majors and minors. Course contains production crew requirement; concurrent registration in THAD 090 required unless excused by the department. In addition, THAD majors and minors must concurrently enroll in THAD 291; all other students must concurrently enroll in THAD 100. Grade only. Offered yearly.

111 - Theatre Appreciation (3 S.H.)

Designed for the general student who wishes to become familiar with theatre. Students will explore theatre through class lectures and discussion, individual and group projects, production attendance, and play readings. Students will be expected to attend theatre productions outside scheduled class time. Offered each semester.

115 - Dance Appreciation (3 S.H.)

Analysis and appreciation of diverse theatrical dance styles and 20th century trends within their cultural, historical, and theoretical contexts. Emphasis on active learning, teamwork, and kinesthetic involvement as a basis for response to the dance experience via live performance, video, movement, and writing. Concurrent registration in THAD 090 required of dance minors unless excused by the department. P/NC option. Offered each semester.

119 - Play Analysis (3 S.H.)

Study and applications of analytical methods to modern theatrical styles; introduction to relationships between designers, directors, and performers and to research methods and library resources in theatre. Concurrent registration in THAD 090 required of theatre majors and minors unless excused by the department. Offered yearly.

131 - Performance I for Everyone (3 S.H.)

Practice in and integration of movement and voice in expressive performance through solo and group improvisation and collaborative work. Concurrent registration in THAD 090 required of THAD majors and minors unless excused by the department. P/NC option. Offered yearly.

137 - Dance Repertory I (1-2 S.H.)

May be taken by students preparing for public performance of new or previously created dance, which is choreographed by faculty or guest artists; or by student choreographers preparing dance for public performance under direct faculty supervision. Prerequisite: Instructor's permission. May be repeated once. Concurrent registration in THAD 090 required of dance minors unless excused by the department. Grade only. Offered each semester.

141 - Oral Interpretation (3 S.H.)

Study of prose, poetry, and drama through performance. Brings to life the printed symbol. Offered yearly.

151 - Tap Dance I (1 S.H.)

An introduction to tap technique emphasizing musicality, expression, and style in performance within its cultural and historical context. May be repeated once for credit. Grade only.

153 - Jazz Dance I (1 S.H.)

An introduction to the basic movement techniques, styles, history, and music of contemporary jazz dance. May be repeated once for credit. Grade only.

155 - Modern Dance I (1 S.H.)

This course is an introduction to the theory, technique, terminology, and history of modern dance as a performing art. The focus of expressive movement training is enhanced through experiences with improvisation and choreography. May be repeated once for credit. Grade only.

157 - Ballet I (1 S.H.)

An introduction to classical ballet technique, theory, and history as a performing art. Grade only. May be repeated once for credit.

195 - Topics in Theatre (1-3 S.H.)

Lower-division version of THAD 395 (Topics in Theatre). Study of a specific topic in dramatic theory/literature/history, performance, or theatrical design/stagecraft. Topics and course credits vary. May be repeated as topics change. Course may contain production crew requirement, attendance at productions, and additional course fees. This course does not satisfy the “Topics” requirement in the theatre major curriculum. Concurrent registration in THAD 090 required unless excused by the department. Prerequisite: Theatre major or minor or instructor's permission. Offered yearly.

205 - Make Up for the Performer (1 S.H.)

Study of design and execution of traditional and non-traditional theatrical make up for the performer. Each student must purchase a personal theatrical make up kit to instructor's specifications. Concurrent registration in THAD 090 required of all majors and minors unless excused by the department. Grade only. Offered alternate years.

207 - Design Communication (3 S.H.)

The study and practice of the aesthetic principles and graphic skills involved in scenery, lighting, and costume design. Development of the student's abilities in external research, mechanical drawing, freehand sketching, and rendering. Concurrent registration in THAD 090 required unless excused by the department. Prerequisites: Satisfactory completion of THAD 107 and THAD 119 or instructor's permission. Grade only. Offered yearly.

209 - Stage Management (1 S.H.)

Study and practice of the functions of a stage manager. Concurrent registration in THAD 090 required of all majors and minors unless excused by the department. Offered alternate years.

210 - Theatre History and Dramatic Literature I (3 S.H.)

Survey of the works of major Western playwrights through 1800, their cultural contexts, and staging practices. Prerequisites: Satisfactory completion of ENG 111, THAD 119, HIST 121. Additional assignments required. Concurrent registration in THAD 090 required of majors and minors unless excused by the department. Offered yearly.

*“Additional Requirements” course as defined in Item 3, page 18

215 - Introduction to Laban Movement Analysis (3 S.H.)

Introduction to the theoretical and experiential movement system of Laban Movement Analysis. Provides a framework for observing, describing, and analyzing human movement patterns and understanding non-verbal actions and communication. This course satisfies the requirements for University Studies Critical Analysis. Prerequisite: None. Grade only. Offered yearly.

231 - Performance II (3 S.H.)

Theories and practice of acting in realistic styles. Concurrent registration in THAD 090 required unless excused by the department. Prerequisites: Satisfactory completion of THAD 119 and THAD 131. Grade only. Offered yearly.

237 - Dance Repertory II- (1-2 S.H.)

Continuation of THAD 137. Prerequisite: THAD 137. May be repeated once. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered each semester.

239 - Creative Dramatics for Children (2 S.H.)

Study and application of techniques that enable teachers and group leaders to guide others to imagine, enact, and reflect upon human experiences through dramatic activity. Offered alternate years.

253 - Jazz Dance II (2 S.H.)

A continuation of Jazz Dance I with more extensive techniques, terminology, history, and music, emphasizing the refinement of skills in contemporary jazz dance. The course will deepen conceptual understandings in various jazz styles and will include elements of performance and choreography. Prerequisite: Jazz I or instructor's permission. May be repeated once for credit. Grade only.

255 - Modern Dance II (2 S.H.)

This advanced beginning level course is a further exploration of the theory, technique, terminology, and history of modern dance as a performing art. The focus of expressive movement training is enhanced through experiences with improvisation and choreography. May be repeated once for credit. Prerequisite: Modern Dance I (THAD 155) or instructor's permission. Grade only.

257 - Ballet II (2 S.H.)

A continuation of Ballet I with more extensive classical ballet technique, theory, and history. The course will develop skills in choreography and performance. Prerequisite: Ballet I (THAD 157) or instructor's permission. May be repeated once for credit. Grade only.

290 - Creativity across the Curriculum (2 S.H.)

Study and practice of skills to improve teaching and learning; the emphasis is on creative thinking, bringing information to life and fostering conditions favorable to participatory learning. Offered alternate years.

291 - Rehearsal and Performance (1 S.H.)

Responsible work as performer, crew head, or running crew on the creation of theatrical productions for public presentation. Theatre majors must normally repeat to 6 S.H.; Theatre minors to 2 S.H. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered each semester.

295 - Making Interdisciplinary Connections (3 S.H.)

Interdisciplinary experience involving one or more artistic media incorporating content from diverse disciplines across campus. Topics vary. This course satisfies the requirements for University Studies Fine and Performing Arts. Prerequisite: None. Grade only. Offered yearly.

307 - Design II Scenery and Costumes (3 S.H.)

Study of the process for creating scenery and costume designs for the stage, including research, conceptualization, and creation of the pieces necessary to communicate a design to a director. Concurrent registration in THAD 090 required unless excused by the department. Prerequisites: Satisfactory completion of CMST 191, THAD 207, and all other prerequisite courses or instructor's permission. Offered alternate years.

309 - Design II Lighting and Sound (3 S.H.)

Study of the process of creating lighting and sound designs for the stage including research, conceptualization, and creation. Concurrent registration in THAD 090 required of majors and minors unless excused by the department. Prerequisites: Satisfactory completion of CMST 191, THAD 207 and all other prerequisite courses. Open to majors and minors or with instructor's permission. Offered alternate years.

310 - Theatre History and Dramatic Literature II (3 S.H.)

Survey of the works of major Western playwrights 1800-1970, their cultural contexts and staging practices. Prerequisites: Satisfactory completion of THAD 210 and all other prerequisite courses. Additional assignments required. Concurrent registration in THAD 090 required of majors and minors unless excused by the department. Offered yearly.

315 - Dancing Through History (3 S.H.)

Broad survey of world dance history from origins to the present within specific cultural and aesthetic contexts. No prerequisite for non-THAD major/minors although THAD 115 is strongly recommended. Prerequisite for THAD majors/minors: THAD 115. Offered occasionally.

321 - Play Directing (3 S.H.)

Study and application of processes affecting play selection, casting, and rehearsals. Prerequisites: Satisfactory completion of University Studies math basic skills course, THAD 231, THAD 307 or THAD 309, and THAD 310. Open to declared theatre majors and minors only. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered yearly.

322 - Dance Composition (3 S.H.)

Compositional theory, methods and conceptual approaches to traditional and non-literal choreography. Explores relationships between form, content, technique, and projection of the dance image. Concurrent registration in THAD 090 required unless excused by the department. Prerequisites: THAD 115 and THAD 131 or instructor's permission. Grade only. Offered alternate years.

331 - Performance III (3 S.H.)

Theories and practice of acting in non-realistic styles. Concurrent registration in THAD 090 required unless excused by the department. Prerequisite: Satisfactory completion of THAD 231 and all other prerequisite courses. Open to declared theatre majors and minors only. Grade only. Offered yearly.

337 - Dance Repertory III (1-2 S.H.)

Continuation of THAD 237. Prerequisite: THAD 237. May be repeated once. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered each semester.

355 - Modern Dance III (2 S.H.)

An intermediate level course focusing on technique, theory, and history of modern dance as a performing art. Level III engages more in-depth skill development in technique, performance, improvisation, and choreography. May be repeated once for credit. Prerequisite: Modern Dance II (THAD 255) or instructor's permission. Grade only.

357 - Ballet III (2 S.H.)

The practice and study of intermediate classical ballet technique with continued refinement of movement skills and aesthetic awareness. The course includes more extensive ballet history and further develops skills in choreography and performance. May be repeated once for credit. Prerequisite: Ballet II (THAD 257) or instructor's permission. Grade only.

395 - Topics in Theatre (1-3 S.H.)

Study of a specific topic in dramatic theory/literature/history, performance, or theatrical design/stagecraft. Topics and course credits vary. May be repeated as topics change. Course may contain production crew requirement. Concurrent registration in THAD 090 required unless excused by the department. Prerequisite: Junior standing. Open to declared majors and minors or instructor's permission. Offered yearly.

399 - Internship (1-16 S.H.)

Supervised work experience designed by student, advisor, and employer. Prerequisites: Faculty advisor's permission and a minimum overall GPA of 2.5. Open to declared theatre and dance majors and minors only. P/NC only. Offered by arrangement.

437 - Dance Repertory IV (1-2 S.H.)

Continuation of THAD 337. Prerequisite: THAD 337. May be repeated once. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered each semester.

455 - Modern Dance IV (2 S.H.)

An intermediate advanced level course focusing on technique, theory, and history of modern dance as a performing art. Level IV develops advanced skill levels in technique, performance, improvisation, choreography, and applied theory. May be repeated once for credit. Prerequisite: Modern Dance III (THAD 355) or instructor's permission. Grade only.

457 - Ballet IV (2 S.H.)

The practice and study of advanced classical ballet technique with continued refinement of movement skills and aesthetic awareness. The course includes more extensive ballet history and further develops skills in choreography and performance. May be repeated once for credit. Prerequisite: Ballet III (THAD 357) or instructor's permission. Grade only.

490 - Capstone Production Project (3 S.H.)

Full responsibility for work as a designer or performer on a Main Season theatre production or as a director in the Studio Season. Concurrent registration in THAD 090 required unless excused by the department. Prerequisites: Satisfactory completion of THAD 307 or THAD 309, THAD 321, THAD 331, and all other prerequisite courses. Open to declared Theatre majors and minors only. Grade only. Offered yearly.

495 - Theatre Senior Seminar (1 S.H.)

Review, editing, organization, and submission of theatre major portfolio. Prerequisites: Senior standing and satisfactory completion of 35 S.H. of theatre major curriculum. Concurrent registration in THAD 090 required unless excused by the department. Grade only. Offered yearly.

499 - Independent Studies in THAD (1-8 S.H.)

Offers the advanced student an opportunity to study independently in an area of special interest. May be repeated to a total of 8 S.H. Prerequisite: Instructor's permission. Grade only. Offered by arrangement.

WOMEN'S AND GENDER STUDIES

Minné Hall, Room 329 (507-457-5460)

www.winona.edu/womensstudies

Tamara Berg (Director)

FACULTY

Tamara Berg, Associate Professor; B.A., University of Wisconsin; M.A., Ph.D., Indiana University, Bloomington; 1995 –

April Herndon, Assistant Professor; B.A., M.A., Radford University; Ph.D., Michigan State University, 2006 –

PURPOSE

Women's and Gender Studies is a multidisciplinary program that looks at the lives and experiences of women and men through many different disciplines—history, art, psychology, economics, literature, sociology, and public health, among others. Women's and Gender studies students explore the ways in which gender shapes women's and men's identities and experiences in national global cultures. They also consider how cultural differences affect women's and men's lives within multicultural societies.

The Women's and Gender Studies Program is committed to integrating classroom and community. Women's and Gender studies students apply feminist theories and analyses to current social issues and develop the skills necessary for citizenship through a field experience with a community organization or agency.

The Women's and Gender Studies Program sponsors and coordinates campus opportunities and events that promote understanding and awareness of diverse perspectives and gender-related issues among WSU students, faculty, and staff. The program centralizes information relevant to women's and gender studies opportunities at WSU and provides students, faculty, and staff convenient access to and use of that information.

The Women's and Gender Studies Program functions for and with all segments of WSU, including the Outreach and Continuing Education Department, the Rochester campus, and the larger Winona community. The program focuses on five major objectives:

1. Promoting understanding of gender issues on campus and in the wider community
2. Supporting gender-related social change activities on campus and in the wider community
3. Guidance and leadership in the process of integrating gender issues into the WSU curriculum
4. Centralization of information about existing opportunities for exploring and addressing gender issues
5. Coordination and administration of women's and gender studies course offerings.

The program operates in the following areas:

- Academic Opportunities: The program offers a minor in women's and gender studies composed of courses that focus on women and/or gender. The program identifies and promotes additional academic opportunities for all students and faculty interested in expanding their knowledge of women's and gender issues.
- Campus and Community Events: The program works with campus constituencies in developing and planning workshops, lectures, performances and other events related to women's and gender issues.

The women's and gender studies minor provides students the opportunity to develop a clearer understanding of the lives and experiences of women, and the impact of gender differences on social development and experience. Women's and gender studies students explore the ways in which gender shapes women's and men's experiences in different global cultures and consider how cultural differences affect women's and men's lives within multicultural societies. The minor in women's and gender studies also develops among students an understanding of feminism both as a body of theory and an approach to social change. Through a combination of interdisciplinary women's and gender studies courses, courses in other departments, and a field experience, the women's and gender studies minor prepares students to assume roles as active citizens in addressing issues shaping women's and men's lives. Each student is required to complete a portfolio that represents and explains her/his growth and development as a minor in women's and gender studies.

PASS/NO CREDIT (P/NC) COURSES

Except for independent study, students must take all courses in the minor on a grade-only basis. The P/NC option is available to non-majors unless otherwise noted. Courses offered on a pass/no credit only or grade only basis are so designated in the course descriptions.

UNIVERSITY STUDIES FLAG REQUIREMENTS

Students may use flag courses, which will usually be in the student's major or minor program, to satisfy both University Studies and major requirements. Flag courses will usually be in the student's major or minor program. The Women's and Gender Studies Program offers the following flag courses in the University Studies Program:

Math/Critical Thinking O

WAGS 348 Topics in Women's and Gender Studies (3)

For Women's and Gender Studies minors, Flag courses are identified in the lists of required courses and electives in this section.

B.A. MINOR – WOMEN'S AND GENDER STUDIES (WAGS)

23-25 S.H.

CORE COURSES - WAGS(14 S.H.)

- 148 Introduction to Women's and Gender Studies (3)
- 220 Power, Privilege and Gender (3)
- 373 Feminist Theory/Process (3)
- 420 Field Experience (3)
- 448 Senior Seminar (2)

CORE DISCIPLINARY COURSES (6-8 S.H.)

Students take 6-8 S.H. from the following list of courses; see the Women's and Gender Studies Director for an updated list:

- BUED 350 Quality of Work Life (3)
- ART 252 Survey of Women Artists (3)

- I HIST 315 Women in U.S. History (4)
- NURS 260 Women's Health Issues (3)
- PSY 275 Psychology of Women and Gender (3-4)
- PHIL 130 Moral Problems (3)
- P POLS 450 Feminist Political Theory (3)
- PSY 424 Women & Mental Health (3)
- WAGS 234 Interdisciplinary Approach to Gender and Latin American Society through 20th Century Literature (3)
- WAGS 235 Interdisciplinary Approach to Women and Social Justice Issues in Latin America (3)
- O WAGS 348 Topics in Women's and Gender Studies (3)

ELECTIVES (3 S.H.)

Electives may be chosen from courses listed above that are not used to fulfill core disciplinary course requirements and from a list of courses approved for women's and gender studies elective credit. The following is a partial list of courses approved as WAGS electives:

History

- I HIST 315 Women in U.S. History

Music

- MUS 113 Women in Music

Nursing

- NURS 260 Women's Health Issues

Philosophy

- PHIL 130 Moral Problems
- PHIL 240 Philosophy of Science

Psychology

- PSY 275 Psychology of Women and Gender

Political Science

P POLS 450 Feminist Political Theory

Global Studies

GS 232 Introduction to Latin America

GS 233 Latin American and Caribbean Immigrants in the U.S.

Social Work

I SOCW 340 Introduction to Social Work and Social Welfare

P SOCW 380 Social Welfare Policy

For a complete list of approved WAGS electives, see the Women's and Gender Studies Program Director.

COURSE DESCRIPTIONS (WAGS)

148 - Introduction to Women's and Gender Studies (3 S.H.)

This course is an introduction to the interdisciplinary study of women and gender in society. The course, which is team-taught by faculty from different disciplines, examines women's social roles and contributions in various social groups, cultures, and areas of the globe; this course explores gender as a socially constructed category of human experience. It introduces students to feminism, both as a body of theory and as an approach to social change.

220 - Power, Privilege, and Gender (3 S.H.)

Explores the social construction of differences that lead to power and privilege in modern society. Issues of race, class, and sex, and gender are considered. Offered at least once a year.

234 - Interdisciplinary Approach to Gender and Latin American Society through 20th Century Literature (3 S.H.)

Latin American literature conveys a vibrant sense of social history and nuanced perspective of gendered realities. This course will explore 20th century writers from Chile, Uruguay, and El Salvador as a means to better comprehend the underlying worldviews, social structure, and gender relations. Grade only. Offered every other year.

235 - Interdisciplinary Approach to Women and Social Justice Issues in Latin America (3 S.H.)

This course demonstrates how ordinary women have had transformational

roles in the social and political spheres of their countries. It will explore how women have chosen to participate in collective action in Chile, Guatemala, El Salvador, and Mexico to address human rights issues and how family values can become a part of public life. Recommended prerequisite: SOC 150. Grade only. Offered every other year.

320 - Independent Readings (1-3 S.H.)

This course allows students to pursue a project or topic of their own design with supervision and evaluation by the instructor. Instructor's written permission is required.

348 - Topics in Women's and Gender Studies (3 S.H.)

This course presents an in-depth study of topics of current interest in the field of Women's and Gender Studies. Offered as needed.

373 - Feminist Theory/Process (3 S.H.)

This course seeks to understand the creation and perpetuation of gender inequalities and their relation to other systems of inequality. This course seeks a broad understanding of the historical development of various strands of Western feminist thought and the range of interpretive possibilities such thought has opened up. Interdisciplinary readings investigate how feminist theory and process have affected our lives and our understanding of literature, philosophy, political science, law, science, film, history, sociology, and medicine. Prerequisites: WAGS 120, 220 or instructor's permission. Offered at least once a year.

420 - Field Experience (3-6 S.H.)

The Field Experience gives students an opportunity to explore gender-related issues and the gender dimension of social issues through experiences outside the classroom; integrate practical experience with feminist analyses developed in Women's and Gender Studies courses; and develop the skills and knowledge necessary to act effectively as citizens of their communities. Prerequisites: Women's and Gender Studies minor status.

448 - Senior Seminar (2 S.H.)

As the capstone for the Women's and Gender Studies minor, this course requires students to review and assess their work in Women's and Gender Studies and the relationship between the minor and their major. Prerequisites: WAGS 148, WAGS 220, WAGS 348, WAGS 420, and Women's and Gender Studies minor status or instructor's permission.

FACULTY

Beckry Abdel-Magid, Professor, Engineering; B.S., University of Khartoum; M.S., Ph.D., University of Wisconsin; 1990 –

Brian Aldrich, Professor, Sociology; A.B., Lewis and Clark College; M.S., Ph.D., University of Wisconsin; 1976 –

Stephen T. Allard, Associate Professor, Geoscience; B.S., M.S., University of New Hampshire; Ph.D., University of Wyoming; 2002 –

Dawn Anderson, Professor, Health, Exercise and Rehabilitative Sciences; B.A., University of Minnesota; M.S., Iowa State University; Ph.D., Ball State University, Muncie (IN); 1992 –

Jeffrey Anderson, Professor, Mathematics and Statistics; B.A., University of Minnesota, Morris; Ph.D., Iowa State University; 1992 –

Jennifer L. B. Anderson, Assistant Professor, Geoscience; B.S., University of Minnesota; Sc.M., Ph.D., Brown University; 2005 –

Jill Anderson, Maxwell Children's Center; B.S., M.S., Winona State University; 1999 –

Jodi Anderson, Residence Life; B.S., Winona State University; 2006 –

Nicole Anderson, Assistant Professor, Computer Science; B.S., M.S., University of Iowa; Ph.D., University of Utah; 2008 –

Phillip Appicelli, Associate Professor, Health, Exercise and Rehabilitative Sciences; B.A., College of St. Scholastica; M.A., Ph.D., Kent State University; 1998 –

James Armstrong, Associate Professor, English; B.A., Northwestern University; M.F.A., Western Michigan University; Ph.D., Boston University; 1999 –

Marzie Astani, Professor, Management of Information Systems and Operations; B.A., Tehran University; M.S., Ph.D., Iowa State University of Science and Technology; M.B.A., Central Michigan University; 1987 –

Susan Ballard, Professor, Nursing; B.S.N., University of Illinois; M.S.N., University of Minnesota; 1984 –

Mark Bambenek, Intramural Director; B.S., M.S., University of Wisconsin; 1988 –

Kimberly M. Bates, Professor, Biology; A.A., Berkshire Community College; B.S., University of Massachusetts; M.S., Ph.D., University of Missouri; 1997 –

Sandra Benning, Assistant Registrar; B.S., Winona State University; 1985 –

Matthew Benson, COMTEC; B.S., Winona State University; 2003 –

Steven Berg, Professor; Biology; B.S., Pacific Lutheran University; Ph.D., Purdue University; 1986 –

Tamara Berg, Associate Professor; Women's & Gender Studies; B.A., University of Wisconsin; M.A., Ph.D., Indiana University, Bloomington; 1995 –

J. Lawrence Bergin, Professor, Accounting; B.S., M.B.A., Northeastern University; 1981 –

Lori Beseler, Associate Registrar; B.A., University of Wisconsin; 2004 –

Susan Beseler, Assistant Professor, Mathematics and Statistics; B.S., Winona State University; M.E., University of Wisconsin-La Crosse; 2005 –

JoEll W. Bjorke, Professor, Business Administration; B.S., St. Cloud State University; J.D., William Mitchell College of Law; 1981 –

George Bolon, Professor, Physics; B.S., M.S., Oregon State University; Ph.D., University of Utah; 1968 –

Cynthia Bork, Associate Professor, Nursing; B.S.N., College of St. Teresa; M.S., Winona State University; Ed.D., St. Mary's University of Minnesota; 1993 –

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Vicki Decker, Director, Career Services; B.A., M.S., Winona State University; 1988 –

- Michael D. Delong*, Professor, Biology; B.S., University of Southern Mississippi; M.S., Memphis State University; Ph.D., University of Idaho-Moscow; 1992 –
- John C. Deming*, Assistant Professor, Chemistry; B.S., Ph.D., University of Montana; 2006 –
- Keith Dennehy*, Professor, Engineering; B.S., Rensselaer Polytechnic Institute; M.S., Youngstown State University; M.B.A., University of Utah; Ph.D., Rensselaer Polytechnic Institute; 1990 –
- Russell Dennison*, Professor, Library; B.A., Central College; M.A.L.S., University of Wisconsin; 1980 –
- Brant Deppa*, Professor, Mathematics and Statistics; B.S., M.S., University of Minnesota, Duluth; Ph.D., University of Minnesota; 1992 –
- Shashi Dewan*, Professor, Business Administration; B.S., Malviya Regional Engineering College; M.B.A., Ph.D., Indian Institute of Technology; 1988 –
- Richard A. Deyo*, Professor, Psychology; B.S., Viterbo College; M.A., Ph.D., Bowling Green State University; 1990 –
- Holly Dibert*, Athletic Training; B.A., Winona State University; M.S., Iowa State University; 2004 –
- Toby Dogwiler*, Associate Professor, Geoscience; B.A., Wittenberg University; M.Sc., Mississippi State University; Ph.D., University of Missouri, Columbia; 2002 –
- Darrell Downs*, Professor, Political Science; B.A., B.S., Montana State University; M.S., Oregon State University; Ph.D., Colorado State University; 1992 –
- Suzanne Rhodes Draayer*, Professor, Music; B.M., Furman University; M.S., George Peabody College of Vanderbilt University; D.M.A., University of Maryland College Park, 1993 –
- Jeffrey Draskoci-Johnson*, Associate Professor, Mathematics and Statistics; B.A., Ohio Wesleyan University; M.S., Ph.D., Ohio State University; 1996 –
- Nancy Dumke*, Assistant Director/504 Coordinator, Advising and Retention Office; B.A., St. Olaf College; M.S., University of Notre Dame; 1989 –
- Edward Duplaga*, Professor, Management of Information Systems and Operations; B.S., Bowling Green State University; M.B.A., Ph.D., University of Iowa; 2001 –
- Ann Durley*, Camps and Conferences; B.A., M.A., St. Mary's University; 2007 –
- Daniel Eastman*, Professor, Residential College; B.A., Western Washington University; M.F.A., Wayne State University; M.F.A., Bard College; 1989 –
- Nancy Ann Eckerson*, Associate Professor, Education; B.S., M.S., Minnesota State University-Mankato; Ph.D., Iowa State University; 2000 –
- Sue Eckerson*, Admissions; B.S., University of Nebraska; 2004 –
- Gary Eddy*, Professor, English; B.A., State University of New York-Brockport; M.A., University of Texas at El Paso; M.F.A., University of Arizona; Ph.D., State University of New York-Binghamton; 1988 –
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- Scott Ellinghuysen*, Associate Vice President for Finance; B.S., Winona State University; M.B.A., University of Wisconsin; 1989 –
- Mark A. Engen*, Professor, Chemistry; B.S., Bemidji State University; Ph.D., Montana State University; 1997 –
- Mark J. Eriksen*, Assistant Professor, Library; B.A., Ohio State University; M.L.S., Kent State University; M.S., South Dakota State University; 1998 –
- Eric Errthum*, Assistant Professor, Mathematics and Statistics; B.S., University of Iowa; Ph.D., University of Maryland; 2007 –
- Maryam Eslamloo-Grami*, Professor, Engineering; B.S., M.S., Shiraz University, Iran; Ph.D., University of California; 1993 –
- David Essar*, Professor, Biology; B.S., Ferris State College; M.S., Ph.D., University of Iowa; 1992 –
- Kimberly J. Evenson*, Professor, Biology; B.S., M.S., North Dakota State University, Fargo; Ph.D., University of Minnesota; 1995 –
- Emilie Falc*, Assistant Professor, Communication Studies; B.A., University of Illinois; M.A., Ph.D., Ohio University; 2001 –
- Cathy Jo Faruque*, Associate Professor, Social Work; B.S., Winona State University; M.S.W., San Diego State University; Ph.D., North Central University; 1997 –
- Mary Fawcett*, Associate Professor, Counselor Education; B.A., University of North Carolina; M.A., Appalachian State University; Ph.D., University of South Carolina; 1999 –
- John Ferden*, Director, Auxiliary Enterprises; B.A., Luther College; 1974 –
- Patricia Ferden*, Professor, Counseling Center; B.S., M.S., Winona State University; 1988 –
- Juan Fernandez Iglesias*, Assistant Professor, Foreign Languages; B.A., Universidad de Santiago de Compostela; M.A., Ph.D., University of Kansas, 2004 –
- Andrew Ferstl*, Associate Professor, Physics; B.S., University of Wisconsin; Ph.D., University of Minnesota; 2000 –
- Joseph Foegen*, Professor, Business Administration; B.B.A., M.B.A., Ph.D., University of Wisconsin; 1958 –
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- Diane Forsyth*, Associate Professor, Nursing; B.S., Winona State University; M.S., University of Wisconsin-Madison; Ph.D., University of Wisconsin-Milwaukee; 2004 –
- Ruth Forsythe*, Professor, English; B.A., St. Olaf College; M.A., Ph.D., University of Minnesota; 1977 –
- Joan Francioni*, Professor, Computer Science; B.S., University of New Orleans; M.S., Ph.D., Florida State University; 1998 –
- Jeanne Franz*, Professor, Chemistry; B.A., Augustana College; Ph.D., University of Minnesota; 1996 –
- Carrie Fried*, Associate Professor, Psychology; B.S., Iowa State University; M.S., Ph.D., University of California; 1999 –
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- Vivian Fusillo*, Professor, Theatre and Dance; B.A., Marymount College; M.A., Stephen F. Austin State University; 1968 –
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- Alejandro Gallegos*, Professor, Economics; B.A., Instituto Tecnológico y de Estudios Superiores de Monterrey; M.A., Ph.D., University of Wisconsin; 1988 –
- Karen L. Gardner*, Professor, Nursing; B.S.N., Florida State University; M.S.N., Texas Woman's University; 1985 –
- Phyllis Gaspar*, Professor, Nursing; B.S.N., M.S.N., University of Nebraska; Ph.D., Case Western Reserve University; 1995 –
- Timothy Gaspar*, Professor, Dean, College of Nursing and Health Sciences; B.S., South Dakota State University; M.S.N., University of Nebraska Medical Center; Ph.D., University of Utah; 1995 –
- Tim Gegg-Harrison*, Professor, Computer Science; B.A., University of Missouri - Columbia; M.S., Ohio State University; Ph.D., Duke University; 1992 –
- Jerry Gerlach*, Professor, Geography; B.A., M.A., University of Nebraska; Ph.D., University of Oklahoma; 1988 –
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- Cynthia Groth*, Counselor, Financial Aid; B.A., Winona State University; 1984 –
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- Chi-Cheng Lin*, Professor, Computer Science; B.S., National Chiao-Tung University; M.S., University of Minnesota-Duluth; Ph.D., University of Pittsburgh; 1997 –
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- Matthew Lindaman*, Associate Professor, History; B.A., M.A., University of Northern Iowa; Ph.D., University of Kansas, 2002 –
- Daniel Lintin*, Associate Professor, Communication Studies; B.A., Buena Vista University; M.A., Ph.D., University of Minnesota; 1994 –
- Mari Livingston*, Counselor, Financial Aid; B.A., College of St. Thomas; 2000 –
- Cathie Logan*, Retiree Center; B.A., M.S., Winona State University; 1989 –
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- Alyssa Lopez*, Residence Hall Director; B.A., M.A., Lee University; 2007 –
- Donald Lovejoy*, Associate Professor, Music; B.S., Asbury College; M.M., University of Regina; M.M., Northwestern University; D.M.A., University of Wisconsin; 2000 –
- Eugene Lundak*, Associate Professor, Computer Science; B.S., M.S., Winona State University; M.S., University of Evansville; 1985 –
- Matthew Lungerhausen*, Assistant Professor, History; B.A., University of California, Santa Cruz; M.A., Binghamton University SUNY; Ph.D., University of Minnesota, 2004 –
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- R. Richard MacDonald*, Professor, Music; B.A., M.M.E., University of North Texas; D.A., University of Northern Colorado; 1996 –
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- Carmen Mahlum*, Inclusion and Diversity; B.A., Winona State University; 2005 –
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- Gabriel Manrique*, Acting Director, Outreach and Continuing Education; Professor, Economics; B.A., Ateneo De Manila University; M.A., Ohio University; M.A., Ph.D., University of Notre Dame; 1989 –
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- Terri Markos*, Director, International Services; B.A., M.S., University of Wisconsin; 1971 –
- Gloria Marmolejo*, Professor, Psychology; B.S., National Autonomous University of Mexico; M.S., Ph.D., University of Wisconsin-Madison; 1994 –
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- Ronald M. Mazur*, Professor, Foreign Languages; B.A., University of Detroit; M.A., Ph.D., University of Michigan; 1978 –
- William McBreen*, Professor, Nursing; B.S.N., Mount Marty College; M.S.N., University of Nebraska Medical Center; Ph.D., University of Texas; 2000 –
- Kelli McClintick*, Health Educator; B.E.S., University of Minnesota; M.P.H., Oregon School of Massage; 2007 –
- Patty McCutcheon*, Coordinator, Sign Language/Interpreter Services; B.S., Cardinal Stritch College; 1995 –
- Gloria McVay*, Associate Professor, Accounting; B.S., M.B.A., Minnesota State University-Mankato; Ph.D., University of Kentucky; 2000 –
- Harry Mechell*, Professor, Music; B.Mus., M.M., Temple University; D.M.A., University of Illinois; 1989 –
- Tamara Merkouris*, Residence Hall Director; B.A., Concordia University; 2006 –
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- Gretchen Michlitsch*, Assistant Professor, English; B.A., Gustavus Adolphus; M.A., Ph.D., University of Wisconsin-Madison; 2005 –
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- Charla S. Miertschin*, Professor, Chemistry; B.S., Abilene Christian University; Ph.D., Texas A & M University, 1993 –
- Andrea Mikkelsen*, Public Information Director; B.A., Truman State University; 2006 –
- Carl Miller*, Major Gifts Director; Ed.D., University of North Texas; 2006 –
- Celeste Miller*, Professor, Education; B.A., University of Arizona; M.A., University of Maryland; Ed.D., Pennsylvania State University; 1997 –
- Deanne Mohr*, Associate Professor, Music; B. Mus., University of Regina; M.Mus., D.M.A., Universite de Montreal; 2002 –
- Nathan Moore*, Assistant Professor, Physics; B.S., Grove City College; Ph.D., University of Minnesota; 2005 –
- John D. Morgan*, Associate Professor, Accounting; B.A., University of Iowa; M.S., Arizona State University; Ph.D., University of Nebraska, Lincoln; Certified Public Accountant (CPA); Certified Management Accountant (CMA); 2006 –
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