1-1-1983

Graduate Catalog 1983-1985

Winona State University

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1983-85 General Catalog

Winona State University

Winona, Minnesota
Telephone (507) 457-5000

The provisions of this publication are not to be regarded as an irrevocable contract between the student and Winona State University. The University reserves the right to change any provision or requirement at any time.

Winona State University is committed to providing equal education and employment opportunities to all persons regardless of race, color, creed, sex, age, religion, marital status, national origin or status with regard to public assistance or handicap or any other group or class against which discrimination is prohibited by State or Federal law, including Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and Section 402 of the Vietnam Era Veterans Readjustment Assistance Act of 1974. Inquiries concerning the application of Affirmative Action, Equal Opportunity or Title IX at Winona State University should be referred to the Affirmative Action Officer (507-457-5024). Inquiries about Section 504 of the Rehabilitation Act of 1973 should be referred to the 504 Coordinator, (507-457-5050).
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The Winona State University campus is situated on 15 square blocks of land in the heart of Winona, Minnesota.

1. Memorial Hall — houses the Departments of Health, Physical Education and Recreation and provides facilities for the university's indoor athletic events.

2. Sorensen Hall — contains the Departments of Business Administration and Economics, Business Education and Office Administration, Foreign Languages, Military Science, and nearly all administrative offices, including the office of the President, Vice Presidents, Registrar, Business Office, Financial Aid Office, Computer Center, Personnel Office, Alumni Affairs, University Relations, and Regional Campus.

3. Phelps-Howell — houses the Nursery School, the Nursing Department, Television Studio, and Admissions Office.


5. Performing Arts Center — includes the Departments of Music, Communication and Theatre Arts and Mass Communications. It also provides facilities for university-sponsored cultural events and KQAL the campus radio station.

6. Pasteur Hall — houses the Departments of Biology, Chemistry, Geology, and Physics.

7. Watkins Hall — contains the Departments of Art and Industrial Education. It also includes a gallery for student and professional art shows which are open for public viewing, also houses the Watkins Art Collection.

8. Gildemeister Hall — is the home of the Departments of Education, Educational Administration, Counselor Education, Counseling Center, Learning Center, Mathematics and Computer Science and the University Placement Bureau.

9. Minne Hall — houses the Departments of English, History, Political Science, Sociology, Psychology, Philosophy and Honors Program.

10. Kryzsko Commons and University Center — contains the university food services, student recreational facilities and lounges, conference rooms, a snack bar, the Alumni Lounge, the Campus Book Store, Student Affairs, and Housing.

11. Conway Hall — women

12. Shepard Hall — men

13. Morey Hall — men

14. Richards Hall — co-ed upperclassmen

15. Prentiss Hall — men

16. Lucas Hall — women

17. Sheehan Hall — women

Winona State University Campus

All buildings accessible by ramps and elevators for handicapped.
1983-84 Academic Calendar

FALL QUARTER — 1983 — 55 DUTY DAYS)

Last day to complete application for Fall Quarter, Tuesday .......... August 30, 1983
Last day for former students to file intent to return, Tuesday .......... August 30, 1983
New faculty meeting and orientation, Tuesday .......................... September 6, 1983
General faculty meeting, Tuesday ....................................... September 6, 1983
Mass Registration, Tuesday (evening) and Wednesday ............... September 6, 1983
Evening classes begin, Wednesday at 8:00 p.m ......................... September 7, 1983
Day classes begin, Thursday ............................................... September 8, 1983
Evening Class Registration — Evening Graduate and Undergraduate Students ONLY
Monday, Tuesday, Wednesday, Thursday ............................ September 12, 13, 14, 15, 1983
Class schedule change (Drop-Add), Wednesday and Thursday ...... September 14, 15, 1983
* Last day to apply for graduation Fall Quarter, Friday .................. October 7, 1983
* Last day to notify Office of Graduate Studies of intent to take written comprehensive examinations, Friday ................. October 13, 1983
MEA Representative Assembly, Holiday, Friday ......................... October 21, 1983
Winter Quarter Pre-registration
Monday, Tuesday, Wednesday, Thursday ........................... October 24, 25, 26, 27, 1983
* Written comprehensive examinations (8—12 noon), Saturday ...... October 29, 1983
Last day to drop classes, Friday .......................................... November 4, 1983
Winter Quarter Pre-registration Fee Payment, Tuesday and Wednesday .... November 8, 9, 1983
Veteran's Day, Holiday, Friday ........................................ November 11, 1983
Final Examinations, Friday, Monday, Tuesday ........................... November 18, 21, 22, 1983
Grading Day, Wednesday ................................................ November 23, 1983
Quarter/Thanksgiving Break begins, Wednesday, 4:30 p.m ........ November 23, 1983
(Note: November 25, 1983 — Holiday ALL Units instead of Explorer’s Day)

WINTER QUARTER 1983 — 1984 — 57 DUTY DAYS)

Last day to complete application for Winter Quarter, Monday ........ November 21, 1983
Last day for former students to file intent to return, Monday ........ November 21, 1983
Mass Registration, Monday (evening) ................................ November 28, 1983
Evening classes begin, Monday at 8:00 p.m .............................. November 28, 1983
Day classes begin, Tuesday ............................................... November 29, 1983
Evening Class Registration — Evening Graduate and Undergraduate Students ONLY
Monday, Tuesday, Wednesday, Thursday ........................... December 5, 6, 7, 8, 1983

*NOTE: Pertains to Graduate Students ONLY.
Class schedule change (Drop-Add), Monday .......................... December 5, 1983
* Last day to apply for graduation Winter Quarter, Friday .......................... December 16, 1983
Christmas/New Year break begins, Friday, 10:00 p.m .......................... December 16, 1983
(Saturday classes will meet on Saturday) .......................... December 17, 1983
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Tuesday .......................... January 3, 1984
Classes reconvene, Tuesday .......................... January 3, 1984
Mid-Term Day, Friday .......................... January 3, 1984
* Written comprehensive examinations (8–12 noon), Saturday .......................... January 21, 1984

Spring Quarter Pre-registration
Monday, Tuesday, Wednesday, Thursday .................. January 30, 31, February 1, 2, 1984
Last day to drop classes, Wednesday .......................... February 8, 1984
Spring Quarter Pre-registration Fee Payment, Wednesday and Thursday .......................... February 15, 16, 1984
Washington, Lincoln Birthday, Holiday, Monday .......................... February 20, 1984
Final Examinations, Monday, Tuesday, Wednesday .......................... February 27, 28, 29, 1984
Grading Day, Thursday .......................... March 1, 1984
Spring Break begins, Thursday, 4:30 p.m .......................... March 1, 1984

SPRING QUARTER — 1984 — 56 DUTY DAYS)

Last day to complete application for Spring Quarter, Monday .......................... February 27, 1984
Last day for former students to file intent to return, Monday .......................... February 27, 1984
Mass Registration, Tuesday (evening) .......................... March 6, 1984
Evening classes begin, Tuesday at 8:00 p.m .......................... March 6, 1984
Day classes begin, Wednesday .......................... March 7, 1984
Last day to make application for Student Teaching
All Quarters, 1984–85, Friday .......................... March 9, 1984
Last day to apply for graduation Spring Quarter,
Graduate and Undergraduate, Friday .......................... March 9, 1984
Evening class registration — Evening Graduate and Undergraduate Students ONLY
Monday, Tuesday, Wednesday, Thursday .......................... March 12, 13, 14, 15, 1984
Class schedule change (Drop-Add), Monday .......................... March 12, 1984
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Friday .......................... March 16, 1984
IFO/MEA Delegate Assembly, Friday (no classes) .......................... March 30, 1984
Mid-Term Day, Monday .......................... April 16, 1984
Holidays (no classes), Friday and Monday .......................... April 20, 23, 1984
Fall Quarter Pre-registration
Tuesday, Wednesday, Thursday, Friday .......................... April 24, 25, 26, 27, 1984
* Written comprehensive examinations (8–12 noon), Saturday .......................... April 28, 1984
Final Examinations, Tuesday, Wednesday, Thursday .......................... May 16, 1984
Grading Day, Friday .......................... May 22, 23, 24, 1984
Commencement, Friday .......................... May 25, 1984

FIRST SUMMER SESSION — 1984

* Last day to apply for graduation First Summer Session, Friday .......................... May 4, 1984
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Thursday .......................... May 24, 1984
Last day to complete application for First Summer Session, Monday .......................... June 4, 1984
Last day for former students to file intent to return, Monday .......................... June 4, 1984
Mass Registration, Monday .......................... June 4, 1984
Classes begin, Monday .......................... June 11, 1984
Class schedule change (Drop-Add), Thursday .......................... June 11, 1984
* Written comprehensive examinations (8–12 noon), Saturday .......................... June 16, 1984
Mid-Term Day, Wednesday .......................... June 27, 1984
Independence Day, Holiday, Wednesday .......................... July 4, 1984
Last day to drop classes, Thursday .......................... July 5, 1984
Final Examinations, Friday .......................... July 13, 1984

*NOTE: Pertains to Graduate Students ONLY.
SECOND SUMMER SESSION – 1984

* Last day to apply for graduation Second Summer Session, Friday ......................................................... June 15, 1984
* Last day to notify Office of Graduate Studies of intent to take written comprehensive examinations, Thursday ......................................................... June 28, 1984
Last day to complete application for Second Summer Session, Monday ......................................................... July 9, 1984
Last day for former students to file intent to return, Monday ......................................................... July 9, 1984
Mass Registration, Monday ......................................................... July 9, 1984
Classes begin, Monday ......................................................... July 16, 1984
Class schedule change (Drop-Add), Thursday ......................................................... July 19, 1984
* Written comprehensive examinations (8–12 noon), Saturday ......................................................... July 21, 1984
Mid-Term Day, Wednesday ......................................................... July 21, 1984
Last day to drop classes, Thursday ......................................................... August 1, 1984
Final Examinations, Friday ......................................................... August 1, 1984

*NOTE: Pertains to Graduate Students ONLY.
1984-85

FALL QUARTER - 1984 - 55 DUTY DAYS

Last day to complete application for Fall Quarter, Tuesday .................................. August 28, 1984
Last day for former students to file intent to return, Tuesday .................................. August 28, 1984
New faculty meeting and orientation, Tuesday ......................................................... September 4, 1984
Mass Registration, Tuesday (evening) and Wednesday ............................................. September 4, 5, 1984
Evening classes begin, Wednesday at 8:00 p.m ..................................................... September 5, 1984
Day classes begin, Thursday .................................................................................... September 6, 1984
Evening Class Registration - Evening Graduate and Undergraduate Students ONLY   September 10, 11, 12, 13, 1984
* Last day to apply for graduation Fall Quarter, Friday ........................................... September 21, 1984
* Last day to notify Office of Graduate Studies of intent to take written comprehensive examinations, Friday ......................................................... October 5, 1984
Mid-Term Day, Thursday ......................................................................................... October 11, 1984
MEA Representative Assembly, Holiday, Friday ..................................................... October 19, 1984
Winter Quarter Pre-registration
Monday, Tuesday, Wednesday, Thursday ................................................................ September 10, 11, 12, 13, 1984
* Written comprehensive examinations (8-12 noon), Saturday ................................ October 22, 23, 24, 25, 1984
Last day to drop classes, Friday ................................................................................. October 27, 1984
Winter Quarter Pre-registration Fee Payment, Tuesday and Wednesday.................. November 6, 7, 1984
Veteran's Day, Holiday, Monday .............................................................................. November 6, 12, 1984
Final Examinations, Friday, Monday, Tuesday ........................................................... November 16, 19, 20, 1984
Grading Day, Wednesday, Thursday ....................................................................... November 21, 1984
Quarter/Thanksgiving Break begins, Wednesday, 4:30 p.m ..................................... November 21, 1984
NOTE: November 23, 1984 - Holiday ALL Units instead of Explorer's Day)

WINTER QUARTER 1984-1985 - 57 DUTY DAYS

Last day to complete application for Winter Quarter, Monday ................................. November 19, 1984
Last day for former students to file intent to return, Monday ................................... November 19, 1984
Mass Registration, Monday (evening) ...................................................................... November 26, 1984
Evening classes begin, Monday at 8:00 p.m .............................................................. November 26, 1984
Day classes begin, Tuesday ..................................................................................... November 27, 1984
Evening Class Registration - Evening Graduate and Undergraduate Students ONLY  December 3, 4, 5, 6, 1984
Monday, Tuesday, Wednesday, Thursday ............................................................... December 3, 4, 5, 6, 1984

*NOTE: Pertains to Graduate Students ONLY.
ACADEMIC CALENDAR

Class schedule change (Drop-Add), Monday .................................................. December 3, 1984
* Last day to apply for graduation Winter Quarter, Friday .......................... December 14, 1984
Christmas/New Year break begins, Thursday, 10:00 p.m .................................. December 20, 1984
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Monday ............................................... January 7, 1985
Classes reconvene, Monday ............................................................................. January 7, 1985
Mid-Term Day, Friday ...................................................................................... January 11, 1985
* Written comprehensive examinations (8–12 noon), Saturday ....................... January 19, 1985
Spring Quarter Pre-registration
Monday, Tuesday, Wednesday, Thursday ......................................................... January 28, 29, 30, 31, 1985
Last day to drop classes, Wednesday ............................................................... February 6, 1985
Spring Quarter Pre-registration Fee Payment, Wednesday and Thursday .......... February 13, 14, 1985
Washington, Lincoln Birthday, Holiday, Monday ......................................... February 18, 1985
Final Examinations, Monday, Tuesday, Wednesday ........................................ February 25, 26, 27, 1985
Grading Day, Thursday ..................................................................................... February 28, 1985
Spring Break begins, Thursday, 4:30 p.m ........................................................ February 28, 1985

SPRING QUARTER — 1985 — 56 DUTY DAYS

Last day to complete application for Spring Quarter, Monday ......................... February 25, 1985
Last day for former students to file intent to return, Monday .......................... February 25, 1985
Mass Registration, Tuesday (evening) ............................................................ March 5, 1985
Evening Classes begin, Tuesday at 8:00 p.m .................................................. March 5, 1985
Day classes begin, Wednesday ........................................................................ March 6, 1985
Last day to make application for Student Teaching
All Quarters 1985–86, Friday ............................................................................ March 8, 1985
Last day to apply for graduation Spring Quarter, Graduate and Undergraduate, Friday ........................................................ .................................................. March 8, 1985
Evening Class Registration — Evening Graduate and Undergraduate Students ONLY
Monday, Tuesday, Wednesday, Thursday ......................................................... March 11, 12, 13, 14, 1985
Class schedule change (Drop-Add), Monday .................................................. March 11, 1985
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Friday ................................................. March 15, 1985
IFO/MEA Delegate Assembly, Friday (no classes) ......................................... March 29, 1985
Holidays (no classes), Friday and Monday ...................................................... April 5, 8, 1985
Mid-Term Day, Monday .................................................................................. April 15, 1985
* Written comprehensive examinations (8–12 noon), Saturday ....................... April 20, 1985
Fall Quarter Pre-registration
Monday, Tuesday, Wednesday, Thursday ....................................................... April 22, 23, 24, 25, 25, 1985
Last day to drop classes, Wednesday ............................................................. May 15, 1985
Final Examinations, Tuesday, Wednesday, Thursday ..................................... May 21, 22, 23, 1985
Grading Day, Friday ......................................................................................... May 24, 1985
Commencement, Friday ................................................................................... May 24, 1985

FIRST SUMMER SESSION — 1985

* Last day to apply for graduation First Summer Session, Friday .................... May 3, 1985
* Last day to notify Office of Graduate Studies of intent to take
written comprehensive examinations, Thursday ............................................. May 23, 1985
Last day to complete application for First Summer Session, Monday ............. June 3, 1985
Last day for former students to file intent to return, Monday ........................ June 3, 1985
Mass Registration, Monday ............................................................................ June 10, 1985
Classes begin, Monday .................................................................................. June 10, 1985
Class schedule change (Drop-Add), Thursday ................................................ June 13, 1985
* Written comprehensive examinations (8–12 noon), Saturday ..................... June 15, 1985
Mid-Term Day, Wednesday ............................................................................ June 26, 1985
Last day to drop classes, Wednesday ............................................................. July 3, 1985
Independence Day, Holiday, Thursday ........................................................... July 4, 1985
Final Examinations, Friday ............................................................................. July 12, 1985

*NOTE: Pertains to Graduate Students ONLY.
SECOND SUMMER SESSION – 1985

* Last day to apply for graduation Second Summer Session, Friday ............................................. June 14, 1985
* Last day to notify Office of Graduate Studies of intent to take
  written comprehensive examinations, Thursday ................................................................. June 27, 1985
Last day to complete application for Second Summer Session, Monday ..................................... July 8, 1985
Last day for former students to file intent to return, Monday ................................................... July 8, 1985
Mass Registration, Monday ..................................................................................................... July 15, 1985
Classes begin, Monday .............................................................................................................. July 15, 1985
Class schedule change (Drop-Add), Thursday ........................................................................... July 18, 1985
* Written comprehensive examinations (8–12 noon), Saturday ............................................... July 20, 1985
Mid-Term Day, Wednesday ...................................................................................................... July 31, 1985
Last day to drop classes, Thursday ........................................................................................... August 8, 1985
Final Examinations, Friday ......................................................................................................... August 16, 1985

*NOTE: Pertains to Graduate Students ONLY.

The University calendar is subject to modification or interruption due to occurrences such as fire, flood, labor disputes, interruption of utility services, acts of God, civil disorder, and war. In the event of such occurrences, the University will attempt to accommodate its students. It does not, however, guarantee that courses of instruction, extra curricular activities or other University programs or events will be completed or re-scheduled. Refunds will be made to eligible students in accordance with State University Board policy.
General Information

MISSION STATEMENT

The mission of Winona State University is to provide citizens of Minnesota regardless of sex, age, race, religious affiliation or handicap, and particularly those of its southeastern area, with accessible, moderate cost, quality undergraduate and graduate programs to meet demonstrated needs in the liberal arts, fine arts, sciences, and selected vocations including business, teacher education and nursing. To achieve this mission and to make such additional contributions to the cultural and community activities of its service region and to research as its expertise and resources permit, the University is committed to cooperate with other institutions of post-secondary education.

ACCREDITATION AND MEMBERSHIP

Winona State University is accredited for undergraduate and graduate programs by the North Central Association of Colleges and Secondary Schools. Its program in Education is additionally accredited by the National Council for the Accreditation of Teacher Education for the preparation of elementary and secondary teachers, elementary and secondary principals, school superintendents and guidance counselors. Winona State University is a member of the American Association of Colleges of Teacher Education, the American Council on Education, and the Midwest Association of Graduate Schools.

THE UNIVERSITY — FACILITIES AND LOCATION

Winona State University is one of the seven state-funded, coeducational universities which make up the Minnesota State University System. The principal purpose of the University is to open opportunities for its students to develop their abilities and to become constructive members of society. A variety of programs are offered by highly qualified faculty in an environment which stimulates sound educational endeavors.

The 4,500 students at Winona State University are instructed by a faculty of nearly 240 who, with the administration, is responsible for the development of the 27 academic departments and the continuous evaluation and revision of their programs and courses to meet the needs of a changing society.

As a further contribution to its principal purpose, the University sponsors programs of co-curricular and extra-curricular activities such as lectures, concerts and plays which serve to reinforce the more formal educational process. The University has also joined its sister institutions in Winona, the College of Saint Teresa and Saint Mary's College, in the Tri-College/University Cooperative Program to enrich the educational and cultural opportunities for the students of all three through a sharing of their programs and other activities.

The physical plant of Winona State University affords its students ample and varied facilities for its educational purposes on a compact and attractive campus—a campus that combines traditional charm with modern convenience. Although Winona State is one of the nation's oldest universities west of the Mississippi River, the majority of its campus buildings have been constructed since 1960. Minne Hall, the newest building, was completed in 1973 and houses classrooms and the offices of the departments of English and of the social sciences. Watkins Hall is the home of the art and industrial education faculty offices, classrooms and studios. Gildeemer Hall is a general classroom building which contains the offices of the education-related departments and the department of Mathematics & Computer Science. Pasteur Hall includes the offices, classrooms and laboratories for the departments of science. Somsen Hall houses classrooms and offices for the business departments and the department of foreign languages and has most of the administrative offices and a 900-seat auditorium. The Performing Arts Center has classrooms, studios and offices for the communications and theatre arts department and the department of music, together with several outstanding facilities for the presentation of musical, dramatic and other public performances. The Phelps-Howell building contains the television studios, nursing department and several service and administrative facilities. Memorial Hall is one of the finest physical education buildings in Minnesota. It houses the offices and classrooms of the department of health, physical education and recreation and has a swimming pool, six full-sized gymnasiums, indoor track and tennis facilities, handball/raquetball courts, a weight training room, an athletic training room and a physiology of exercise laboratory. This building is the center for the 15 men's and women's teams which represent the University in intercollegiate athletics and for a comprehensive program of intramural activities. Highlighting the educational facilities at Winona State is the Maxwell Library, which contains over 180,000 bound volumes and 632,026 units of microfilm from all fields of study, public documents and periodicals. The department of Military Science and the Health Service is located in the Maxwell Library building.

In addition to its modern academic facilities, the University also has excellent facilities for student living and activities. The six residence halls can accommodate 1,200 students; all but one (which was recently remodeled) were constructed within the last 15 years. Kryzsko Commons and University Center, whose final phase was completed in 1975, has lounges, dining and snack facilities, student organization offices, conference rooms and the offices of the Vice President for Student Affairs and his associates.

The location of the University in Winona, Minnesota, a city of about 27,000 situated on the west bank of the Mississippi River, is not only physically attractive but makes an important contribution to its educational purposes. The campus is a few blocks from the city's center, convenient for shopping and recreation and for the use of community resources as part of academic programs. The accessibility of Winona by highway, rail (Amtrak) and air to the metropolitan centers of the upper midwest, particularly the Twin Cities, serves the same purposes. As a supplement and enrichment for
the educational offerings, students and faculty may readily design field trips, attend concerts and lectures, visit museums and galleries or seek internships or practicums in the numerous business firms and government agencies in these centers.

DEGREES AND PROGRAMS

GRADUATE

Specialist Degree
- Elementary School Administration
- Secondary School Administration
- General School Administration

Sixth Year Certification Program
- Elementary School Administration
- Secondary School Administration
- General School Administration

Master of Arts in English

Master of Business Administration

Master of Science
- Counselor Education
- Elementary School Administration
- Secondary School Administration
- Teaching in the Elementary School
- Developmental Reading

Areas of Concentration in:
- Business Education
- English
- Health Education
- History
- Physical Education

FOUR-YEAR

Bachelor of Arts
- Art
- Biology
- Communication
- Economics
- English
- German
- History
- Individualized Study
- Mass Communications
- Mathematics
- Music
- Political Science
- Psychology
- Social Science
- Sociology
- Theatre Arts

Bachelor of Science
- Accounting
- Art (Teaching)
- Biology
- Business Administration
- Business Education
- Chemistry
- Communication (Teaching)
- Computer Science
- Criminal Justice
- Earth Science (Teaching)
- Elementary Education
- English (Teaching)
- General Science (Teaching)
- Geology
- Industrial (Teaching)
- Industry
- Life Science (Teaching)
- Mathematics (Teaching)
- Medical Technology
- Music (Teaching)
- Nursing
- Paralegal
- Physical Education (Teaching)
- Physical Science (Teaching)
- Physical Therapy
- Physics
- Public Administration
- Recreational and Leisure Studies
- School and Community Health Education (Teaching & Non-teaching)
- Social Science (Teaching)
- Social Work
- Speech Pathology

TWO-YEAR

Associate in Arts
- Criminal Justice
- General Education
- Medical Assistant
- Medical Technician
- Pre-Agriculture Education
- Veterinary Medical Technician

Associate in Science
- Executive Secretarial

ONE-YEAR

Stenographic (No diploma)

SPECIAL LICENSURE PROGRAMS

(Graduate and Undergraduate)
- Coaching
- Early Childhood
- Learning Disabilities
- Reading (Graduate only)
- Teaching Mentally Retarded

PRE-PROFESSIONAL

- Pre-Agriculture
- Pre-Dental Hygiene
- Pre-Dentistry
- Pre-Engineering (General and Chemical)
- Pre-Fishery and Wildlife Management
- Pre-Forestry
- Pre-Law
- Pre-Medicine
- Pre-Mortuary Science
- Pre-Optometry
- Pre-Pharmacy
- Pre-Podiatry
- Pre-Veterinary Medicine

Enrollment Statistics 1982 Fall Quarter

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<th>ON-CAMPUS</th>
<th>MEN</th>
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<td>UNDERGRADUATE STUDENTS</td>
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<td>Full-Time</td>
<td>19</td>
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<td>B.S. Elementary Education</td>
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<td>B.S. Secondary Education</td>
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<td>B.S. Non-Teaching</td>
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<td>Bachelor of Arts</td>
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<td>Others, including Undecided &amp; Special</td>
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<td>210</td>
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<td>Total Full-Time</td>
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<td>GRAND TOTAL</td>
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<td>5303</td>
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Student Information

Becoming an educated person is largely achieved through academic pursuits. The nurture of group relations is also of prime importance in realizing one's full potential. At Winona State University, the students hold positions of responsibility which involve them in the planning and governance of co-curricular aspects of student life. In the university residence halls, students are relied upon to develop and sustain self-government; in campus-wide organizations, students participate with the administration in the discussion and resolution of current issues.

Approximately fifty student clubs, sororities, and fraternities represent a wide variety of interests. Two are honorary fraternities, six are Greek letter chapters, two are service clubs, six are religious organizations, eleven are special interest clubs; the remaining organizations represent departmental clubs, intramural sports, student government, and political action.

The Winona State University Greek System is comprised of three fraternities: Alpha Kappa Lambda, Sigma Tau Gamma, and Delta Sigma Pi; and three sororities: Alpha Delta Pi, Alpha Xi Delta, and Delta Zeta. Each organization provides special and service activities that benefit the members, campus and community. Joining one of these organizations will greatly enhance your college experience.

Student publications are The Winonan (university newspaper), and Satori (literary magazine) and Zeigeist (philosophy magazine).

Student directed or produced media include the university radio station, KOAL, and a weekly color television program on WECC, Channel 12.

COUNSELING CENTER
The Counseling Center is located in 132 Gildemeister Hall. Counseling services are available without charge to all regularly enrolled students to help them search for answers, recognize abilities and interests, and to aid in the adjustment to university life. Students may confer with a counselor about any problem—personal, academic, or vocational.

All staff members are professional counselors who have experience in counseling with college students. A testing service is available with emphasis on vocational interest testing. All information exchanged during the counseling process is viewed as confidential and is used exclusively for the benefit of the student. The only exceptions are in the unlikely event that there is clear and imminent danger to an individual or the information is subpoenaed in court. No counseling records are kept in the general student file.

THE LEARNING CENTER
The Learning Center, which includes study skills lab, is located in 124 Gildemeister. The Learning Center is designed as a place where any WSU student may come for assistance in reading efficiency, math, English mechanics, and study skills. Such areas as time organization, effective study, listening and notetaking, reference skills and preparing for and taking examinations are discussed. You may register for the class Ed. 115 "Improving Reading and Study Skills," or make an appointment to work on an individual basis. Tutoring in particular subject areas can also be arranged through the Learning Center.

STUDENT HEALTH SERVICE
Mandatory pre-enrollment Medical Examination: A medical examination form is provided to all new students as soon as their applications for admission have been approved. Entering students schedule a medical examination through their own physicians and submit the completed medical examination form supplied by the university in time for clearance by the health office before they register. The physical examination shall be completed within six months prior to registration and shall include a report on Mantoux test reading and certification of up-to-date immunization. The medical examination is not required for graduate students, but is mandatory for undergraduates.

Facilities: The Health Service is located in the west wing of Maxwell Library. A full-time physician, five part-time physicians, two full-time nurses and a laboratory technologist staff this facility which provides for the type of preventive and curative needs met in general medical practice. Most of the service provided during regular office hours is completely covered by the student health fee. There is a minimal charge for some medications and some laboratory tests. Emergency care is available evenings and weekends at the community hospital, but at the student's own expense. A student health insurance plan, underwritten by Rushmore Mutual Life Insurance Company, is also available. The university contracts with a local orthopedic surgeon for medical services to athletes.

WINONA STATE UNIVERSITY
NURSERY SCHOOL
Winona State has a nursery school for children three to five years old. There is a Monday, Wednesday, Friday group and a Tuesday—Thursday group. Each session starts at 9:00 a.m. and ends at 11:00 a.m.

The purpose of these programs is to provide quality preschool experiences for young children, to allow parents of preschoolers to take morning classes, and to provide students in early childhood education with a laboratory setting where they can observe children and participate in a structured program.

For more information contact Dr. Jean Billman, Education Department.

ON-CAMPUS
HOUSING SERVICES
RESIDENCE HALL FACILITIES
Six resident halls, accommodating approximately 1400 students and staffed by three full-time directors, provide an excellent atmosphere to get the most out of university life. Twenty-five trained resident assistants are hired as floor leaders to assist residence hall students. The directors and resident assistants provide academic and personal
counseling services on an informal basis. The entire staff supports the academic mission of the university by creating a friendly living environment. Residential living at Winona State University is a positive involvement in higher education.

Each resident hall has several rooms which are modified to meet current handicap accessibility codes. Richards Hall contains three completely accessible apartments which are designed to provide WSU housing program offerings to handicapped students.

DINING SERVICE
Occupants of the residence halls board at the cafeteria in the university center. Students living off campus may purchase quarterly contracts to eat all meals on campus. Guests, visitors, and faculty are invited to use the dining facilities on a cash basis.

RESIDENCE HALL LIVING
Programmed activities are an important part of residence hall living. Each building provides public lounges, study areas, snack kitchens, and television rooms. The university furnishes desk, bed, mattress with pad; you furnish a pillow, sheets, pillowcases, blankets and towels. A local laundry will provide linen service for a quarterly fee. A refrigerator rental is available on campus through the Business Office. Telephones are provided in rooms and residents are responsible for all toll charges.

OFF-CAMPUS HOUSING
A limited list of off-campus rooms and apartments for students is available in the Housing Office, 132 Kryzsko Commons. It is necessary for you to visit the campus to select housing personally. Office hours are 8:00 a.m. to 4:00 p.m. weekdays.

These listings are compiled from information provided to Winona State University by individual landlords. The university makes no representation as to the kind, quality or quantity of facilities available from the landlords listed, nor does the university have any control over changes in the information. The cost and availability of space is subject to change at the discretion of the landlord.

Winona State University does not assume any liability arising from the relationship between the student and the landlords on these listings. All questions about accommodations should be addressed directly to the landlords.

While the university does not own or operate married housing facilities at the present time, listings of accommodations are available at the Housing Office. The Thurlrey Homes, a development jointly owned by the city and the federal government, provides partially furnished apartments for a limited number of married students. Application must be made in person on weekdays (not Saturdays) to the Thurlrey Homes, Tenant Selector, 165 East 4th Street, Winona, MN 55987.

RESERVING A ROOM
You may request an application for residence hall space on the form which is mailed to you with your 'Letter of Acceptance' from the Winona State University Admissions Office. You should mail the application request to the WSU Housing Office after which you will be sent the residence hall application materials and information packet.

Residence hall rooms are allotted on a "first-come - first served" priority; therefore, you are urged to return the application contract and $50.00 reservation fee as soon as possible. You will be notified approximately March 1 about space available. If you receive an "on campus" room, your assignment will be mailed to you between June 5 and June 15, and you will be requested to send a $100.00 advance payment. If the advance payment is not received by July 1, your room assignment will be cancelled and your space will be reassigned to another applicant. NOTE: Do not send the $100.00 advance payment until you receive your room assignment.

THE COLLEGE OF SAINT TERESA
(women only)
During the past four years, Winona State University has been utilizing space available in the residence halls at The College of Saint Teresa to house approximately 300 women per year. This is an option, not a requirement. Due to the number of students who apply for our dorms, this has proven to be a good alternative.

If your rooms are filled when you apply (women only), you may choose the optional residence hall space at The College of Saint Teresa or, if you prefer, seek an "off campus" apartment or room.

CANCELLATIONS
Cancellations must be in writing and postmarked July 15 or before for fall quarter, two weeks prior to winter quarter, spring quarter, and summer sessions to ensure refund of the advance payment and reservation deposit.

HANDICAPPED STUDENT SERVICES
A handicapped person (student) is defined using Section 504 of the Rehabilitation Act of 1973. This comprehensive definition includes anyone who has a physical or mental impairment or history of such an impairment, which substantially limits at least one major life activity.

WSU is in compliance with Section 504, requiring non-discrimination of handicapped persons. Qualified handicapped students are not excluded from benefits and services offered by WSU. Efforts have been made to assure that buildings and programs are accessible to all students. The Admissions Office, Counseling Center, Learning Center and Education Department are available, emphasizing individual help, including academic adjustments for equality of services. Direct services to students are also provided by a federally funded Special Services program. A campus 504 advocate, located in the Administrative Affairs office, can be contacted for assistance with special problems.

CAREER PLANNING AND PLACEMENT SERVICE
Seniors seeking positions in business, industry, government, non-profit organizations, and education, who wish assistance in securing employment upon graduation, should register with the Winona State University Placement Office early during their senior year. W.S.U. undergraduate or graduate students will receive personalized assistance in preparing for and conducting a job search.

Underclasspersons desiring career information are also welcome to use the resources of the Placement Office. Office hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday, during the academic year and 7:30 a.m. to 4:00 p.m., June through August.

STUDENT ACTIVITIES
The focal point of student activities is Kryzsko Commons (Student Union), a complex with dining facilities such as a snack bar, patio, private dining rooms, alumni lounge, and main dining room for residence hall students; conference rooms for informal gatherings of students and faculty; a six-lane bowling alley; a pocket billiards and ping-pong area; resident lounges; television-viewing center; the campus bookstore; mini-theatre; and staff offices.

The director of Kryzsko Commons and the director of housing, together with the appropriate student committees, coordinate the social, cultural and recreational program. Activities include movies, guest speakers, concerts, intramural sports, river excursions, banquets, art and craft exhibits, and other special events.

With a university I.D., ski equipment and bicycles may be rented for a nominal fee.

INTERNATIONAL STUDENT ADVISING
The international student office located in 128 Kryzsko Commons provides assistance to students from countries other than the United States. The director of international students is available for information and advice regarding immigration, discrimination concerns, laws, travel, employment, personal concerns, and other questions of students who are not familiar with the campus community and American way of life.

There is no intensive English program for international students on campus. However, the English Department offers a special course, "English for Non-Native Speakers," which is REQUIRED of all international students as preparation for English 110 and 115.

OSLO EXCHANGE PROGRAM
This is the twenty-second continuous year of an exchange of students between Winona State University and the Oslo Offentlige Lærerskole (Teacher's College) in Norway. Twenty-eight Winona State students and twenty-six Norwegian students, in addition to several staff members, have participated in the exchange. One or more students are selected each year to participate in the program. Application forms and more information about the program can be obtained in the Education Department Office, Gildemeister 152. The program is directed by the Oslo Exchange Committee composed of faculty and students.
Financial Information

All financial information below is subject to change by action of the Minnesota State University Board. A non-refundable fee of $10.00 is required with the Application for Admission. Persons who have been admitted to Winona State University and have paid the $10.00 fee will not be subject to this fee for subsequent enrollments.

TUITION

REGULAR ACADEMIC YEAR

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate — on-campus and extension courses:</th>
<th>Graduate — on campus course:</th>
<th>Graduate — extension courses:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>Resident</td>
<td>Resident and non-resident</td>
</tr>
<tr>
<td></td>
<td>$23.35</td>
<td>$29.90</td>
<td>$50.50</td>
</tr>
<tr>
<td></td>
<td>Non-Resident</td>
<td>Non-Resident</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$46.70</td>
<td>$59.80</td>
<td></td>
</tr>
</tbody>
</table>

SUMMER SESSION:

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate, resident and non-resident</th>
<th>Graduate, resident and non-resident</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$22.00</td>
<td>$27.00</td>
</tr>
<tr>
<td></td>
<td>$27.00</td>
<td>$32.40</td>
</tr>
</tbody>
</table>

FEES

ACTIVITY FEE

- Maximum activity fee: $56.60 per quarter or $28.30 per summer session
- Students enrolled in regular on-campus offerings: $6.30 per credit hour
- Students enrolled in External Studies Program: $3.15 per credit hour
- Students taking courses in Rochester: $3.15 per credit hour
- Students enrolled at off-campus locations other than Rochester in extension courses, continuing education unit courses or workshops: $3.15 per credit hour
- Senior citizens over the age of 62 enrolled on a space available basis: no fee

INSURANCE

Health Insurance is available to all full-time students. The cost is approximately $43.00 per quarter for single coverage for Medical and Hospitalization Insurance. This coverage is available for all full-time students who do not have their own coverage. The insurance is available for full-time summer session students. Payment must be made during registration periods. Further details are available in the counseling center.

CLASS FEES

- Bowling is $7.00 per quarter and golf $11.00 per quarter in addition to the regular tuition.
FINANCIAL INFORMATION

INCIDENTIAL FEES
You will find several smaller fees which arise with special class enrollment and other curriculum projects. A charge of $5.00 per credit hour is made for the privilege of Credit by Examination.

LATE REGISTRATION FEE
Payment in full, all for tuition, fees and residence hall must be made during the regularly scheduled registration period. Any payment accepted after such registration period will be assessed a late fee of $5.00 for the first day payment is late and an additional $2.00 for each succeeding instructional day. Payments of tuition and fees will not be accepted beyond the periods on the following schedule:
- Regular Quarter — Ten class days
- Summer Session — Four class days
- Extension — No later than second class meeting

REFUND POLICY
Students who withdraw from the university should obtain Application for Refund forms from the Office of Registrar.
Except for provisions contained elsewhere in this system policy, refunds of tuition will be made only to students who withdraw from the university. No refunds are made on individual credit drops. Students who withdraw from the university shall receive tuition refunds according to the following schedule:

REGULAR SCHOOL YEAR:
- 1st through 5th instructional day: 80%
- 6th through 10th instructional day: 60%
- 11th through 15th instructional day: 40%
- 16th through 20th instructional day: 20%
- After 20th instructional day: None

EXTENSION, EVENING AND SATURDAY CLASSES:
- Before 2nd class meeting: 80%
- Before 3rd class meeting: 60%
- Before 4th class meeting: 40%
- Before 5th class meeting: 20%
- 5th meeting and after: None

SUMMER SESSION
- 1st through 5th instructional day: 60%
- 6th through 10th instructional day: 20%
- After 10th instructional day: None

If your course schedule is reduced for the convenience of the university, the tuition shall be adjusted without penalty. Refunds on activity and student union and health service fees will be on the same basis as tuition. As for textbooks and materials, refunds are not made. Used books may be sold at the university Bookstore during the last week of each quarter or session.

The university also enforces “drop-add” fees. Students who change a part of their program after classes have started, will be required to pay a $2.00 fee per program change when classes are added. The “drop-add” clause is intended only for students who must correct errors in their program.

You 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 or credits and to deny you further registration until all monies due the university have been paid.

ROOM AND BOARD
Payment for Residence Hall and meal services are made in advance on a quarterly basis or by semi-quarterly installments. All rates are subject to change by the State University Board. The following costs include meals and a phone in each room.

<table>
<thead>
<tr>
<th>Category</th>
<th>1st through 5th instructional day</th>
<th>6th through 10th instructional day</th>
<th>After 10th instructional day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Occupancy</td>
<td>$373.60</td>
<td>$499.00</td>
<td>$499.00</td>
</tr>
<tr>
<td>Normal Occupancy - Double Room</td>
<td>$747.20</td>
<td>$499.00</td>
<td>$499.00</td>
</tr>
<tr>
<td>Guest rate (per night)</td>
<td>$556.00</td>
<td>$499.00</td>
<td>$499.00</td>
</tr>
<tr>
<td>Room deposit</td>
<td>$50.00</td>
<td>$50.00</td>
<td>$50.00</td>
</tr>
</tbody>
</table>

ESTIMATED TOTAL MINIMUM EXPENSES FOR UNDERGRADUATE STUDENTS

<table>
<thead>
<tr>
<th>Category</th>
<th>1983-84 Resident Per Quarter</th>
<th>1983-84 Non-Resident Per Quarter</th>
<th>1984-85 Resident Per Quarter</th>
<th>1984-85 Non-Resident Per Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition (16 quarter hours)</td>
<td>$373.60</td>
<td>$747.20</td>
<td>$426.40</td>
<td>$852.00</td>
</tr>
<tr>
<td>Activity, Student Union, and Health Service Fee</td>
<td>56.60</td>
<td>66.60</td>
<td>56.60</td>
<td>56.60</td>
</tr>
<tr>
<td>Residence Halls - Board and Room</td>
<td>499.00</td>
<td>499.00</td>
<td>499.00</td>
<td>499.00</td>
</tr>
<tr>
<td>Medical and Hospital Insurance (optional)</td>
<td>43.00</td>
<td>43.00</td>
<td>43.00</td>
<td>43.00</td>
</tr>
<tr>
<td>Total Average Student</td>
<td>$972.20</td>
<td>$1345.80</td>
<td>$1025.00</td>
<td>$1450.60</td>
</tr>
</tbody>
</table>

Textbooks will average about $90.00 per quarter. Tuition and fees are to be paid in advance for the quarter on the regularly scheduled registration days.
RESIDENT STATUS

As a state supported institution, Winona State University has a primary function of making higher education available to residents of the state of Minnesota. For that reason a higher tuition rate is charged if you are a resident of another state or nation.

Regulations and criteria regarding the determination of resident status can be obtained through the Admissions Office, 129 Phelps Hall. Any student having been initially classified a nonresident and having decided that residency has been achieved, may initiate action to effect a change by filing with the Admission Office a "State of Residence" form.

MINIMUM STANDARDS OF SATISFACTORY PROGRESS FOR FINANCIAL AID RECIPIENTS

Federal regulations require that all financial aid recipients maintain satisfactory academic progress. All students receiving assistance under the following programs will be required to adhere to the guidelines listed below.

The aid programs are: Pell (Basic) Grant, Supplemental Educational Opportunity Grant (SEOG), Nursing Scholarship, National Direct Student Loan (NDSL), Nursing Student Loan, Guaranteed Student Loan (GSL), Federal College Work-Study Program (CWSP), Minnesota College Work-Study Program (MN CWSP), Minnesota Higher Education Coordinating Board (MHECB) Scholarship or Grant, Allis Scholarships, and Winona State University (WSU) Scholarships. The intent of this requirement is to encourage all aid recipients to advance steadily toward the completion of their degrees. These guidelines are concerned only with the number of credit hours for which a student received funding in relation to the number of credit hours successfully completed.

The following guidelines are in effect at Winona State University

1. Credit Earned/Student Status:
   A. Full-time Students — Students who receive financial aid based on full-time enrollment are expected to successfully complete a minimum of an average of 12 credit hours per term and 36 credit hours per academic year. An academic year is defined as three quarters, usually referring to fall, winter, and spring terms. All students who fail to maintain 12 quarter hours of credit in any one term are encouraged to make an appointment with a financial aid advisor. At this time the implications of carrying less than 12 credits will be discussed with the student. When it becomes apparent that the student will not complete 36 credits in three terms, the student may be declared ineligible to receive aid for the third quarter. It should be noted that financial aid awards are computed based on the assumption that all students will enroll for an average course load of 16 hours of credit per quarter or 48 hours of credit during an academic year.

   B. Three-quarter-time Students — Students who receive financial assistance based on 3/4-time enrollment are expected to successfully complete a minimum of 9 quarter hours of credit per term or 27 quarter hours of credit per academic year. It is understood that students enrolling 3/4-time will be funded on a 3/4-time basis.

   C. Half-time Students — Students who receive financial assistance based on half-time enrollment are expected to successfully complete a minimum of 6 credit hours per term, 18 credit hours per academic year. It is understood that students enrolling 1/2-time will be funded on a 1/2-time basis.

   * Grade is not acceptable.

2. Graduation Requirements: It should also be noted that if a student completes 12 quarter hours of credit for twelve quarters, the student will not be eligible for graduation after four years. All undergraduate students must earn 192 credits (an average of 16 credits per term) in order to graduate with a four-year baccalaureate degree from Winona State. Financial aid is available to students attending full-time for a period of twelve quarters. Under certain circumstances students will be allowed to receive financial aid for a maximum of fifteen quarters of full-time attendance. Courses which are taken for personal enrichment (audited), courses enrolled in a second time to obtain a better grade (repeated) and courses which are not counted in computing the 192 credits necessary to graduate do not count in the computation of the 12 credits per term or 36 credits after three quarters of attendance, since these credits do not advance the student toward a degree.

3. Withdrawals: If a student withdraws within the first few days of the term before the financial aid checks are available for distribution, the student will not receive any aid since no progress has been made toward a degree. A student withdrawing within the first few days of the term will be required to pay any incurred expenses from his or her own funds.

Standard university refund policies and procedures will be followed when a student withdraws from the institution for any reason during the quarter after student aid checks have been distributed. University refund policies could require the student to make immediate repayment of all or a percentage of the funds received. If the student withdraws from the institution after the deadline for financial aid distribution, the financial aid office will provide the student with a refund of funds not used or earned.

All undergraduate students must earn 192 credits (an average of 16 credits per term) to be eligible for graduation after four years. Under certain circumstances students will be allowed to receive financial aid for a maximum of fifteen quarters of full-time attendance. Courses which are taken for personal enrichment (audited), courses enrolled in a second time to obtain a better grade (repeated) and courses which are not counted in computing the 192 credits necessary to graduate do not count in the computation of the 12 credits per term or 36 credits after three quarters of attendance, since these credits do not advance the student toward a degree.

Standard university refund policies and procedures will be followed when a student withdraws from the institution for any reason during the quarter after student aid checks have been distributed. University refund policies could require the student to make immediate repayment of all or a percentage of the funds received. If the student withdraws from the institution after the deadline for financial aid distribution, the financial aid office will provide the student with a refund of funds not used or earned.
aid received, the student would still not be eligible to receive financial assistance for the next academic period of enrollment since no progress has been made toward a degree. In this case the student would be required to complete the next quarter in which he or she enrolls utilizing his or her own resources or repay the funds received for that quarter. This policy may be waived if the withdrawal was the result of a personal family emergency or documented medical reasons. Future aid will be contingent upon satisfactory completion of at least 12 quarter hours of credit during the quarter financed by the student, provided the student received funds as a full-time student the quarter he or she withdrew. If the student was funded at the 3/4-time rate and withdrew, 9 quarter hours of credit must be earned during the quarter financed by the student. A student who was funded as a 1/2-time student and withdrew must earn 6 quarter hours of credit during the quarter he or she

4. Appeals: Any student denied aid because of a lack of satisfactory progress has the right to appeal this decision. A written appeal should be submitted to the Financial Aid Office staff for review. The Financial Aid Office reserves the right to modify The Satisfactory Progress Standards to accommodate special circumstances. If the student wishes to appeal the decision of the Financial Aid Office staff, the student may appeal to the Satisfactory Progress Committee.

5. Regaining Eligibility: If a student did not successfully complete the necessary credits to be considered making satisfactory progress after three quarters, the student will be required to successfully complete the number of credits necessary as determined by the Financial Aid Office, using his or her own resources before additional aid will be granted. After the student has successfully completed the number of credits necessary to be considered eligible for further financial assistance, the student will again be eligible to receive aid. Students may consider enrolling during the summer session(s) utilizing their own funds in order to reestablish eligibility to receive aid funds for the next academic year.

EMPLOYMENT

Federal Work-Study Program: Students who demonstrate need may work a maximum of twenty hours per week during the regular school year and/or forty hours per week during vacation periods. Most employment is on campus, but students can work in off-campus, non-profit organizations or agencies.

State Work-Study Program: Minnesota residents who are full-time students are eligible to apply for this part-time employment program. Eligibility requirements, placement, and hours worked are the same as The Federal Work-Study Program.

Miscellaneous Part-Time Work: The Financial Aid Office cooperates with the Minnesota Department of Employment Services in securing part-time student employment. A counselor is available to assist you.

SCHOLARSHIPS

Scholarships are awarded in recognition of superior achievement and potential; the amount of each award is determined on the basis of the recipient's total resources. Endowed Scholarships and Donors: Elia Tucker, by Lucinda Tucker; Harriet R. Choate; Wenonah Chapter D.A.R. Laird, by Frances Laird Bell and Maude Laird Prentis; W. W. Norton, Beulah Norton, by Mrs. Emma B. Norton; Louise Sutherland Kindergarten Award, Florence Loring Richards; World War, by Residents of the women's residence halls, 1917-1919; Seventieth Year, by 1,100 alumni and friends of the university.

L. L. Brown, Stephen H. Somsen; Alice H. Mead; Josephine Flagg, by Eda D. Flagg; Theda Gildemeister; Etta Heddon Howe; Elin; Wenonah Chapter D.A.R. Mabel Marvin, Centennial, by faculty members, former scholarship holders, and other friends of the university; Phillip F. Loughey Memorial, by Peter F. Loughey in memory of his son; Charles and Ellora Allis; Glen E. Galligan Professional Development Award, by Mrs. Glen E. Galligan and family; Jesust Nursing Scholarship, by Jesse Justus, Sarah Allen, James and Margaret Borgwed, Effie Chris­tensen, Larry Connell, Mary June Fischer, Elder, Herbert Garvin, Fred and Mary Heyer, Lilly Nelson Hudson, Blanche Hunter, Harry Jackson by Mrs. Harry Jackson, Clara Klug, William Markle, Warren Marley by Mrs. Warren Marley, Luther McCown by Mrs. Luther McCown, Mary Koven-Rivet, Katie Sandt, Jean Talbot, Hannah and Mary Tillman, Walter Wadewitz, Memorial Scholarship by Mrs. Walter Wadewitz, William P. Theurer, Winona County American Bi­centennial Committee, Mary Walker, Phyllis Ehmke, Arthur and Viola (Zeller) Mattson, Raymond N. Thielen by family and faculty and students.

Annual Scholarships: The following roster of annual and recurring scholarships indicates the extent of the support which the university receives from the wider community:

- Pank Lady, by the Winona Community Memorial Hospital Auxiliary; Winona County Medical Association and its Auxiliary; Delta Kappa Gamma, International Honorary Fraternity of Women Educators; Winona Business and Professional Women's Club.
- Award for Creativity in Writing or the Theatre: Sylvia S. Bremer, Prize, by Adolph Bremer.

Nursing Scholarships: Nursing scholarships are available to applicants of exce­sional financial need who require such assistance to pursue a full-time course of study. An applicant must be accepted as a full-time student in the Nursing Program.

President's Honor Scholarship: Approximately 100 students receive the President's Honor Scholarship each year. Students must rank in the upper 20% of their high school graduating class and have one of the following test scores to be considered for the scholar­ship: ACT, PSAT, or SAT.

Fine Arts Scholarship: Scholarships based on talent are available through the Art, Music, and Communication Theatre Arts Departments. Students should contact these departments.

Minority Scholarship: Scholarships are available to qualified minority students. For information contact the Winona State University Minority Student Advisor.

State Part-Time Student Grant: Available to qualified Minnesota residents attending on less than a full-time basis.

Supplemental Educational Opportunity Grant: A Federal Grant available to under­graduate students with exceptional financial need.

Pell Grant: A federal grant program that provides gift assistance to Undergrad­uate students based on their financial need to attend college.

LOANS

National Direct Student Loan: A 5% interest loan available to students demonstrat­ing financial need. Repayment does not begin until six months after leaving school. Partial cancellation of the loan is provided for teaching in certain areas or certain subject matters.

Guaranteed Student Loan: A loan that is available to students accepted for enroll­ment or enrolled on at least a half-time basis. Demonstrated financial need is not required. Repayment at 9% interest begins 6 months after you cease to be enrolled as at least a half-time student. Undergraduate students may borrow a maximum of $2500, independent Undergraduates up to $3000, and graduate students up to $5000 per year. Applications are available in the Financial Aid Office.

Nursing Student Loan: An applicant must be enrolled or accepted for enrollment as a full-time student in the Nursing Program and be in need of this low interest loan in order to pursue a full-time course of study.

Emergency Loans: Short term loans
are available for emergency expenses. Applications and information are available in the Financial Aid Office.

ASSISTANTSHIPS

Graduate assistantships are available to highly qualified graduate students in several departments. Applicants should submit requests for assistantships to the appropriate department chairperson, or to the Dean of Graduate Studies.

Anyone who has been appointed to a graduate assistantship prior to the first day of classes shall be granted resident tuition status for the period of time of the appointment.

Army R.O.T.C.: Participation in the on-campus Advanced Army R.O.T.C. Program at Winona State University provides the following financial assistance:

a. Basic Entitlement: Approximately $2600 for all advanced course students earned through participation in the R.O.T.C. Program during a two-year period. Computation is based upon $100 per month x 10 months x 2 years = $2000. In addition, approximately $600 is received during attendance at Advanced R.O.T.C. Summer Camp.

b. Scholarships: Students may apply for 4, 3, 2, and 4, 3, 2 year full-tuition Army R.O.T.C. scholarships. In addition, scholarship students receive a $100 per month allowance during each month of the scholarship. University students not currently enrolled in Military Science may apply for 3 and 2 year scholarships.

c. Simultaneous Membership program (SMP): Students enrolled in the Advanced Army R.O.T.C. Program may simultaneously serve as a member of a U. S. Army Reserve Unit or Army National Guard Unit and receive pay from both programs. Between $4400 and $5400 is available through participation in this program.

For further information, consult the Military Science Department advisor.
Academic Information

Winona State grants the Bachelor of Science and Bachelor of Arts degrees, the culmination of its four-year program. Though the majority are enrolled in these programs, the university also has a substantial enrollment in the graduate program, the two-year curriculums which may fulfill the requirements for the Associate in Arts and Associate in Science degrees, and pre-professional programs.

ADMISSION REQUIREMENTS

Winona State University requires students applying for admission to meet certain entrance requirements. No person will be denied admission on the grounds of race, color, sex, or national origin.

Freshmen Students: All students who rank at or above the 50th percentile of their high school graduating class or achieve an acceptable score on one of the college entrance examinations are eligible for admission. A composite score of 16 on the ACT, a combined verbal-mathematical score of 70 on the PSAT or a combined verbal-mathematical score of 700 on the SAT are acceptable levels. Students who rank between the 33rd and 49th percentile of their graduating class or achieve a composite score of 13 on the ACT, a combined verbal-mathematical score of 60 on the PSAT, or a combined verbal-mathematical score of 600 on the SAT are admitted on a provisional basis, with the recommendation to carry no more than 12 credits during the first quarter. Students who rank below the 33rd percentile of their graduating class and score below minimum requirements on the ACT, PSAT, or SAT must attend an open summer session.

Students who have not graduated from high school will be considered for admission if they have been awarded a High School Equivalency certificate based on the successful completion of the GED test, and if they achieve an acceptable score on one of the college entrance examinations.

Early Admission: A currently enrolled high school student who has demonstrated unusually high ability and/or achievement and who is recommended by a high school counselor or principal may be considered as an applicant. Students must have completed the 11th year before being eligible for consideration.

International Student Admission: All international students are required to submit a TOEFL score of 500 or more to comply with college regulations. The university requires that international students enroll in a Winona State University English course specifically designed for their special needs after their initial enrollment here.

In addition to official academic credentials, international students must present proof of financial responsibility for the full course of study. Specific financial support forms for this purpose will be supplied by the university. The university requires that all financial obligations including tuition, fees, room and board be paid at the time of registration.

The International Student Office emphasizes that the financial support statement is of extreme importance because very little financial aid exists for foreign students and immigration regulations prohibit employment outside the campus community. In view of the increasing cost of education and unstable conditions around the world, Winona State is unable to assume responsibility for emergency situations which arise while a foreign student is in attendance at the university.

International students must apply well in advance of the time they wish to enroll. This is necessary due to the complexity of the admission process and allows for the proper planning of mandatory orientation programs for international students.

International students interested in further information about the university should direct their initial inquiries to the Director of International Students, Kryzsko Commons, Winona State University, Winona, Minnesota 55987.

Transfer Students: The policy for admission of transfer students will be based on the retention standards of Winona State University. Students should be academically eligible to return to their former school. A transfer student who has attempted from 1-16 quarter hours of credit may be admitted if the grade point average at the last school attended is not less than 1.50, between 17-43 credits the GPA must be 1.75, and for 44 credits and above the GPA must be 2.00.

Students who have earned credits in other colleges, including Minnesota State Universities, which are members of the North Central Association of Colleges and Schools or corresponding regional accrediting association, receive credit to the extent that courses pursued can be applied to the curriculum selected. Transfer students admitted to Winona State University will receive credit for courses taken at accredited institutions in which the grades A, B, C, D, P or their equivalents were attained. Transfer students who are on probation or have been suspended should refer to the section in the catalog on "Retention and Scholarship Standards."

Only those courses and credits taken at Winona State University will count for the computation of grade point averages and for
probationary decision after enrolling at Winona State University. An official transcript, including a statement of honorable dismissal is required from each college attended. Applicants should request the registrar of each college attended to send an official transcript directly to the Office of Admissions, Winona State University. A student failing to comply with this requirement and inadvertently admitted to the university, is subject to suspension.

As a general rule, the A.A. degree (90 quarter hours credit minimum) with 60 credits in Liberal Studies from a community or junior college in a transfer curriculum will waive the general education requirement at Winona State University provided that they have a broad distribution of credits in the humanities, natural sciences, and social sciences and provided that they have met the skills area requirements in composition, speech, and mathematics. Exceptions to this rule are handled individually. Students seeking a B.S. Education degree must meet the teacher education entrance requirements.

Credits earned at a community or junior college may be accepted in transfer to a maximum of 96 quarter hours, to apply toward the 192 credits required for a degree. Credits may not be transferred if college credits earned in a course by a student who already has a total of 96 quarter hours earned at a community or junior college will not be counted toward the 192 required credits, but it will not be necessary to take the corresponding required course. Transferred credits must average at least C in quality.

Returning Students: All Winona State students who do not attend WSU for one quarter or more (summer excluded) will be classified as a returning student. You will also be classified as returning if you leave WSU and attend any college or university for two or more years (10 terms or less quarters or semesters) on a part-time basis. A returning student who has attended another college or university for more than two terms on a part-time basis will be considered a returning transfer student and must apply as a transfer student. Official transcripts will be required for all college/university attendance.

A returning student who has been academically suspended should refer to the section in the catalog on "Retention and Scholarships Standards" for readmission guidelines.

A returning student must complete the Intent to Return Form available in the Admissions Office. The Registrar’s Office will update the student's record and the Admissions Office will then evaluate the record for possible readmission.

Undergraduate Specials: All students taking undergraduate courses for enrichment, transferring to another school, general interest, or who have no intentions of earning a degree will be classified as undergraduate specials. Students in this category must (1) file an Undergraduate Special Enrollment Form, (2) submit a $10.00 non-refundable application fee (if they have never attended Winona State University and paid the fee previously), (3) submit transcripts of previous college work or Statement of Good Standing — for those who wish to transfer credits to their "home" university or college.

Post-Baccalaureate Students: Students holding a baccalaureate degree and taking additional courses to satisfy a second major, minor, or certificate will be classified as post-baccalaureate students. Students in this category must: 1) file a Post-Baccalaureate Application Form in the Admissions Office; 2) submit a $10.00 non-refundable application fee (if they have never attended WSU and paid the fee previously), and 3) submit transcripts of previous college work and proof of baccalaureate degree.

Admission to Summer Session: Admission to a summer session may be "open" to all students including freshmen, transfer, and special students who do not qualify for admission during the academic year. This includes students who have been suspended for low scholarship. All students must follow the normal procedures for admission.

These students must attend both summer sessions, will be limited to a maximum of 5-6 credits per summer session, and must make extensive use of the Learning Center. Students must successfully complete at least 8 credits during the summer with a grade point average of 2.00. Students who fail to meet these standards will be denied further admission to the university. This will apply only to those who do not meet other admission requirements.

Vocational-Technical School Students: Students interested in transferring credits from vocational-technical schools should contact the Admissions Office.

Credits may be applied to a Vocational Education major, Business Education-Office Administration major, Individualized Study major (Technical Option), or as general electives. Generally the maximum credits accepted from a vocational-technical school are 24-48 for a completed program.

Students entering WSU from a Vocational-Technical School will be considered transfer students. These students will be required to submit an official transcript from the vocational school indicating their graduation date. A high school transcript and admission test scores are also required.

Correspondence Coursework: Winona State University does not offer correspondence coursework. The university will accept a maximum of 15 quarter hours of correspondence work toward a degree.

Credit or Advanced Placement by Examination: The departments of Biology, Chemistry, English, Mathematics and Physics offer advanced placement to qualified students who achieve satisfactory scores on C.E.E.B., Advanced Placement Tests, or other tests. For specific details, consult the chairpersons of the departments.

Students who successfully complete the general examination of the College Level Examination Program (CLEP) may be granted advanced standing of up to 32 hours of credit. Credit is granted in history-social sciences, natural sciences, arts, and the humanities. The departments of Business Administration—Economics, English, Sociology, and Mathematics will also accept credit for successful completion of CLEP subject examinations.
### ACADEMIC INFORMATION

**DECLARATION AND CHANGES IN MAJOR/MINOR/CERTIFICATION PROGRAM**

Students must declare or change a major, minor, or certification program by completing the appropriate form which is available in the Registrar's Office, Sornsen 228. Upon declaration or change of declared major/minor/certification program, students must follow the requirements in effect on the date shown on the declaration or change form. Program implementation dates are available in the Registrar's Office. Detailed program requirements are available in the office of the appropriate Department Chair.

**CREDIT BY EXAMINATION**

Credit by departmental examination may be granted, without formal enrollment in a course, if you can satisfy the requirements of the course by a written or oral examination. The intent of this policy is to make it possible, without enrolling in the course, for a student who has completed equivalent study at a non-accredited school or who can present evidence of independent study and related work experience to establish credit. You must be fully matriculated with an established Grade Point Average at Winona State University, in good standing, and enrolled at the university during the quarter in which a "credit by examination" is taken. You may not use this process to improve a grade.

**GRADUATION REQUIREMENTS**

The requirements for graduation from Winona State University with a Bachelor of Arts or Bachelor of Science degree consist of 192 quarter hours of credit; overall C average; 45 quarter hours in residence during the junior and senior years combined (residence credit is defined as any credit earned by any Winona State University student under the Minnesota State University Common Market Program); enrollment during the quarter of graduation; general education requirements completed (see section on General Education Program for Undergraduate Students); and completion of C average in one major and one minor or one broad major of 65 or more credits in length *only one option or one concentration may be selected in fulfilling the major or minor requirements within a given department. A minimum of 12 credits of non-duplicative coursework will be required in major/minor or double major combinations completed within the same department.

The major and minor grade point averages do not include additional requirements. Bachelor of Science candidates, teaching only, must complete the professional education sequence, including student teaching, and must be eligible for teacher certification in Minnesota. Students who change from one curriculum to another within the university.
must meet the requirement for the newly chosen curriculum even though the total number of credits earned exceeds the total minimum for graduation.

You have the final responsibility for selecting and registering for courses that will meet curriculum requirements. By mid-quarter of the term you plan to receive a degree, you must file a formal application for graduation with the Registrar's Office. Three weeks prior to graduation, a list of candidates will be posted on the Registrar's Office bulletin board on the second floor of Somson Hall. You should check this list to ensure that you have been approved for graduation; a candidate whose name does not appear must notify the Registrar immediately. Students graduating at the end of spring quarter are required to attend the commencement exercise.

B.S. DEGREE AND/OR TEACHER CERTIFICATION REQUIREMENTS FOR B.A. GRADUATES

The holder of a Bachelor's degree not in teacher education either from this university or another accredited institution, may qualify for teacher certification by completing the Professional Education Sequence, including student teaching in the major field, and one of the B.S. teaching majors with a "C" grade (G.P.A. of 2.0) in the major. A student requesting additional certification in a minor must also have a "C" average in the major. A candidate whose name does not appear on the Terminal Degree Registry Office of a "repeat" class by completing the necessary paperwork (repeat form or card). The Registrars Office does not accept responsibility for incorrect credit totals or grade point averages which are due to "repeat" courses for which the proper paperwork has not been completed.

PASS-NO CREDIT COURSES

The Winona State "pass-no credit" program enables you to enroll in unfamiliar or difficult academic subjects without fear of jeopardizing your grade point average. The program is intended to introduce you to the life-long context of education in which learning does not include the traditional "reward or penalty" of a grade.

Although the courses in this program upon satisfactory completion, grant credit which applies toward graduation the credit does not affect the grade point average. Completion of such a course is entered P (pass) or NC (no credit) on your permanent record. However, P is interpreted as equivalent to A, B, C and D.

Departments designate which courses they require or permit to be taken on the "pass-no credit" basis. Major, minor, or professional courses are generally not included, but exceptions may be made upon approval by the Departmental chairperson. When you select a major or minor after taking a course in that department on a "pass-no credit" basis the department may permit the course to count.

You may not take more than six (6) P/NC credits per quarter exclusive of student teaching and internships. The six credits include both optional P/NC classes and classes in which P/NC grading is mandatory. In addition, your total number of credits for graduation may not include more than forty-eight (48) "P" credits. Optional P/NC courses, mandatory P/NC courses, student teaching and/or internships are all counted in the forty-eight credit limitation. You must decide whether or not to take a given course which is offered on an optional P/NC basis prior to enrolling as changes after enrollment will not be permitted.

If you receive an NC and wish to repeat the course, you must do so on a regular grade and honor point basis, not on the "pass-no credit" basis.

AUDITED COURSES

You may audit courses if you so desire. This procedure permits you to attend classes but not receive credit. Courses pursued on an audit basis must be declared and processed prior to completing your registration. Regular tuition charges apply. Students may not use "audit" credits to satisfy graduation, certification, or licensure requirements.

ARRANGED CLASSES INDEPENDENT STUDIES-DROP-ADD

A student who desires to take an arranged class must first complete an arranged class application form.

ARRANGED COURSES

A course may be offered on an arranged basis at the discretion of the appropriate faculty member, department chairperson, and dean. A student who desires to take an arranged class must first complete an arranged class application form.

INDEPENDENT STUDY

Projects beyond the scope or range of courses offered may be pursued on an independent study basis at the discretion of the appropriate faculty member, department chairperson, and dean. Applications must be completed according to announced deadlines.

DROPPING AND ADDING COURSES

In the event a student must drop and/or add a course after registration has been completed, report to the Registrar's Office, Somsen 228, for instructions on how to process a drop/add.

GRADE POINT AVERAGE AND GRADUATION WITH HONORS

Each quarter hour of credit attempted receives honor points according to the following: each A credit - 4 honor points; each B credit - 3 honor points; each C credit - 2 honor points; each D credit - 1 honor point; each E - 0 honor points. The grade point average is computed by dividing the total number of honor points by the total number of credits attempted. The frequently referred to C average is a 2.00 grade point average.

A graduating student with an overall grade point average of at least 3.25-3.49 is graduated Magna Cum Laude. A student with an average of 3.50-3.74 is graduated Cum Laude. A student with an average of 3.75-4.00 is graduated Summa Cum Laude. All courses from all institutions are used in the computation for honors. However, to be considered for honors, your WSU GPA must be 3.25.

To be eligible for graduation with honors, you must have completed 45 quarter hours in residence during your junior and senior years combined.

Anyone with a previously earned bachelor's degree is ineligible for honors as these awards apply only to students earning their first four-year degree.
RETENTION AND SCHOLARSHIP STANDARDS

SCHOLASTIC STANDARDS

A student must have a cumulative minimum grade point average of 1.50 for the first 16 credits attempted; 1.75 for the first 32 credits attempted; and 2.00 thereafter to remain in good academic standing. This grade point average is in reference to all course work taken at Winona State University.

PROBATION AND SUSPENSION

A student who does not meet the required cumulative grade point average or does not demonstrate satisfactory progress will be automatically placed on probation. Additionally, any student who has repeated six or more courses and is on probation may be suspended. (Courses listed in the catalog with the notation "may be repeated" can be taken for additional credits the stipulated number of times without penalty).

After one quarter of probation, a student who still does not meet the requirements may be suspended from the University by the Vice President for Academic Affairs.

FOR TRANSFER STUDENTS:

Only those courses and credits taken at Winona State University will count for the computation of grade point averages and for probationary decisions.

READMISSION AFTER SUSPENSION

Suspended students may seek readmission after satisfying one of the following conditions:

1. Remain out of the University for one quarter*, then file an intent-to-return form in the Admissions Office.
2. Appeal their suspension to the Committee on Appeals and Suspension. The Appeals and Suspension Committee will meet once each quarter. Appointments for appeals must be made in the Office of the Vice President for Academic Affairs. The Committee, with the approval of the Vice President for Academic Affairs may allow a student to remain in attendance at the University under clearly stated conditions.

All readmitted students will be reviewed quarterly. Failure to maintain a minimum grade point average of 2.00 will result in suspension.

*Students suspended for a second time must remain out of the University for one full academic year. Students suspended for three or more times must remain out of the University for two full academic years.

WITHDRAWAL FROM THE UNIVERSITY AND CLASS

If you withdraw either from a class or from the university you are required to report to the Office of the Registrar to complete the appropriate forms. Withdrawals must be processed at least ten class days preceding final examinations of each quarter. If you process the withdrawal by the deadline date you will receive a mark of withdrawal (W) on your transcript. Withdrawals will not be authorized during the period of ten class days immediately preceding final examinations.

The original grade remains on the record and in the scholastic ratio if you withdraw (W) from a class you are repeating.

If you drop a course or withdraw from the university without giving official notification you will be given a grade of E.

If you withdraw from the university during any quarter you should discharge all business obligations and notify the Office of the Registrar.

CREDIT TRANSFERS AND TRANSCRIPT

Academic courses, undergraduate and graduate, completed at Winona State University are accepted at universities and other colleges where they are applicable to the curriculum chosen and meet the prescribed scholastic standards.

Transcripts are issued by the Registrar's Office only upon your written request, since student records are confidential in nature. Partial transcripts are not issued. Each transcript must include your complete record. As the university cannot certify credit earned at other institutions, copies of such transcripts will not be issued. All Winona State University transcript requests will be issued free of charge.

POLICY CHANGES

Throughout the academic year, administrative and committee action will change policies that affect you. It is your responsibility to comply with the changes as they are enumerated in the university newspaper, the Winonan, or are posted on the Office of the Registrar bulletin board, second floor of Somsen Hall.

INTERNSHIP PROGRAM

Internship programs are available in all departments by arrangement with the department chairperson. Many departments offer internship experiences with credit and, in some instances, with remuneration. See internship reference under departmental course descriptions for specific limitations.

TRI-COLLEGE/UNIVERSITY PROGRAM

A cooperative program is available with the College of Saint Teresa and Saint Mary's College whereby full-time, undergraduate Winona State University students may take a class at one of the two colleges and pay tuition for the credits at Winona State University. Students participating in the program are required to take a minimum of 9 credits at WSU the quarter they enroll in the Tri-College Program.

A Winona State University student interested in obtaining further information about the program should contact the Registrar's Office, Somsen 228, where academic calendars, class schedules and catalogs are available. If you decide to take a course at a participating college, a permit requiring the approval of the students advisor and the approval of the Registrar's Office must be obtained. The permit is then presented to the Registrar of the college where you wish to take a course, and the approved permit is returned to the home institution during their registration.

Students must register for CST and SMC courses during WSU's Pre-registration, Mass registration or Drop/Add day only.

MINNESOTA STATE UNIVERSITY COMMON MARKET PROGRAM

Under the Student Exchange Program, a Winona State University student may attend other Minnesota State Universities, one institution for a maximum of one quarter, up to a total of three quarters at three different institutions taking advantage of curriculum and program specialties and the different intellectual and social climates. Credit earned under the program is considered "resident credit" at the home university.

When application is made, you list the courses you wish to take, usually with several alternate choices. The Common Market Director at the receiving institution notifies you whether or not the request can be met and reserves the class cards for the available courses. On the application form, you indicate your choice of housing, which is referred to the Housing Office at the receiving university. Assistance also will be given to transfer or obtain financial aid. Fees are uniform throughout the six State Universities.

You are eligible to participate in the Common Market Program if you have attended your home institution for at least three quarters and earned at least a 2.0 average. Catalogs, class schedules, and application forms are available in the Registrar's Office, Somsen 228.

REGIONAL CAMPUS

EXTENSION

Winona State University offers a wide range of off-campus learning experiences for the residents of Southeastern Minnesota in addition to the on-campus program. The Extension program offers credit courses from university departments throughout the year in many regional communities. These courses may be undergraduate or graduate classes for degree oriented people and/or for expanding one's personal growth. Credit offerings may also be developed which provide specialized learning experiences to industries, agencies, and interested groups. Instruction for Extension courses includes regular scheduled evening and daytime classes taught by university faculty; specially scheduled workshops and seminars; plus programmed classes available on video and audio tape. Admission to WSU is not required prior to enrolling in an Extension
class. All Extension courses may apply toward appropriate degree programs.

For more information contact:
Regional Campus, Somsen Hall
Room 112, Winona State University
Winona, MN 55987. (507) 457-5080,
or from Rochester call 285-0111.

CONTINUING EDUCATION
Continuing education provides non-credit and CEU offerings to fulfill specialized learning needs identified by professionals, organizations and communities. The CEU provides a standard measure for non-credit learning (1 CEU = 10 contact class hours) and is used for record keeping but is not equated to academic degree credit. The CEU is recorded on a transcript and can serve as verification for continuing education activities.

Instruction for CEU activities may be by Winona State University faculty, community resource persons or visiting experts.

For more detailed information about CEU offerings or to discuss how Winona State may provide learning resources for your organization, contact the Regional Campus, 112 Somsen Hall, Winona State University, Winona, MN 55987. (507) 457-5080 or (507) 285-0111.

SENIOR CITIZEN PROGRAM
All course offerings at Winona State University are available by special arrangement and within legislative limitations to senior citizens who are legal residents of the state of Minnesota. (Reciprocity is not available).

A senior citizen is defined as any person who has reached 62 before the beginning of any quarter in which a course is pursued. Senior citizens may register for courses on a no-credit, no-transcript basis at no cost or they may register for credit on a non-tuition/fee basis which requires a service charge of $6.00 per credit hour. In either case, senior citizens may only be accommodated after all tuition-paying students have enrolled.

Please contact the Regional Campus, Somsen 112, Winona State University, for registration details. (507) 457-5080.
GRADUATE INFORMATION / 27

Graduate Information

Winona State University offers the Specialist degree, and the Sixth Year Certificate, in Educational Administration; the Master of Science and the Master of Arts (in English) degrees; and the Master of Business Administration.

A Fifth-Year Program for teachers is also available.

Students wishing to apply for acceptance into a department offering a graduate degree must make application through the Graduate Office, 228 Somsen Hall, WSU. The Dean of Graduate Studies, whose charge it is to administer and to enforce all university graduate standards, reviews each application and forwards one set of the application materials of qualified students to the relevant department.

Admission to Graduate Study does not automatically ensure acceptance to a particular department's graduate program; however, since each department administers its own program.

Graduate students are each individually responsible for knowing and for complying with the regulations for admissions, registration, admission to candidacy for advanced degrees, completion of all requirements, application for graduation, and all other pertinent requirements.

The Graduate Office is open weekdays except holidays.

MASTER OF SCIENCE

ADMISSION REQUIREMENTS

1. Each student must submit a completed Application for Admission to Graduate Study form (available at the Office of Graduate Studies) and two official transcripts of all previous undergraduate and graduate credits one month prior to initial registration for graduate courses.

2. Transcripts must show that the student has received a Bachelor's degree from a college or university accredited by N.C.A.T.E., by the appropriate regional accrediting agency or by the reporting state university of the state in which the college or university is located. The Dean of Graduate Studies may admit on probation a student with a Bachelor's degree from a non-accredited college or university.

3. The student must have a minimum undergraduate grade point ratio of 2.50 on a 4-point scale, or a minimum Graduate Record Examination Aptitude Test scaled score of 900 (verbal plus quantitative), or a written statement from the department accepting the student.

4. The student must complete the Graduate Record Examination Aptitude Test and file the scores with the Office of Graduate Studies at the time of application for admission, otherwise the admission will be probationary. The GRE scores must be filed within six (6) calendar months.

5. Some coursework must be taken within two (2) years after admission to graduate study or the admission will be invalid and must be renewed.

ADVISEMENT

As soon as possible after admission, the student must read the departmental regulations and must request the chairperson of his/her major department to appoint an advisor, who will determine whether there are deficiencies to be removed.

REMOVAL OF DEFICIENCIES

The student must have an undergraduate major or a minimum of thirty-six (36) undergraduate quarter hours of credit in the field of specialization for the Master’s degree (except in Educational Administration and School Counseling). A deficiency should be made up as soon as possible. The credits earned for removing deficiencies will not be applicable to the required work for completion of the Master's degree. Some departments may require possession of a teaching certificate based on a Bachelor's degree from an accredited teacher-preparation institution. The student who does not have such a certificate should consult with his/her advisor to determine whether it is required and, if so, what courses must be taken to remove this deficiency.

ADMISSION TO CANDIDACY

After the completion of nine (9) graduate credits, with a grade point ratio of not less than 3.0, the student in consultation with the advisor must submit a completed application form for admission to candidacy for an advanced degree (Forms are available in the Office of Graduate Studies.) The application must include a proposed program of course work, must indicate whether a thesis plan has been selected and must be approved by the advisor, the department chairperson and the Dean of Graduate Studies. Any later changes in this program must be requested on the appropriate form and approved by the advisor, the department chairperson and the Dean of Graduate Studies. The Graduate Record Examination Aptitude Test scores (verbal and quantitative) must be on file in the Graduate Office for admission to all graduate programs, except the Sixth Year and the M.B.A.

COMPLETION OF GENERAL REQUIREMENTS FOR THE DEGREE MASTER OF SCIENCE

The student must complete the following general degree requirements:

1. The student must have all deficiencies removed.

2. The student must have the scores for the Graduate Record Examination Aptitude Test on file in the Office of Graduate Studies.

3. The student must successfully complete nine (9) credits in professional education of which at least six (6) shall be from List 1 below and three (3) may be from List 1 or 2 (please note prerequisites for courses listed), or with approval of the graduate advisor, department chairperson and graduate dean, the student may be allowed an
Graduate Information

Winona State University offers the Specialist degree, and the Sixth Year Certificate, in Educational Administration; the Master of Science and the Master of Arts (in English) degrees; and the Master of Business Administration.

A Fifth-Year Program for teachers is also available.

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Admission to Graduate Study does not automatically ensure acceptance to a particular department's graduate program, however, since each department administers its own program.

Graduate students are each individually responsible for knowing and for complying with the regulations for admissions, registration, admission to candidacy for advanced degrees, completion of all requirements, application for graduation, and all other pertinent requirements.

The Graduate Office is open weekdays except holidays.

MASTER OF SCIENCE

ADMISSION REQUIREMENTS

1. Each student must submit a completed Application for Admission to Graduate Study form (available at the Office of Graduate Studies) and two official transcripts of all previous undergraduate and graduate credits one month prior to initial registration for graduate courses.

2. Transcripts must show that the student has received a Bachelor's degree from a college or university accredited by N.C.A.T.E., by the appropriate regional accrediting agency or by the reporting state university of the state in which the college or university is located. The Dean of Graduate Studies may admit on probation a student with a Bachelor's degree from a non-accredited college or university.

3. The student must have a minimum undergraduate grade point ratio of 2.50 on a 4-point scale, or a minimum Graduate Record Examination Aptitude Test scaled score of 900 (verbal plus quantitative), or a written statement from the department accepting the student.

4. The student must complete the Graduate Record Examination Aptitude Test and file the scores with the Office of Graduate Studies at the time of application for admission, otherwise the admission will be probationary. The GRE scores must be filed within six (6) calendar months.

5. Some coursework must be taken within two (2) years after admission to graduate studies or the admission will be invalid and must be renewed.

ADVISEMENT

As soon as possible after admission, the student must read the departmental regulations and must request the chairperson of his/her major department to appoint an advisor, who will determine whether there are deficiencies to be removed.

REMOVAL OF DEFICIENCIES

The student must have an undergraduate major or a minimum of thirty-six (36) undergraduate quarter hours of credit in the field of specialization for the Master's degree (except in Educational Administration and School Counseling). A deficiency should be made up as soon as possible. The credits earned for removing deficiencies will not be applicable to the required work for completion of the Master's degree. Some departments may require possession of a teaching certificate based on a Bachelor's degree from an accredited teacher-preparation institution. The student who does not have such a certificate should consult with his/her advisor to determine whether it is required and, if so, what courses must be taken to remove this deficiency.

ADMISSION TO CANDIDACY

After the completion of nine (9) graduate credits, with a grade point ratio of not less than 3.0, the student in consultation with the advisor must submit a completed application form for admission to candidacy for an advanced degree (Forms are available in the Office of Graduate Studies). The application must include a proposed program of course work, must indicate whether a thesis plan has been selected and must be approved by the advisor, the chairperson of the major department and the Dean of Graduate Studies. Any later changes in this program must be requested on the appropriate form and approved by the advisor, the department chairperson and the Dean of Graduate Studies. The Graduate Record Examination Aptitude Test scores (verbal and quantitative) must be on file in the Graduate Office for admission to all graduate programs, except the Sixth Year and the M.B.A.

COMPLETION OF GENERAL REQUIREMENTS FOR THE DEGREE MASTER OF SCIENCE

The student must complete the following general degree requirements:

1. The student must have all deficiencies removed.

2. The student must have the scores for the Graduate Record Examination Aptitude Test on file in the Office of Graduate Studies.

3. The student must successfully complete nine (9) credits in professional education of which at least six (6) shall be from List 1 below and three (3) may be from List 1 or 2 (please note prerequisites for courses listed), or with approval of the graduate advisor, department chairperson and graduate dean, the student may be allowed an
alternative to the Education requirements.

List 1
Education 429G Teaching of Reading (Secondary)
Education 475G The Exceptional Child
Education 477G Education of the Gifted
Education 488G Individualizing Instruction
Education 502 Secondary School Curriculum
Education 506 Principles of Secondary Education
Education 522 Historical Foundations of Education
Education 523 Philosophy of Education
Education 538 School and Community Relations for Teachers
Education 540 Current Educational Issues
Education 571 Supervision of Student Teaching
Education Administration 503 The Junior High School and Middle School
Education Administration 510 School Law
Education Administration 526 Educational Measurement and Evaluation
Education Administration 570 Research and Writing
Counselor Education 522 Human Relations

List 2
Business Education & Office Administration 511 Trends in Accounting and Data Processing
Economics 531 Economics for Teachers
Education Administration 504 Curriculum Development & Administration
Education Administration 527 School Business Management
Education Administration 528 Personnel Administration in Education
Education Administration 578 Supervision of Instruction
Education Administration 580 Foundations of Educational Administration
Education Administration 583 School Finance
Counselor Education 515 Child Development
Counselor Education 525 Adolescent Development
Counselor Education 560 Individual Problem in Counselor Education
Counselor Education 507 Introduction to Counseling
Counselor Education 560 Group Process and Dynamics
Counselor Education 565 Personality Structure
English 400G Teaching Literature to Young Adults
English 411G Teaching Language and Composition
Health, Physical Education and Recreation 506 Chemical Dependency Education

4. The student must complete a minimum of twenty-four (24) graduate quarter credits in the field of specialization (except in elementary teaching, elementary and secondary administration, elementary and secondary counseling) with a minimum grade point ratio of 3.0 on courses taken at Winona State University. No course will be counted if the grade is below C. These standards are minimal; departments may require higher standards. At least forty percent (40%) of the credits required for the Master's degree should normally be in courses numbered at the 500 level.

5. If the student has elected a plan which requires a thesis or research paper, this thesis or research paper must have been completed and approved by the advisor not later than one calendar month prior to graduation and three (3) unbound copies of the thesis or research paper must be available to the oral examination committee. After this committee has approved the thesis or research paper, all copies must be delivered to the university library for binding and distribution.

6. Each candidate for the Master's degree with thesis or research paper must pass a final oral examination by a committee of three graduate faculty members at least two weeks before graduation. The advisor will be the chairperson of this committee. The Office of Graduate Studies will post the place and date of this examination at least three (3) days in advance. Candidates for the Master's degree with thesis may also be required by their major department to pass a final oral examination.

All candidates for the Master's degree must pass a final written examination to be prepared by the major department and administered by the Office of Graduate Studies on the dates indicated in the Academic Calendar for 1983-85.

7. Each candidate for the Master's degree must submit to the Office of Graduate Studies a statement signed by the advisor or by the chairperson of the major department certifying that the student has completed all departmental requirements for the Master's degree. The requirements listed above in 1 through 6 are general, all-university regulations. Students should consult their advisors to determine whether there are also special departmental requirements.

MASTER OF ARTS IN ENGLISH

ADMISSION REQUIREMENTS

1. An undergraduate major in English equivalent to that required by Winona State University. Deficiencies may be removed after admission to graduate study.

2. A 3.0 (B) average in undergraduate English courses.

3. Take the Graduate Record Examination Aptitude Test. Although the Graduate Record Examination Advanced Test, Literature in English, is not normally required, the department may require the student to take it if his/her undergraduate major was not English or if the undergraduate grade point ratio was below 3.0. Such cases will be decided on an individual basis by the departmental graduate studies committee.

COMPLETION OF REQUIREMENTS OF THE DEGREE MASTER OF ARTS IN ENGLISH

1. Forty-five (45) quarter graduate credits, of which at least thirty (30) should be in English (both plans).

2. The specific requirements of Plan A or Plan B as described in the "Requirements for the Master of Arts in English," available from the Department of English.

MASTER OF BUSINESS ADMINISTRATION

ADMISSION REQUIREMENTS

(Completion of the following requirements will admit students to graduate study and to candidacy for the M.B.A. degree).

1. Completion of the application for admission form, including a one-page statement of interest and objectives in pursuing the M.B.A. degree. This form is available from the M.B.A. Advisor, Winona State University, and must be returned to him/her together with two original transcripts of all previous undergraduate and graduate credits.

2. Transcripts must show that the student has received a bachelor's degree from an accredited college or university, with a satisfactory undergraduate grade point average of 2.50 on a 4-point scale. A student with a baccalaureate degree from a non-accredited college or university may be provisionally admitted.

3. The student must achieve an acceptable score on the Graduate Management Admissions Test (GMAT). For further information on the GMAT, write or call the M.B.A. Advisor, Winona State University, (phone 457-5183 in Winona, 285-0111 in Rochester).

4. The student must demonstrate competency in special areas listed below by successful completion of coursework at Winona State University or elsewhere, by examination or, in a few instances, by appropriate and documented experience. The competencies and their Winona State University course equivalents are:

Accounting Financial Accounting I, II; BA 240-241
Business Law Business Law; BA 310
Computer Basic Computer Applications, Programming; BA 312
Economics Principles of Economics I, II; EC 201-202
Finance Fundamentals of Business Finance; BA 360
Management Business Organization & Management; BA 370
Marketing Principles of Marketing: BA 315
Statistics Statistics for Business and Economics; BA 201
Written Communication Competence will be judged by the statement of interest and objectives in the application for admission. Prior to the completion of all of the above competencies, a provisionally admitted student may take M.B.A.
courses for which all prerequisites have been met.
5. Based on the above criteria, the M.B.A. Advisor and Admissions Committee will recommend to the Dean of Graduate Studies that the student be: a) Unconditionally admitted to graduate study and to the M.B.A. Program; b) Provisionally admitted to graduate study and to the M.B.A. Program with a stipulated deadline for the completion of all deficiencies; c) Denied admission to the M.B.A. Program and/or other graduate study. Final decisions on all applications for admission will be made by the Dean of Graduate Studies.
6. International students must have a TOEFL score of at least 575.
7. Applicants with non-traditional transcripts must have a minimum GPA of 2.0.

TRANSFER CREDIT
Fifteen (15) graduate quarter credits may be accepted in transfer from any accredited graduate institution upon presentation of two official transcripts from that institution and subject to the approval first of the M.B.A. Advisor and the chairperson of the Department of Business Administration and Economics and then of the Dean of Graduate Studies. Subject to the same approvals, an additional nine (9) graduate quarter credits may be accepted in transfer from the University of Minnesota, Universities of the State University System of Minnesota, or from the University of Wisconsin - Eau Claire or the University of Wisconsin - La Crosse. Transfer courses are acceptable for all of the competencies listed in number 4 above.

COMPLETION OF REQUIREMENTS FOR THE DEGREE MASTER OF BUSINESS ADMINISTRATION
The student must have completed the following requirements:
1. All deficiencies must have been removed and all prerequisites must be completed.
2. An acceptable score on the Graduate Management Admissions Test must have been achieved and on file with the M.B.A. Advisor and the Office of Graduate Studies.
3. Within seven (7) years of initial enrollment, the student must have successfully completed the required core courses, twelve (12) credits of electives with a minimum grade point average of at least 3.0; no courses may be counted if the grade is below a C.

SPECIALIST DEGREE IN EDUCATIONAL ADMINISTRATION
The Specialist Degree in Educational Administration is designed for those who wish to achieve, by a planned program of graduate studies, a proficiency beyond the Master's degree level in elementary, secondary or general school administration. The program is available to students with or without the Master's degree.
1. Completion of the program will enable the qualified student to meet the requirements of the Minnesota State Department for the Entrance License in Educational Administration. The Entrance License, however, will not be granted to recipients of the degree until they have provided evidence of three years of successful teaching experience: for elementary principals, experience must be at the elementary level and for secondary principals it must be at the secondary level.
2. Admission requirements for advanced graduate study for the Specialist degree program in Educational Administration:
   1. A student with an earned Master's degree will be admitted to advanced graduate study if he/she has a minimum grade point ratio of 3.25 on a 4-point scale or has a minimum score of 900 on the Graduate Record Examination Aptitude Test.
   2. A student with a Bachelor's degree from an accredited college or university but without an earned Master's degree, will be admitted to advanced graduate study if he/she has a minimum overall grade point ratio of 2.50 on a 4-point scale or a minimum score of 900 on the Graduate Record Examination Aptitude Test.
3. Admission requirements for advanced graduate study for those who wish to achieve, by a planned program of graduate studies, a proficiency beyond the Master's degree level in administration. Students must have earned a master's degree before undertaking the program. Completion of the program will enable qualified students to meet the requirements of the Minnesota State Department for the Entrance License in Educational Administration.
4. The Entrance License will not be granted, however, until the student has provided evidence of three years of successful teaching experience; for elementary principals, experience must be at the elementary level, and for secondary principals it must be at the secondary level.

ADMISSION REQUIREMENTS FOR ADVANCED Graduate Study
1. Earned a minimum of nine (9) quarter hours of graduate credit at Winona State University in the Department of Educational Administration and maintained an overall grade point ratio of 3.0.
2. Received the approval of the Department Graduate Admissions Committee. The Committee may require a personal interview and/or qualifying examination.
3. Admission to candidacy for the Specialist degree in Educational Administration will be granted after the student has been admitted to the Specialist degree program and has filed a program of studies which has been approved by the Department of Educational Administration and the Dean of Graduate Studies.
4. The Specialist degree in Educational Administration will be awarded when the student has:
   1. Completed at least ninety-three (93) quarter hours of graduate credit beyond the Bachelor's degree. At least one quarter of full-time study is required (nine quarter hours of residence credit).
   2. Completed all course work leading to the degree and maintained a 3.0 grade point ratio. No grade lower than a C is counted for graduate credit. Only grades earned at Winona State University will be counted in determining the grade point ratio.
   3. Completed all degree requirements within eight (8) years of admission to the Specialist degree program.
5. Possessed a final oral examination on the field study and a written comprehensive examination.
6. International students must have a minimum grade point ratio of 3.0; no courses may be counted if the grade is below a C.

SIXTH YEAR CERTIFICATION PROGRAM IN EDUCATIONAL ADMINISTRATION
The Sixth Year Certification Program in Educational Administration is designed for those who wish to achieve, by a planned program of graduate studies, a proficiency beyond the Master's degree level in administration. Students must have earned a master's degree before undertaking the program. Completion of the program will enable qualified students to meet the requirements of the Minnesota State Department for the Entrance License in Educational Administration.
1. Earned a minimum of nine (9) quarter hours of graduate credit at Winona State University in the Department of Educational Administration and maintained an overall grade point ratio of 3.0.
2. Received the approval of the Department Graduate Admissions Committee. The Committee may require a personal interview and/or qualifying examination.
3. Admission to the Sixth Year Certification Program will be granted when the student has been admitted to advanced graduate study and has:
   1. Earned a minimum of nine (9) quarter hours of graduate credit at Winona State University in the Department of Educational Administration and maintained an overall grade point ratio of 3.0.
   2. Received the approval of the Department Graduate Admissions Committee. The Committee may require a personal interview and/or qualifying examination.
   3. Admission to the Sixth Year Certification Program will be granted after the student has been admitted to the Sixth Year Program and has filed a program of studies which has been approved by the Department of Educational Administration and the Dean of Graduate Studies.
4. The Sixth Year Certification Program in Educational Administration will be awarded when the student has:
   1. Completed an approved program, of at least forty-five (45) quarter hours of graduate credit beyond the Master's
GRADUATE INFORMATION

2. Satisfactorily completed all course work leading to the certificate and maintained a grade point ratio of 3.0. No grade lower than a C is counted for graduate credit. Only grades earned at Winona State University will be counted in determining the grade point ratio.

3. Completed all program requirements within eight (8) years of admission to the Sixth Year Certification Program in Educational Administration.

(please consult the Department of Educational Administration for possible changes and/or additions to degree requirements).

TRANSIENT GRADUATE STUDENTS

A graduate student in good standing at another college or university who wishes to earn credits to transfer to that institution may register for graduate courses at Winona State University without being admitted to graduate studies and without submitting a transcript. When an appropriate form (available in the Office of Graduate Studies) has been completed and signed by the student’s graduate dean and returned to the Dean of Graduate Studies, registration will be allowed. A graduate student, who wishes to enroll for graduate credit, must be enrolled in the Office of Graduate Studies. These transfer credits must have been earned within the seven year time limit and will not be posted on Winona State University transcripts until they have been approved as part of the student’s advanced degree program and transferred on the application for candidacy for an advanced degree. Only grades of A and B will be accepted for transfer and may not be used for computation of the required grade point ratio. Graduate credit earned through correspondence study will not be accepted.

TRANSMIT STUDENTS

A student who has completed a baccalaureate degree, and who wishes to enroll in graduate courses but does not intend to pursue a graduate degree at Winona State University may register as a Graduate Special Student without being admitted to graduate study and will receive graduate credit for all graduate courses satisfactorily completed. A Graduate Special Student who later wishes to enter a graduate degree program at Winona State University must meet all requirements for admission to graduate study. A maximum of nine (9) credits earned as a Graduate Special Student may be transferred to the degree program if the major department approves.

UNDERGRADUATE STUDENTS

Undergraduate students who have twelve quarter hours or less to complete all requirements for a baccalaureate degree may request permission to take courses for graduate credit to complete a regular course load (20 credits) during the quarter of graduation. They may not, however, enroll in courses at the 500 level.

GENERAL REGULATIONS

The following regulations are applicable to all graduate programs unless otherwise stated.

GRADUATION

Applications for graduation must be submitted at least two calendar months prior to graduation. Students who graduate spring quarter must participate in commencement exercises unless excused by the Dean of Graduate Studies on presentation of proof that attendance at commencement will cause undue hardship.

TRANSFER CREDIT

Fifteen (15) hours of transfer credit may be accepted from any accredited graduate institution upon presentation of two official transcripts from that institution and subject to the approval first of the advisor and chairperson of the student’s major department and then of the Dean of Graduate Studies. These transfer credits must have been earned within the seven year time limit and will not be posted on Winona State University transcripts until they have been approved as part of the student’s advanced degree program and transferred on the application for candidacy for an advanced degree. Only grades of A and B will be accepted for transfer and may not be used for computation of the required grade point ratio. Graduate credit earned through correspondence study will not be accepted.

After the student has applied for admission to candidacy for an advanced degree, he/she should not enroll at another college or university without the approval of the advisor and the Dean of Graduate Studies if expecting to transfer these credits for fulfilling graduate degree requirements at Winona State University. Failure to obtain approval could result in taking courses which will not be acceptable.

COURSE CREDIT

Courses offered for graduate credit during the regular school day carry the amount of credit listed in this catalog. Courses 500 and above are for graduate credit only and no undergraduate may enroll in them. Coursesa numbered 400G are for either graduate or undergraduate credit. Graduate students registered in G-numbered courses will be required to do additional work to meet course requirements. All courses will be graded A, B, C, D, E unless indicated otherwise in the specific course description.

Graduate credit will not be given for courses in the 400G level to students who have already received credit for an equivalent undergraduate course.

INCOMPLETES

All incompletes for course work undertaken must be removed before a graduate degree is granted. All incompletes must be removed within one calendar year from the end of the quarter in which they were incurred or they will revert to E.

WITHDRAWALS

Students withdrawing from the university during any quarter should discharge all business obligations and notify the Graduate Dean, the Academic Vice President and the Registrar in writing to cancel their registration. Transcripts will not be issued for students who withdraw without fulfilling financial and other obligations to the university.

TIME LIMITATION

All degree requirements (including credits to be earned, and final examinations and theses or research papers where required, etc.) must be completed within seven (7) years of initial graduate enrollment, except for Specialist degree and Sixth Year Certification programs in Educational Administration where the limitation is eight years after admission to the program. Under exceptional circumstances the Graduate Dean, upon receipt of a petition setting forth the pertinent facts, may grant a one-year extension of time in individual cases.

INDEPENDENT STUDY COURSES/ARRANGED CLASSES

Arrangements for independent study courses must be made with the instructor concerned and approved by the chairperson of the department concerned and by the area dean and the Dean of Graduate Studies. Requests for a regular course to be given by arrangement on an individual basis to complete a graduate program should be submitted to the major advisor for special consideration. The application must be approved by the instructor of the arranged class the department chairperson, the area dean and the Dean of Graduate Studies. Application forms for independent study and arranged classes may be obtained in the Office of Graduate Studies. Please refer to the quarterly registration schedules to determine the deadline for submission of these application forms.

PASS/NO CREDIT COURSES

A student may be allowed to count pass/no credit courses on the Master of Science degree and the Specialist degree: 8 credits of P/NC on the Master of Science degree in all departments, except in the departments of Counselor Education and Education the limit is 12 credits, and 16 credits for the sixth year and Specialist degree. A grade of Pass means at least B quality work for graduate credit.

QUARTERLY ACADEMIC LIMITATIONS AND CREDIT OVERLOADS

No graduate student is permitted to enroll for more than 12 credits per academic quarter or 9 credits per summer session without approval from the graduate dean.
General Education Requirements for Undergraduate Students

(EFFECTIVE FOR ALL NEW STUDENTS STARTING FALL QUARTER 1981)

The General Education Program is designed to widen your intellectual horizons by introducing you to new subjects by expanding your knowledge and understanding of old subjects and by helping you discover fields of learning in which you have special interests and aptitudes.

The following General Education requirements are applicable to all degree programs. However, transfer students who have completed the general education requirements (including at least 60 general education quarter hours) for a lower division transfer program (usually designated Associate in Arts) at a community or junior college and transfer students from accredited four year colleges and universities who have completed the general education requirements at their former institution (including at least 60 quarter hours) will normally have the general education requirements at W.S.U. waived.

REQUIRED GENERAL EDUCATION COURSES — 60-68 QUARTER HOURS MINIMUM

I. Basic Skills

A. Written Communication ................................................. 8 Quarter Hours Minimum
   English 110 .................................................. 4 Quarter Hours
   English 115 .................................................. 4 Quarter Hours

   These courses should be completed during the first year of enrollment. Students who score below 30 on the verbal scale of the PSAT, below 13 on the English scale of the ACT or below a comparable score on another appropriate test will be required to complete English 108, 4 credits, prior to enrolling in English 110.

B. Oral Communication .................................................. 0-4 Quarter Hours
   CTA 191 .................................................. 4 Quarter Hours
   or satisfactory completion of a special examination which includes the presentation of a 7-10 minute speech.

C. Mathematics ................................................................ 0-4 Quarter Hours
   Math 113 .................................................. 4 Quarter Hours
   or intermediate algebra or its equivalent (two years of high school algebra) completed in high school with a "C" average or better in each course or satisfactorily completing a written examination. (Contact the Department of Mathematics & Computer Science, G311.)

II. Humanities ................................................................. 12 Quarter Hours Minimum

   Courses may be selected from an approved list of courses for group II which deal with the understanding of the great ideas and works of mankind through philosophy, literature (including non-English literature) history, the theatre, art or music. Courses from at least two departments must be included.

III. Natural Sciences ......................................................... 12 Quarter Hours Minimum

   Courses may be selected from an approved list of courses for Group III which stress basic knowledge of natural (including mathematics) science and the scientific method. At least one laboratory course and courses from at least two departments must be included.

IV. Social Sciences ........................................................... 12 Quarter Hours Minimum

   Social science addresses the study of a person as an individual and as a member of a group and includes approved courses for group IV in geography, economics, political science, psychology, sociology and from other departments. Courses from at least two departments must be included.
32 / GENERAL EDUCATION REQUIREMENTS

V. Different Culture .................................................. 8 Quarter Hours minimum

Courses must be selected to constitute a coherent cluster of studies concerning one or more aspects of the way of life (e.g., political system, philosophy, social structure, economic system or language) of an identifiable group whose race is not caucasian or whose native language is not English. All eight credits must be from one culture. Course clusters must be selected from a list approved from group V.

VI. Contemporary Living ........................................... 8 Quarter Hours Minimum

A. Physical education activities .................................... 2 Quarter Hours Minimum, 4 Quarter Hours Maximum.

Activities must be selected from a list of approved courses for group VI-A designed to develop knowledge, skills and attitudes which will enhance a lifetime of physical fitness.

B. Other courses in contemporary living .......................... 4 Quarter Hours Minimum

Courses must be selected from an approved list for group VI-B which deal primarily with requirements of modern living including an understanding of basic technology, recreational opportunities, health maintenance principles, business, etc.

Students may not use the same course to meet both the major and the general education requirements, however, courses listed as "additional requirements" outside the major department may be used toward meeting the general education requirements. No course may be used to satisfy more than one general education requirement.

APPROVED LISTING OF COURSES

The following courses which are listed by area and department have been designated as appropriate for general education credit. You are expected to check all course descriptions carefully to determine prerequisites.

NOTE: * Indicates course may be used in one of several categories.

II. Humanities (12 credits)

<table>
<thead>
<tr>
<th>Area</th>
<th>Course Numbers</th>
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<tbody>
<tr>
<td>Art</td>
<td>109, 221, 222, 223</td>
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<td>CTA THEATRE</td>
<td>111, 211, 212</td>
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<tr>
<td>English</td>
<td>121, 122, 123, 131, 132</td>
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<tr>
<td>Foreign Language</td>
<td>200, 250 plus (French, German, or Spanish) 110*, 111*, 112*, 213*, 214*</td>
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<tr>
<td>History</td>
<td>120, 121, 122, 123*, 165*, 225, 230, 231, 232, 233*, 240, 241, 310*</td>
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<td>Honors</td>
<td>201, 251</td>
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<td>Humanities</td>
<td>140</td>
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<tr>
<td>Music</td>
<td>109, 110, 114, 120</td>
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<tr>
<td>Philosophy</td>
<td>102, 103, 110*, 135, 202, 210*, 213, 235, 273</td>
</tr>
<tr>
<td>Photography</td>
<td>250</td>
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III. Natural Sciences (12 credits)

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<th>Area</th>
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<tbody>
<tr>
<td>Biology</td>
<td>104*, 117, 118, 201, 203, 207, 208, 210, 211, 233, 269</td>
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<tr>
<td>Chemistry</td>
<td>100, 108, 208, 209, 212, 213</td>
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<tr>
<td>Geology</td>
<td>101, 102, 116, 117, 200, 220, 221, 230</td>
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<tr>
<td>Honors</td>
<td>203, 253</td>
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<tr>
<td>Mathematics</td>
<td>130, 208, 210, 216, 220, 221, 225, 226, 227</td>
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<td>Physics</td>
<td>115, 184, 201, 221, 305</td>
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IV. Social Sciences (12 credits)

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<th>Area</th>
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<td>Economics</td>
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<tr>
<td>Geography</td>
<td>110, 211, 212, 213</td>
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<tr>
<td>Honors</td>
<td>202, 252</td>
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<tr>
<td>Political Science</td>
<td>103, 123*, 124*, 125*, 126*, 220, 222*</td>
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<tr>
<td>Psychology</td>
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<tr>
<td>Sociology</td>
<td>150, 205, 212, 216</td>
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</table>

V. Different Culture (8 credits)

A. African
   Geography — 224
   History — 170
   Political Science — 126*

B. American Indian
   English — 151
   History — 310*

C. Far Eastern
   History — 123*
   Philosophy — 110*, 161
   Political Science — 125*
D. French
   French – 110*, 111*, 112*, 213*, 214*

E. German
   Foreign Language – 250*
   German – 110*, 111*, 112*, 213*, 214*

F. Greek and Roman
   English – 223
   Philosophy – 210*
   CTA – 213

G. Latin American
   Geography – 225
   History – 165*, 233*
   Political Science – 124*
   Spanish – 110*, 111*, 112*, 213*, 214*

H. Middle East
   Geography – 233
   Political Science – 123*, 222*

I. Scandinavian
   Sociology – 201, 202

J. Slavic
   History – 130, 132

VI. Contemporary Living (8 credits)

A. Physical Education Activities (2-4 credits)

B. Other courses in Contemporary Living (4-6 credits)
   Art – 110, 114, 118, 215, 225
   Biology – 104*
   Business Administration – 101, 110, 201, 202, 203
   Business Education and Office Administration – 106, 201, 202, 215
   CTA – 001 (limit of 2 credits), 141, 261
   Education – 210
   HPER – 111, 204, 205, 206, 214, 239
   Industrial Education – 131, 151, 160, 166, 180
   Mass Communications – 100, 213
   Nursing – 260
   Physics – 200
   Photography – 150, 151

RETURNING STUDENTS

At the beginning of Fall Quarter 1986, anyone still on the old General Education program will be converted automatically to the new program, regardless of any credit earned under the old program.
### GENERAL EDUCATION

#### I. BASIC SKILLS

**A. Written Com. (6-12 crs.)**

<table>
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<tr>
<th>Dept.</th>
<th>Title</th>
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<tbody>
<tr>
<td>English</td>
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<tr>
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<td>4</td>
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<tr>
<td>English</td>
<td>115</td>
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</tr>
</tbody>
</table>

*Required of students who have a low English admission score.

**B. Oral Communication (0-4 crs.)**

- CTA 118
- or EXAM 0-4

**C. Mathematics (0-4 crs.)**

- Math 113 or high school equiv. ("C" grade or better)
- or EXAM 0-4

#### II. Humanities (12 crs.) Two departments required.

#### III. Natural Sciences (12 crs.) Two departments required and one Lab course required.

#### IV. Social Science (12 crs.) Two departments required.

#### V. A Different Culture (8 crs.) (e.g.) African, Asian, Latin Amer., French, German. (All courses from one area).

#### VI. Contemporary Living (8 crs.)

**A. Physical Education Act. (2-4 crs.)**

**B. Contemporary Living (4-6 crs.)**

(B.T. Req.) HPER 204 3

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### GENERAL ELECTIVES

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<th>2</th>
<th>3</th>
<th>4</th>
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### MAJOR COURSES

### MINOR COURSES

### PROFESSIONAL EDUCATION

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<tr>
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<td>(BII) Hum. Rel.</td>
<td>190</td>
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<td>A.V.</td>
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<td>Ed.</td>
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<td>Ed.</td>
<td>Exceptional Child</td>
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INTRODUCTION

The following section of the catalog lists the undergraduate and graduate programs offered by the university's academic departments. Included are undergraduate majors and minors, undergraduate program options, graduate programs and related information about each department. Departments are listed in alphabetical order. Each department begins its section with its name, a list of faculty and a statement of its purpose. This list of faculty, beginning with the department chairperson, contains both undergraduate and graduate faculty.

Course Listings. In its course listings a department gives each course's number, title, credit value and description. A course's number indicates the level at which the course should be taken. Generally, freshmen take 100 level courses, sophomores 200, juniors 300, and seniors 400. You are required to limit your course selection to courses not more than one level above your class standing. All 400 level courses designated as G courses may be taken for credit by both undergraduate and graduate students, while 500 and 600 level courses are for graduate students only.

A course description includes one or more of the following:
1. A brief description of the subject matter to be covered.
2. Prerequisites. Generally a prerequisite is either a course that must have been completed previously or a notice that the instructor's consent is required prior to enrolling in the course.
3. Frequency of offering. Descriptions of courses open to undergraduate students show how often that course is offered—quarterly, twice yearly, yearly, etc.
4. Pass/No Credit Status. If a course is offered on a pass/no credit basis, its pass/no credit status will be noted in its description or will be given in the pass/no credit policy preceding a department's course listings. You are advised to read this policy before enrolling in a course on a pass/no credit basis.

Art

Watkins Hall Room 204 / 457-5395
Sternal (Chairperson), McKenzie, Schlawin, Schmidlapp, Vint

The Department of Art offers two undergraduate programs. The B.A. program is primarily studio-oriented and leads to a Bachelor of Arts degree in Art. The B.S. program leads to a Bachelor of Science degree in Art and eligibility for teacher certification in Minnesota.

All courses and plans of study within the department are directed toward providing opportunities for students to identify their individual potentials for study and performance in the visual arts and the means for achieving their selected goals. Courses are numbered and offered in sequence by way of providing the most economical use of time and most effective foundation for pursuit of advanced work. Therefore studio courses will be taken in sequence according to the curriculum prototype available from the department chairperson.

The Portfolio Review Committee will schedule a portfolio presentation for art majors of junior standing. The portfolio presented must be approved prior to arranging the Senior Show. In the senior year, each student will present an exhibition of work for evaluation by the Art Faculty.

B. A. MAJOR

65 Q.H.

(Minor not required)

REQUIRED COURSES (36 Q.H.)

Note: Majors must complete a three-course sequence in two studio areas or a six-course sequence in one area.

118 Drawing I (4)
121 Drawing II (4)
114 Design I (4)
309 Design II (4)
228 Sculpture I (4)
217 Painting I (4)
221 Art History I (4)
222 Art History II (4)
223 Art History III (4)
ELECTIVES (29 O.H.)
Electives may be chosen from any courses in Art except 300, 402, 410, and 412 providing prerequisites are met.

399 Internship
Work-related experience in such appropriate settings as museums, commercial offices or studies, or public relations offices. May be used as an elective.

B.S. MAJOR
78 O.H. (TEACHING)

REQUIRED COURSES (66 O.H.)
Note: Majors are to complete a three-course sequence in two studio areas.

110 Calligraphy (2)
118 Drawing I (4)
114 Design I (4)
218 Drawing II (4)
309 Design II (4)
228 Sculpture I (4)
217 Painting I (4)
220 Ceramics I (4)
226 Fibers I (4)

Art History:
221 Art History I (4)
222 Art History II (4)
223 Art History III (4)
400 Level Art History

Art Education:
300 Elementary Art Education
410 Secondary Art Education
402G The Psychology of Art and Art Education (4)
412G Multi-Media Crafts for the Classroom (4)

ELECTIVES (12 O.H.)
Any 200, 300 or 400 level course providing prerequisites are met.

B.A. MINOR
36 O.H.

REQUIRED COURSES (28 O.H.)
118 Drawing I (4)
114 Design I (4)
218 Drawing II (4)
309 Design II (4)
221 Art History I (4)
222 Art History II (4)
223 Art History III (4)

ELECTIVES (8 O.H.)
Choose two elective courses totaling 8 credits.

COURSE LISTINGS
Pass/No Credit option on all 100-level Art courses except for majors and minors. All prerequisites must be met before enrolling in a particular course.

Art History Courses may be taken by non-majors and minors without prerequisites.

109 Introduction to Art - 4 O.H.
A survey of movements and styles of art of past and present civilization. Developing students' ability to understand the visual arts through lectures, slides, films, etc. Offered quarterly. P/NC Option.

110 Calligraphy - 2 O.H.
The history of lettering and the rendering of a one-stroke alphabet. May be repeated up to 6 credits. Offered quarterly. P/NC Option.

114 Design I - 4 O.H.
Work with fundamental design principles in the art process. Problems in two-dimensional experimentation and abstract compositions using a variety of materials. Offered quarterly. P/NC Option.

118 Drawing I - 4 O.H.
Introduction to perception and delineation of forms and volumes with emphasis on figure and still-life drawing. Offered quarterly. P/NC Option.

212 Water Media I - 4 O.H.
An introduction to painting with watercolor and other water soluble materials; used singly or in combination. Offered yearly. P/NC Option.

213 Water Media II - 4 O.H.
A continuation of experimentation with water soluble media with emphasis on personal development. Prerequisite: Water Media I. Offered yearly. P/NC Option.

215 Crafts - 3 O.H.
The application of design theory to the crafts of various media: textiles, wood, metal, etc. Prerequisite: 114 recommended. May be repeated up to 6 credits. Offered quarterly.

217 Painting I - 4 O.H.
An introduction to painting with the exploration of oil and acrylic media and the concepts of color, form and space. Offered twice yearly. P/NC Option.

218 Painting II - 4 O.H.
A continued experience in figure drawing with emphasis upon thematic problems in a variety of media. Prerequisite: Drawing I. Offered yearly.

220 Ceramics I - 4 O.H.
An introduction to ceramics through the use of the potter's wheel and hand-building techniques. Films and slides will be used to give a brief historical development of ceramics. Offered quarterly. P/NC Option.

221 Art History I - 4 O.H.

222 Art History II - 4 O.H.
Art History of the Neo-Classical, Romanistic, Realistic, Impressionistic, Post-Impressionistic, and Modern periods. A study of major developments in Western civilization through painting, sculpture, and architecture during these times. Prerequisites: 221 recommended. Offered yearly.

223 Art History III - 4 O.H.
Art History of the Gothic, Renaissance, Baroque, and Rococo periods. A study of major developments in Western civilization through painting, sculpture, and architecture during these times. Prerequisites: 222 recommended. Offered yearly.

225 Fibers I - 4 O.H.
Introduction to the off-loom constructions with emphasis upon the students' artistic expression; feltingmaking, basic weaving, crocheting, coiling. Prerequisite: 114 recommended. Offered yearly. P/NC Option.

228 Sculpture I - 4 O.H.
Initial experiences in three-dimensional work. Emphasis will be placed on the problems in carving; modeling and mold making, and a brief exposure to the history and development of sculpture through slides and films. Offered twice yearly. P/NC Option.

230 Screen Printing I - 4 O.H.
Beginning Serigraphy (Silk Screen) Printing. One or two color screen printing, four techniques including photo screen printing. Prerequisites: Drawing I, Design I and permission of instructor.

300 Elementary Art Education - 4 O.H.
Survey of concepts, processes, philosophy appropriate to visual arts learning in the elementary classroom. For prospective teachers. (Not recommended for freshmen). Offered quarterly.

309 Design II - 4 O.H.
A sequence of experiences, working with materials involving two-dimensional relationships based on form modification, color concepts, visual kinetics, modular arrangements. Prerequisite: 114. Offered twice yearly.

311 Commercial Art I - 4 O.H.
Basic commercial art studio skills, vocabulary and theory will be taught. A broad array of rendering assignments are integrated with teaching vocabulary and layout, production art, lettering, and illustration concepts. Prerequisites: 118 and 114. Offered yearly.

312 Commercial Art II - 4 O.H.
Commercial Art II continues into portfolio projects, the basic exercises in Commercial Art I. Prerequisite: 311. Offered yearly.

317 Painting II - 4 O.H.
A continuation of the development of painting as a means of personal expression using oils, acrylics, encaustics, lacquers, or other painting media. Prerequisites: 118 and 217. Offered twice yearly. P/NC Option.

318 Drawing III - 4 O.H.
An advanced course in figure drawing designed to fulfill the need for personalized artistic expression. Prerequisites: 118 and 218. Repeatable up to 12 credits. Offered yearly.

320 Ceramics II - 4 O.H.
A continuation of work in clay with the introduction of glaze theory and kiln firing. Slides will be used as a means to introduce new or combinations of techniques. Prerequisite: 220. Offered yearly.

325 Fibers II - 4 O.H.
Handweaving on the four harness loom with emphasis on the woven design, artistic expression, and fabric structures. Offered yearly.

328 Sculpture II - 4 O.H.
Various welding techniques, basic non-ferrous metal casting and exploration of advanced carving techniques. Slides and films will be used to expose students to new forms of sculpture. Prerequisite: 228. Offered yearly.

330 Screen Printing II - 4 O.H.
Color Serigraphy (Screen Printing) will increase the number of colors the student deals with in the printing process, and builds on the ability of the student to color register and print clean consistent prints in one and two colors which has been accomplished in Screen Printing I. Prerequisite: 230. Offered yearly.

228 Sculpture I - 4 O.H.
Initial experiences in three-dimensional work. Emphasis will be placed on the problems in carving; modeling and mold making, and a brief exposure to the history and development of sculpture through slides and films. Offered twice yearly. P/NC Option.

230 Screen Printing I - 4 O.H.
Beginning Serigraphy (Silk Screen) Printing. One or two color screen printing, four techniques including photo screen printing. Prerequisites: Drawing I, Design I and permission of instructor.

300 Elementary Art Education - 4 O.H.
Survey of concepts, processes, philosophy appropriate to visual arts learning in the elementary classroom. For prospective teachers. (Not recommended for freshmen). Offered quarterly.

309 Design II - 4 O.H.
A sequence of experiences, working with materials involving two-dimensional relationships based on form modification, color concepts, visual kinetics, modular arrangements. Prerequisite: 114. Offered twice yearly.

311 Commercial Art I - 4 O.H.
Basic commercial art studio skills, vocabulary and theory will be taught. A broad array of rendering assignments are integrated with teaching vocabulary and layout, production art, lettering, and illustration concepts. Prerequisites: 118 and 114. Offered yearly.

312 Commercial Art II - 4 O.H.
Commercial Art II continues into portfolio projects, the basic exercises in Commercial Art I. Prerequisite: 311. Offered yearly.

317 Painting II - 4 O.H.
A continuation of the development of painting as a means of personal expression using oils, acrylics, encaustics, lacquers, or other painting media. Prerequisites: 118 and 217. Offered twice yearly. P/NC Option.

318 Drawing III - 4 O.H.
An advanced course in figure drawing designed to fulfill the need for personalized, artistic expression. Prerequisites: 118 and 218. Repeatable up to 12 credits. Offered yearly.

320 Ceramics II - 4 O.H.
A continuation of work in clay with the introduction of glaze theory and kiln firing. Slides will be used as a means to introduce new or combinations of techniques. Prerequisite: 220. Offered yearly.

325 Fibers II - 4 O.H.
Handweaving on the four harness loom with emphasis on the woven design, artistic expression, and fabric structures. Offered yearly.

328 Sculpture II - 4 O.H.
Various welding techniques, basic non-ferrous metal casting and exploration of advanced carving techniques. Slides and films will be used to expose students to new forms of sculpture. Prerequisite: 228. Offered yearly.

330 Screen Printing II - 4 O.H.
Color Serigraphy (Screen Printing) will increase the number of colors the student deals with in the printing process, and builds on the ability of the student to color register and print clean consistent prints in one and two colors which has been accomplished in Screen Printing I. Prerequisite: 230. Offered yearly.
Courses for Graduate Students Only

500 Current Trends in Art Education - 3 Q.H.
Review of current trends in art programs, examination and study of state, city, and county art guides adopted in the past 5 years. New developments in art education, review of current periodical articles concerned with experimental programs.

501 Ceramics IV - 3 Q.H.
Hand-built and wheel-thrown ceramics with an emphasis on design, creative expression, use of materials and equipment, various firing procedures. Prerequisite: minimum of 3 undergraduate credits in ceramics.

503 Implementing Visual Arts Learning in the Elementary Classroom - 3 Q.H.
Objectives, strategies for increasing perceptual awareness in art production/appraisal. Prerequisite: Art 300.

504 History of Art of the Americas - 4 Q.H.
The development of American Art forms from the colonial period in North and South America through World War II. The transition from early European influence brought to the colonies to the beginning of an American school of expression.

505 Oriental Art History - 3 Q.H.
Consideration of the aspects of Chinese and Japanese art from the early dynasties of China to the 18th Century in both Japan and China.

513 Advanced Water Media - 3 Q.H.
Students with basic knowledge of watercolor sumi ink, casein, gouache, and tempera techniques are aided in developing a personal expression.

514 Contemporary Design - 3 Q.H.
Analytical study of design in relationship to the work of contemporary designers. Special emphasis is placed on Art Nouveau, Art Deco and the Bauhaus.

516 Painting IV - 3 Q.H.
Continued experimentation with painting media as a means of developing a personal statement. Prerequisite: minimum of 3 Q.H. of painting.

517 The Design Process: Its Cultural Base - 3 Q.H.
A lecture/laboratory exploration of the designing process as it has functioned in the major cultures of the world from the classical period of Greek and Roman art to the present time.

519 Jewelry IV - 3 Q.H.
A course designed to meet the needs of the jewelry designer, craftsman and the prospective teacher of jewelry making at the secondary level. Independently designed experiences in forging, fusing, casting, enameling, stone setting, lapidary and research and the contemporary jewelry design.

550 Special Problems in Art - 3 Q.H.
Independent study in the solution of a problem related to the individual student’s field of special interest. Problems course may be repeated up to a total of six credit hours.
Biology

Pasteur Hall Room 216 / 457-5270
White (Chairperson), Anderson, Dapkus, Fremling, Jefferson, Opsahl, O'Rourke, Reuter, Zwonitzer.

The department offers courses intended to provide: majors and minors with a broad background in biology applicable to their teaching or to graduate work; Nursing, Medical Technology and Physical Therapy majors with the fundamentals of biology required in their programs; and students majoring in other areas with a knowledge of their own structure and function and of the world of living things.

The Biology Department has responsibility for curriculum and advising in Medical Technology and Physical Therapy majors and in the Pre-Dentistry, Pre-Agriculture, Pre-Dental Hygiene, Pre-Fishery andWildlife Management, Pre-Forestry, Pre-Medicine, Pre-Mortuary Science, Pre-Optometry, and Pre-Dentistry programs. Students interested in these areas are urged to consult with the designated advisors.

All majors, minors and programs which are the responsibility of the Biology Department are closely coordinated and integrated with the Biology major.

General Education requirements in the Natural Science Area are waived for all majors administered by the Biology Department.

All Biology Majors expecting to attend graduate school should take one year of calculus.

B. S. MAJOR
LIFE SCIENCE
95 Q.H. (TEACHING)

No minor required.

201 Anatomy and 202 Physiology may be substituted for 210 Zoology, which may be waived for Phy. Ed. majors and minors. Freshmen should take Botany (207, 208) sequence or the Zoology (210, 211) sequence and Chemistry 212, 213.

Students who intend to pursue a degree or degrees beyond the Baccalaureate Degree should take Biology 290 Comparative Anatomy, 310 Genetics, Biology 323 & 324 General Physiology, Biology 370 Embryology, and Chemistry 400, 401 Biochemistry.

Freshmen should consult with an advisor in the Biology Department at their earliest convenience.

REQUIRED COURSES (26 Q.H.)
207 Botany (5)
208 Botany (4)
210 Zoology (5)
211 Zoology (4)
350 Plant Taxonomy (4)
301 or 302 or 320 or 360 Biology (4)

ELECTIVES (17 Q.H.)
Electives must include courses as specified in the following groups.

Group A - minimum of two courses:

- Biology 206, 290, 305, 310, 323, 324, 325, 370, 380, 385; Biochemistry 400 and 401.

Group B - minimum of one course:

- Biology 204, 301, 302, 312, 320, 360, 420.

Group C - minimum of two courses:

- Biology 205, 314, 330, 331, 340.

REQUIRED CHEMISTRY COURSES (18 Q.H.)
212 General Inorganic Chemistry (5)
213 General Inorganic Chemistry II (5)
340 Organic Chemistry Survey (4)
311 Teaching of Science in the Secondary Schools (4)

REQUIRED PHYSICS COURSES (12 Q.H.)
201 General Physics I (4)
202 General Physics II (4)
203 General Physics III (4)

The following requirements may be counted in General Education:

REQUIRED MATHEMATICS COURSES (8 Q.H.)
215 College Algebra (4)
216 Trigonometry (4)

REQUIRED GEOLOGY COURSES (10 Q.H.)
116 Physical Geology (5)
117 Historical Geology (5)
BIOLOGY 442 OR PHILOSOPHY 273 (4)

B.S. BIOLOGY MAJOR
(94 Q.H.)

REQUIRED COURSES (35 Q.H.)
207 Botany (5)
208 Botany (4)
210 Zoology (5)
211 Zoology (4)
308 Cell Biology (5)
309 Developmental Biology (4)
310 Genetics (4)
312 General Ecology (4)

ELECTIVES (28 Q.H.)
Seven (7) courses to be chosen from those listed with a minimum of one course per category.

Survey/Taxonomy
301 Vertebrate Fauna
302 Invertebrate Fauna
319 Vertebrate Biology
320 Ornithology
340 Aquatic Flowering Plants
350 Plant Taxonomy
360 Entomology

Structural/Function
205 Bacteriology
305 Comparative Physiology
314 Plant Physiology
470 Histology

Ecology/Environmental
315 Environmental Biology
420 Limnology
423 Ecosystems Analysis

Development/Evolution
290 Comparative Anatomy
330 Plant Evolution
331 Vascular Plant Morphology
370 Embryology
380 Evolution

ADDITIONAL REQUIREMENTS (31 Q.H.)
220 Mathematics or equivalent (5)
212, 213, 340 or 350, 351 Chemistry (14)
201, 202, 203, or 221, 222, 223 Physics (12)

All students expecting to attend graduate school should take:
1. Mathematics 225, 226, 227
2. Computer programming
3. Chemistry 350, 351, 400, 401, 425

B.A. MINOR
(49-50 Q.H.)

REQUIRED COURSES (25-26 Q.H.)
Note: 201 Anatomy and 202 Physiology may be substituted for 210 Zoology.
207 Botany (5)
208 Botany (4)
210 Zoology (5)
211 Zoology (4)
301 or 302 or 320 or 360 Biology (4)

ELECTIVES (10 Q.H.)
Electives must include at least one course from each of the following groups:

Group A - Biology 206, 290, 305, 310, 323, 324, 370, 380, 385; Biochemistry 400 or 401.

Group B - Biology 204, 301, 302, 312, 320, 360, 420.

Group C - Biology 205, 314, 330, 331, 340.

REQUIRED CHEMISTRY COURSES (14 Q.H.)
Note: 350 and 351 Organic Chemistry may be substituted for 340 Organic Chemistry Survey.
212, 213 General Inorganic Chemistry (10)
340 Organic Chemistry Survey (4)

COURSE LISTINGS

Any undergraduate course, other than 117 and 118, may be taken on pass/no credit basis except:

a. Biology majors and minors may not take courses required for the major or minor on a pass/no credit basis.

b. Biology 400, Individual Problems in Biology may not be taken on a pass/no credit basis.

c. Biology courses may not be taken on a P/NC basis for graduate credit.

104 Conservation of the Environment – 4 Q.H.
Problems in the wise use of renewable resources (air, water, soil, forest, wildlife).
Lecture and field trips. No prerequisites. Offered quarterly.

117 Human Biology - 4 Q.H.
An introductory study of the structure, function, development and heredity of man. Lecture only. No prerequisite. Not open to students who have taken Botany, Zoology or Anatomy. Offered quarterly.

118 General Biology - 4 Q.H.
A general approach to the study of living things with emphasis on scientific method, biological principles, and survey of living things (exclusive of man) as related to everyday life. Lecture and laboratory. No prerequisite. Not open to students who have taken Botany or Zoology. Offered quarterly.

201 Gross Anatomy - 5 Q.H.
A study of the microscopic and macroscopic structure of the human body. Students dissect a cat as an example of mammalian anatomy. Demonstrations on a human cadaver relate cat and human anatomy. Designed especially for students in the allied medical professions. This course should be of interest to others desiring a rigorous background in Human Anatomy. Lecture and Laboratory. Offered quarterly. Prerequisite: 210 recommended.

202 Human Physiology - 5 Q.H.
Study of functions of various parts of the human body. Meets the needs of those students specializing in Physical Education. Prerequisite: Anatomy 233, Lecture and Laboratory. Offered yearly.

203 Nature Study - 4 Q.H.
Natural history of plants and animals in local habitats, including forests, prairies, lakes and streams. Students learn identification of common plants and animals, as well as skills for leadership of environmental activities. Lecture, laboratory and field trips. Offered yearly.

205 Bacteriology - 4 Q.H.
A study of representative types of bacteria, methods of culturing, control and economic importance of bacteria. Prerequisite: Botany 208 or Zoology 211 and 2 quarters of Chemistry. Lecture and laboratory. Offered yearly.

206 Normal Nutrition - 4 Q.H.
Basic principles of nutrition and the application to needs of individuals at different age levels. Prerequisites: Chemistry 212, 213; Anatomy 201; and Physiology 324 or concurrent enrollment. Offered yearly.

207 Botany I - 5 Q.H.
A study of the structure, function and development of vascular plants and emphasizing the flowering plants. Lecture and laboratory. Offered each quarter.

208 Botany II - 4 Q.H.
A taxonomic survey of the plant kingdom. Lecture and laboratory. Prerequisite: Botany 207. Offered twice yearly.

210 Zoology I - 5 Q.H.
Introduction to the study of animal life. Emphasis on structure, function, and embryology of vertebrates. Lecture and laboratory. Offered each quarter.

211 Zoology II - 4 Q.H.
Survey of the animal kingdom. Emphasis on structure, function, evolution, and ecology of the major groups of animals. Lecture and laboratory. Prerequisite: Zoology 210, Botany 207. Offered twice yearly.

215 Local Insects - 2 Q.H.
A study of local insects for the elementary major or non-biology major or minor. Lecture, laboratory and field trips. Offered yearly.

216 Local Flora - 2 Q.H.
A study of the local flowering plants for the elementary major or non-biology major or minor. Lecture, laboratory and field trips. Offered yearly.

217 Trees and Shrubs - 2 Q.H.
A study of local trees and shrubs for the elementary education major or non-biology major. Lecture, laboratory and field work. Offered yearly.

218 Local Aquatic Animals - 2 Q.H.
A study of local aquatic animals for the elementary major or non-biology major. Lecture and laboratory. Offered yearly.

219 Local Birds - 2 Q.H.
An introduction to the methods and knowledge necessary to identify birds in the field and how to attract them. Lecture, laboratory and field trip. Offered yearly.

220 Medical Terminology I: Anatomical - 2 Q.H.
Introduction to basic anatomical terminology stressing language mechanics, pronunciation and correct spelling. Not recommended for students with previous preparation in human anatomy. Offered quarterly. Grade only. Tape course.

221 Medical Terminology II: Cardiovascular - 2 Q.H.
Introduction to the basic medical terminology as applied to the cardiovascular system and associated disease states. Topics include: congenital anomalies, coronary artery disease, cardiac transplant and diagnostic procedures. Open to students majoring in allied medical sciences. Offered quarterly. Grade only. Prerequisite: Bio 201. Tape course.

222 Medical Terminology III: Gastroenterology - 2 Q.H.
Introduction to the basic medical terminology of the digestive system and associated disease states. Topics include: congenital defects of the esophagus and stomach, disorders of the small intestine, neoplastic processes, infections and parasites and corrective procedures. Open to students majoring in allied medical sciences. Offered quarterly. Grade only. Prerequisite: Bio 201. Tape course.

223 Medical Terminology IV: Respiratory - 2 Q.H.
Introduction to the basic medical terminology as applied to the respiratory system and associated disease states. Topics include: The upper respiratory system, newborn abnormalities, pulmonary infections, neoplastic processes, thoracic surgery and diagnostic procedures. Open to students majoring in allied medical sciences. Offered quarterly. Grade only. Prerequisite: Bio 201. Tape course.

224 Medical Terminology V: Orthopedics - 2 Q.H.
Introduction to the basic medical terminology as applied to orthopedic disorders and corrective procedures. Topics include: congenital defects, metabolic disturbances, arthritis, neoplastic disturbances and diagnostic procedures. Open to the students majoring in the allied medical sciences. Offered quarterly. Grade only. Prerequisite: Bio 201. Tape course.

233 General Human Anatomy - 5 Q.H.
A study of the human body with an emphasis on the skeletal and muscular system. Designed especially for physical education majors and minors. A cat is dissected by students to serve as an example of mammalian anatomy. Demonstrations on a human cadaver relate human and cat anatomy. Open only to PE students. Offered yearly.

269 Human Reproduction - 4 Q.H.
The biology of human reproduction. Topics include the anatomy, physiology, biochemistry, normal and abnormal functions of all aspects of reproduction. No prerequisites: Lecture-discussion-demonstration. Offered yearly.

290 Comparative Anatomy - 5 Q.H.
Study of selected vertebrates with emphasis on the ways in which the anatomy of the more advanced forms represents modifications of structure present in lower forms. Lecture and laboratory. Prerequisite: Zoology 211, Offered alternate years.

301 Vertebrate Fauna of North America - 4 Q.H.
The classification, identification, and natural history of North American vertebrate animals exclusive of birds. Lecture, laboratory and field trips. Prerequisite: Zoology 211. Offered alternate years.

302 Invertebrate Fauna of North America - 4 Q.H.
The classification, identification and natural history of the fresh-water and terrestrial invertebrates of North America exclusive of insects. Emphasis is placed on those found in the upper midwestern states, laboratory and field trips. Prerequisite: Zoology 211. Offered alternate years.

305 Comparative Physiology - 4 Q.H.
An introduction to the study of physiological adaptations throughout the animal kingdom. Lecture and laboratory. Prerequisites: Zoology 210 or Biology 202, a minimum of two quarters of inorganic chemistry and one quarter of organic chemistry. Offered every other year.

308 Cell Biology - 5 Q.H.
A study of the cell as a biological unit. Analysis of ultra-structure, macromolecular organization and function of cell components in plants and animals is emphasized. Lecture and laboratory. Prerequisites: Biology 207 and 210; Chemistry 340. Offered yearly.

309 Developmental Biology - 4 Q.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 and laboratory. Prerequisite: Biology 308. Offered yearly.

310 Genetics - 4 Q.H.
A survey of the principles of Mendelian, molecular, cytological, population and human genetics. Lecture and laboratory. Prerequisite: Biology 308. Offered yearly.

312 General Ecology - 4 Q.H.
Relationships of animals and plants to their environments. Lecture, laboratory and field trips. Prerequisites: Zoology 211, Botany 208, Chemistry 213. Offered yearly.
314 Plant Physiology — 4 Q.H.
Principles of absorption, conduction, transpiration, photosynthesis, respiration, growth and reproduction in plants. Prerequisites: Botany 207, 208, Organic Chemistry 340 or 350, 351. Lecture and laboratory. Offered every other year.

315 Environmental Biology — 4 Q.H.
A study of man’s impacts on his natural environment. Modern conservation measures and habitat management procedures are treated in depth. Lecture, laboratory and field work. Prerequisites: Biology 312. Offered alternate years.

319 Vertebrate Biology — 5 Q.H.
A study of the structure, function, evolution and taxonomy of all the groups of vertebrates. Lecture and laboratory. Prerequisites: Biology 207, 210 and 211. Offered alternate years.

320 Ornithology — 4 Q.H.
Structure, classification, behavior, distribution and identification of birds. Lecture, laboratory and field work. Prerequisite: Zoology 211. Offered alternate years.

323 General Physiology — 5 Q.H.
First of two-quarter sequence. Lectures, demonstrations and laboratory are designed to provide the basis of understanding general physiological mechanisms and the functional organization of physiological systems. Topics are translocation of materials, muscle, nervous, cardiovascular, respiratory and excretory systems. Meets needs of nursing, paramedical and biology majors. Prerequisite: Anatomy 201 or equivalent; Chemistry 208 and 209 or 212 and 213. Offered fall quarter.

324 General Physiology — 5 Q.H.
A continuation of Biology 323. Lecture and laboratory topics include acid-base balance, hematology, gastrointestinal physiology, intermediary metabolism, basic endocrinology and sexual reproduction. Lecture and laboratory. Prerequisites: Biology 201 and 323, Chemistry 208 and 209 or 212, 213. Offered yearly.

330 Plant Evolution — 4 Q.H.
An evolutionary survey of the plant kingdom emphasizing the phylogenetic facets of the morphology, taxonomy, cytology and life histories of the plants. Lecture and laboratory. Prerequisite: completion of major core program. Offered alternate years.

331 Vascular Plant Morphology — 4 Q.H.
Development and morphology of the vascular plants in reference to phylogenetic considerations. Lecture and laboratory. Prerequisite: completion of Biology 309, 310. Offered alternate years.

333 Medical Laboratory Techniques — 2 Q.H.
Selected students will participate in the everyday operation of a hospital medical laboratory. Students must see Dr. Dwight Anderson 4 weeks prior to registration. May be repeated for credit. Offered quarterly. P/NC only.

340 Aquatic Flowering Plants — 3 Q.H.
The classification and study of the higher flowering plants of aquatic and marsh habitats. Prerequisite: Botany 207 and 208. Lecture and field work. Offered alternate summers.

350 Plant Taxonomy — 4 Q.H.
An introduction to the development and classification of flowering plants with special emphasis on local flora. Individual collections are made. Prerequisites: Botany 207 and 208. Lecture, laboratory and field trips. Offered yearly.

360 Entomology — 4 Q.H.
Morphology, classification, life histories, distributions, and economic importance of insects. Individual collections are made. Lecture, laboratory. Prerequisite: Zoology 211. Offered alternate years.

370 Embryology — 5 Q.H.
Patterns of development of vertebrate embryos and the causative factors involved. Laboratory work includes study of developmental stages of frog and chick embryos. Lecture and laboratory. Prerequisite: Biology 309, 310. Offered alternate years.

380 Evolution — 3 Q.H.
The history of the development of life on earth and theories pertaining to process of evolution. Lecture and laboratory. Prerequisite: completion of major core program. Junior or Senior standing. Offered alternate years.

400 Individual Problems in Biology — 1-4 Q.H.
An opportunity for the qualified advanced undergraduate student to work independently. Prerequisite: consent of instructor. May be repeated to a total of 4 credits. Written report required. Offered quarterly.

405 Seminar in Biology — 1-4 Q.H.
An analysis of topics and problems in biology. The subject matter will be arranged by the department prior to the quarter offered. Prerequisite: consent of the instructor. May be repeated to a total of 4 credits dependent upon the subject matter. Offered when feasible.

420 Limnology — 4 Q.H.
Analysis of the geological, physical, chemical and biological aspects of inland waters. Lecture, laboratory and field work. Prerequisites: Botany 208, Zoology 211, Biology 312, and two quarters of chemistry or consent of instructor. Offered alternate years.

423 Ecosystem Analysis — 4 Q.H.
Analytical approach to understanding structural, functional and temporal characteristics of selected terrestrial ecosystems. Lecture and laboratory. Prerequisite: Biology 312. Offered alternate years.

442 Philosophy of Science — 4 Q.H.
A treatment primarily concerned with methodological topics and meaning in modern science, including illustrations drawn from the formal and empirical sciences. Lecture. Prerequisites: Senior standing. A laboratory science. Offered alternate years.

445G Immunology — 4 Q.H.

450 Medical Technology I — 12 Q.H.
Laboratory Medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator and staff of the affiliated hospital. Prerequisite: Medical Technology majors with senior standing. Offered yearly. Grade only.

451 Medical Technology II — 12 Q.H.
Laboratory Medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator and staff of the affiliated hospital. Prerequisite: Medical Technology majors with senior standing. Offered yearly. Grade only.

452 Medical Technology III — 12 Q.H.
Laboratory Medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator and staff of the affiliated hospital. Prerequisite: Medical Technology majors with senior standing. Offered yearly. Grade only.

453 Medical Technology IV — 6 Q.H.
Laboratory Medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator and staff of the affiliated hospital. Prerequisite: Medical Technology major with senior standing. Offered yearly. Grade only.

454 Medical Technology V — 6 Q.H.
Laboratory Medicine. Courses and content to be determined by the Director of Laboratories, Educational Coordinator and staff of the affiliated hospital. Prerequisite: Medical Technology major with senior standing. Offered yearly. Grade only.

460G General Parasitology — 4 Q.H.
An introduction to the study of parasites of man and his domestic animals and the etiology of associated pathologic states. Prerequisites: Biology 207, 211 and at least one quarter of biochemistry. Lecture and laboratory. Offered yearly.

470G Histology — 4 Q.H.
A microscopic study of animal cells, tissues, and organs and correlating structure and function. Emphasis is placed on the mammal. Consideration is given to various microtechniques and histochemistry and the analysis of electronmicrographs. Lecture and laboratory. Prerequisites: Biology 207 or Chemistry 212 and 213. Offered yearly.

COURSES FOR GRADUATE STUDENTS ONLY

500 Problems in Biology — 1-5 Q.H.
This course is designed to give graduate students the opportunity to study biological subjects of special interest to them. Prerequisite: consent of advisor. May be repeated with consent of advisor up to 5 credits.
Business Administration and Economics

Sonsen Hall 324 / 457-5170
Gieske (Chairperson)

Accounting: Briggs, Ellis, Ihrke, Lee, Schneider

Economics: Gieske, Hunter, Petersen, Rieder, Salyards

The basic purposes of the department are to prepare students for upper level careers in business and government service, and to provide essential undergraduate preparation for postgraduate work in accounting, business, economics, data processing, law, political economy and other fields. Through formal courses and informal educational experiences you are encouraged to develop the skills and perspective necessary for intelligent analysis of the problems of managers of business and government institutions and, in addition to their traditional responsibility, for meeting our mounting problems of environmental pollution, racial imbalance, urban blight and human resource development.

B.S. MAJOR

ACCOUNTING 115 Q.H.

The accounting program is designed to prepare students for a professional career in public, private and governmental accounting; and/or to prepare students for graduate study in accounting or related fields.

(REQUIRED not required)

REQUIRED ACCOUNTING COURSES (36 Q.H.)

201, 202 Principles of Accounting I, II (8)
301, 302, 303 Intermediate Accounting I, II, III (12)
407 Intro to Taxation (4)
411 Auditing I (4)
440 Cost Accounting I (4)
442 Advanced Accounting I (4)

REQUIRED BUSINESS ADMINISTRATION & ECONOMICS COURSES (48 Q.H.)

201, 202, 203 Principles of Economics I, II, III (12)
207, 335 Statistics for Business & Economics I, II (8)
201, 202 Principles of Accounting I, II (8)
203 Managerial Accounting (4)
310, 311 Business Law I, II (8)
312 Business Computer Application and Programming (4)
315 Principles of Marketing (4)
320 Business & Gov't Relations (4)
360 Fundamentals of Business Finance (4)
370 Business Organization and Management (4)
375 Management of Human Resources (4)

ELECTIVES (30 Q.H.)

The student must select A, B, C or D for 32 hours of electives. Certain approved courses transferred from junior colleges may be substituted as electives under the 300 level. Selected courses in the Department of Business Education and Office Administration, up to a maximum of 8 credits, may apply as business electives. A list of approved courses is available in the department office. If fewer than 8 credits from the department of BEOA are applied toward the degree, selected courses from other departments may be substituted with the written approval of the Head of the Department of Business Administration and Economics based on the special needs of the individual student. Business Administration 110 is strongly recommended as an elective for students who are uncertain about the nature and potential of studies in Business and Economics.

OPTION A - PERSONNEL AND INDUSTRIAL RELATIONS (32 Q.H.)

Thirty-two credits of personnel and industrial relations and related courses, at least 24 of which are numbered 300 or above. At least 20 credits must be taken from the following list of courses offered by the Business Administration and Economics department.

OPTION B - MARKETING (32 Q.H.)

Thirty-two credits of marketing and related courses.

OPTION C - GENERAL ADMINISTRATION (32 Q.H.)

Thirty-two credits of electives in Business Administration, Economics, or other Approved Courses, at least 24 of which must be numbered 300 or above. Econ 302, 303, Math 222 and BA 330 are strongly recommended for those considering graduate school any time in the future, as these are prerequisite courses in many graduate programs. A Small Business Consulting Project is also strongly recommended.
Choose two of the following three courses:

TION (32 O.H.)

OPTION D - PUBLIC ADMINISTRATION

REQUIRED COURSES (20 Q.H.)

PoSci 221 State & Local Government (4)
PoSci 223 Public Administration (4)
Econ 400 Public Finance (4)

Choose two of the following three courses:

PoSci 420 Administrative Law (4)
PoSci 324 Urban Planning (4)
PoSci 329 Municipal Administration (4)

REQUIRED COURSES (24 Q.H.)

201, 202, 203 Principles of Economics I, II, III (12)
302 Intermediate Price and Income Theory (4)
303 Intermediate Macro Economic Analysis (4)
304 Money and Banking (4)

ELECTIVES (8 Q.H.)

300 and 400 level courses in Economics (8)

B.S. MINOR

BUSINESS ADMINISTRATION

36 Q.H.

REQUIRED BUSINESS COURSES (20 Q.H.)

201, 202 Principles of Accounting I, II, (8)
203 Managerial Accounting (4)
310 Business Law I (4)
370 Business Organization and Management (4)

ELECTIVES (12 Q.H.)

Students may select business electives totaling 4 credits, BA 110 Intro to Business, BA 315 Marketing, BA 360 Business Finance, BA 312 Computers, and BA 207 Statistics are strongly recommended.

B.S. MAJOR

PARALEGAL

(Minor not required)
(see Paralegal Major)

B.A. MINOR

ECONOMICS

32 Q.H.

REQUIRED COURSES (24 Q.H.)

201, 202, 203 Principles of Economics I, II, III (12)
302 Intermediate Price and Income Theory (4)
303 Intermediate Macro Economic Analysis (4)
304 Money and Banking (4)

ELECTIVES (8 Q.H.)

300 and 400 level courses in Economics (8)

B.S. MINOR

BUSINESS ADMINISTRATION

36 Q.H.

REQUIRED BUSINESS COURSES (20 Q.H.)

201, 202 Principles of Accounting I, II, (8)
203 Managerial Accounting (4)
310 Business Law I (4)
370 Business Organization and Management (4)

REQUIRED ECONOMICS COURSES (12 Q.H.)

201, 202, 203 Principles of Economics I, II, III (12)

ELECTIVES (4 Q.H.)

Students may select business electives totaling 4 credits, BA 110 Intro to Business, BA 315 Marketing, BA 360 Business Finance, BA 312 Computers, and BA 207 Statistics are strongly recommended.

MASTER OF BUSINESS ADMINISTRATION

The Master of Business Administration (M.B.A.) is a professional degree which has become an important factor in many hiring and promotion decisions for business, government, and other organizations. Winona State University's M.B.A. is designed as a general management degree, developing competence for managerial and administrative positions in either the public or private sector. Students who enter the program should already possess substantial knowledge of management and administration as taught in undergraduate schools of business, or should acquire that mastery by completing prerequisites to the M.B.A. courses. The M.B.A. curriculum will include work in the essential tools of management, mastery of the functional areas of business and management (accounting, finance, marketing, organization and production); and practice in managerial policy and decision-making. The program also allows for specialization or breadth by offering electives which may be selected by the student subject to the approval of an advisor.

In addition to prerequisites and other requirements contained in the Graduate Information section in this catalog, all core courses and 12 elective credits must be completed.

REQUIRED COURSES (36 Q.H.)

BA 463G Financial Management (4)
BA 501 Research Methodology (3)
BA 510 Management Law (3)
BA 531 Production Management and Inventory Control (3)
BA 535 Accounting for Management (3)
BA 542 Marketing Analysis (3)
BA 545 Human Resource Development and Administration (3)
BA 565 Small Business Administration Consulting Projects (3)
BA 595 Business Policies (3)
Econ 425G Managerial Economics (4)
Econ 503 Macro-Economic Theory and Forecasting (3)

ELECTIVES (12 Q.H.)

All graduate courses ("G" courses and 600 level) build upon the Department of Business Administration and Economics qualify as electives. Selected courses from other departments may be taken if approved in advance by the M.B.A. advisor.

ACCOUNTING COURSES

Any course not required for a major, minor, option, or any of the concentrations, may be taken by undergraduates on a pass/no credit basis by permission of the instructor.

201 Principles of Accounting I — 4 Q.H.

Theory of double entry accounting including journalizing, ledger posting and preparation of financial statements for service and merchandising businesses organized as sole proprietorships, partnerships, or corporations.

202 Principles of Accounting II — 4 Q.H.

A continuation of 201 which shows the study of assets and liabilities, financial statement analysis, the statement of changes in financial position, tax considerations, and long-term debt. Prerequisite: Acct 201.

203 Managerial Accounting — 4 Q.H.

Branch and departmental accounting; process, job order; standard costing; budgetary control; income tax problems; statement analysis. Includes a computer simulation of the accounting of a manufacturing concern. Prerequisite: Acct 202.

301 Intermediate Accounting I — 4 Q.H.


302 Intermediate Accounting II — 4 Q.H.

Development of accounting principles and procedures related to liabilities, noncurrent assets, and owner's equity. Prerequisite: Acct 301.
303 Intermediate Accounting III - 4 O.H.
Development of accounting principles and procedures related to revenue recognition, and special areas, including current value accounting. Prerequisite: Acct 302.

346 Governmental Accounting - 4 O.H.
Analysis of accounting systems and problems in federal and state and local units of government. Prerequisite: Acct 202.

350 Accounting Systems - 4 O.H.
A study of the principles underlying the design and installation of accounting systems, survey of methods of processing data, with an emphasis on internal control. Prerequisite: Acct 302, BA 312, or consent of instructor.

398 Internship - 1-12 O.H.
Credits will not be counted in Accounting major, but as general elective credits. Prerequisite: Core courses completed. P/NC only.

399 Internship Problem - 4 O.H.
Prerequisite: Acct 398. Grade only.

407G Introduction to Taxation - 4 O.H.
A study of the history of taxation, tax bases, tax rates, tax law formation, modification, research, planning and appeal. Introduces the personal income tax, partnership, corporations, trusts, estates and transfer taxes. This course is recommended for non-accounting majors. Prerequisite: Acct 202, Econ 203.

409G Advanced Taxation - 4 O.H.
A study of the tax laws in effect during the course and operational techniques for filing including more complex research and planning techniques in federal and state taxes. Prerequisite: Acct 407.

411G Auditing I - 4 O.H.
The public accounting profession and its requirements, internal control, verification of accounts, auditors' reports. A review of the auditing process and an analysis of the generally accepted auditing standards. Prerequisites: Acct 303, BA 207, 312.

413 Auditing II - 4 O.H.
Practical application of auditing procedures to the use of comprehensive practice set worked by students. In-depth analysis of auditing procedures as applied in specific areas. Prerequisite: Acct 411.

425G Tax Planning - 4 O.H.
This survey course provides an overview of the tax laws and their inter-relationships in a way that has proven interesting, enlightening, and profitable to taxpayers, managers, tax planners, and defenders. Prerequisite: Acct 407 or consent of instructor.

440G Cost Accounting I - 4 O.H.
Cost accounting fundamentals including long-term planning, control, cost allocation, quantitative analysis and behavioral considerations in systems design. Prerequisites: Acct 202, BA 335, Econ 201.

441G Cost Accounting II - 4 O.H.
Indepth study of cost accounting problems including interpretation, company strategies for planning, behavioral accounting research and Cost Accounting Standards Board promulgations. Prerequisite: Acct 440.

442G Advanced Accounting I - 4 O.H.
Business combinations, consolidations and branch accounting. Prerequisites: Acct 303, BA 311.

443 Advanced Accounting II - 4 O.H.
Partnerships, foreign operations, bankruptcy, trusts and estates, non-profit organizations. Prerequisite: Acct 303.

446 Accounting Theory - 4 O.H.
A study of the foundations, statements, analyses, and evolution of the various accounting theories including those by the FASB, AICPA, AAA, NAA, and other organizations. A review of the research studies and postulates that has occurred in the current century. Prerequisite: Acct 303.

480G Independent Studies in Accounting - 1-6 O.H.
Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: consent of instructor. Total credits may not exceed 12.

535 Accounting for Management - 3 O.H.
This course is designed to help the business manager to be aware of the accounting alternatives available to him/her for planning, forecasting, directing, controlling, import taxes, and auditor selection. A survey of the various skills and organizations providing accounting services to managers will also be presented. Prerequisites: BA 201 and 202. Grade only.

540 Accounting for Management and Control - 4 O.H.
The study of how accounting information and mathematical techniques are used for decision-making related to planning and control. Prerequisite: Acct 202.

BUSINESS ADMINISTRATION COURSES

Any course not required for a major, minor, option, or any of the concentrations, may be taken by undergraduates on a pass-no credit basis by permission of the instructor.

101 Introduction to Law and the Legal Process - 4 O.H.
A study of 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 and remedies. Not open to those having 15 or more credits in business. Note: only one 100 level course can be counted as a business elective.

110 Introduction to Business - 4 O.H.
Develops broad, beginning understanding of business institutions, functions, practices and problems. A survey of basic national institution for non-majors. Not open to those having 15 or more credits in business.

112 Introduction to Computer Science - 1 O.H.
This course is designed for individuals who would like to know something about the computer. Course consists of video tapes and involves self-instruction at the students' own pace. P/NC only.

207 Statistics or Business and Economics I - 4 O.H.
Elementary business statistics including descriptive measures, elementary probability, sampling of distributions, and statistical inference. Prerequisite: Math 113 or equivalent.

310 Business Law I - 4 O.H.
Legal background, contracts, agency, bailments, sales and commercial paper.

311 Business Law II - 4 O.H.
Partnerships, corporations, bankruptcy, secured transactions, real and personal property, trusts and estates, torts and consumer protection. Prerequisite: BA 310 or consent of instructor.

312 Business Computer Applications and Programming I - 4 O.H.
A study of computer hardware and software concepts using an appropriate language such as FORTRAN. The student will flowchart, code, compile, test and debug selected business problems.

313 Business Computer Applications and Programming II - 4 O.H.
Included are disk and tape file organization. The student will document, compile, test and debug business application problems using COBOL language. Prerequisite: BA 312.

315 Principles of Marketing - 4 O.H.
A beginning course in marketing which stresses the marketing function's contribution to the business firm. Topics include buyer behavior, products, channels of distribution, promotion, pricing and social issues in marketing. Prerequisite: Econ 201.

317 Analysis of Consumer Behavior for Marketing - 4 O.H.
An application of the behavioral sciences to marketing. Topics include motivation, perception, learning, personality, communication, cultural values and norms, social class, and consumer decision-making models. Prerequisite: BA 315.

318 Management of Promotion - 4 O.H.
The nature, scope, and contributions of advertising, personal selling, public relations, and sales promotion in serving as a communications link between the business firm and its target market. Prerequisite: BA 315 & 317.

319 Marketing Systems and Channels - 4 O.H.
The political, social and economic relationships among the various institutions that comprise marketing channels with a focus on available means for securing effective management in the distribution of goods and services. Prerequisite: BA 315. Grade only.

322 Retailing - 4 O.H.
An examination of the functions, institutions, and managerial practices encompassing the field of retailing. Emphasis is placed on retail management and its role in the channel of distribution. Prerequisite: BA 315.

323 Purchasing - 4 O.H.
A study of purchasing management. Includes objectives, procedures, organization, ordering techniques, inventory control, vendor selection, price, equipment, legal aspects, make or buy, and purchasing department reports. Prerequisite: BA 315. Grade only.

325 Consumer Law - 4 O.H.
A study of the major issues affecting consumers. Included are sales practices, warranties, advertising, credit extension, rates and
Marking related project. Prerequisite: BA 315 and 335.

419G Management Systems — 4 Q.H.
Stresses the use of the systems approach to management and the use of quantitative decision-making techniques such as models and simulations. Prerequisite: BA 335 and 370.

420G Insurance — 4 Q.H.
An introductory study of automobile, crime, fire, health, liability, life, and transportation insurance, with emphasis on the economic significance of the various types of insurance contracts. Prerequisite: BA 310.

423 International Marketing — 4 Q.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. Prerequisites: 315, 318, senior standing.

428 Marketing Management — 4 Q.H.
An advanced problem method course dealing with specialized marketing functions and policies. Topics include product line planning, operating diagnosis and control, competitive strategy, quantitative marketing, and the marketing environment. Case analyses are used to promote effective learning. Prerequisites: BA 315, 317 or 418, 318, 207, Econ 202.

429 Small Business Consulting — 4 Q.H.
A practical, problem-solving course where students are divided into teams and act as consultants to a small business. Students present their written findings to the entrepreneur and officers of the U. S. Small Business Administration. Senior standing is a prerequisite. Grade only.

430 Real Estate Law — 4 Q.H.
An analysis of the legal system and real property, including the transfer of real estate, land use and regulation and financing of the real estate transaction. Prerequisite: BA 311.

456G Labor Law and Legislation — 4 H.
Examination of the legal framework of labor relations including common law, administration, and judicial interpretations of statutory law and equity applications. Prerequisite: BA 310.

461G Personnel Compensation — 4 Q.H.
Issues, theories, and policies in the areas of wage and salary administration and employee compensation. Prerequisites: Econ 203 and 375 or consent of instructor.

463G Financial Management — 4 Q.H.
Case and text 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. Prerequisite: BA 360.

465G Collective Bargaining — 4 Q.H.
How practical differences between labor and management over wages, hours, and working conditions — in both private and public employment — are resolved by negotiation and administration of labor agreements. Prerequisite: Econ 203 and BA 375. Recommended but not required, Econ 420.

467G Personnel Staffing & Evaluation — 4 Q.H.
Examination of personnel staffing and evaluation including EEO and Affirmative Action requirements. Area reported will include recruitment, selection, job analysis, and performance appraisal. Prerequisites: BA 370 and 375. Grade only.

470G Theories of Management — 4 Q.H.
Study of various modern theories of management and organization. Application of these theories to actual management situations is also examined.

475G Problems in Management of Human Resources — 4 Q.H.
Controversial, practical situations involving people at work are examined with an eye to giving greater insight into the complexities of working effectively with human resources. Prerequisite: BA 375 or consent of instructor.

480G Independent Studies in Business Administration — 4 Q.H.
Offers the advanced student an opportunity to do additional reading and/or research in areas of special interest. Prerequisite: consent of instructor. Total credits may not exceed 12.

481 Independent Readings in Management — 1-4 Q.H.
To provide more background in management, two books of the student’s choice (with concurrence of faculty advisor) are read for each credit desired. Primary source is Maxwell Library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each book with each other. Prerequisite: upper division status or consent of instructor. Limit of 12 credits of independent study per program.

482 Independent Readings In Human Resources — 1-4 Q.H.
To provide more background in Human Resources, two books of the student’s choice (with concurrence of faculty advisor) are read for each credit desired. Primary source is Maxwell Library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each book with each other. Prerequisite: upper division status or consent of instructor. Limit of 12 credits of independent study per program.

483 Independent Readings in Labor Relations — 1-4 Q.H.
To provide more background in Labor Relations, two books of the student’s choice (with concurrence of faculty advisor) are read for each credit desired. Primary source is Maxwell Library. Chapter summaries and evaluations are requested for each book as well as an integrative report, comparing and contrasting each book with each other. Prerequisite: upper division status or consent of instructor. Limit of 12 credits of independent study per program.

490G Organization and Leadership — 1-4 Q.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 theo-
COURSES FOR GRADUATE STUDENTS ONLY

501 Research Methodology — 3 O.H.
A study of research methods, including both subjective & objective information, with the goal of optimal decision-making. Prerequisites: BA 207 and 312. Grade only.

510 Management Law — 3 O.H.
Consideration of the nature of the partnership & corporation, the development of the law concerning the rights and powers of managers and the limits of their discretion and their duties and responsibilities to their organizations, to creditors, to the state and the public. Also includes judicial remedies & procedures available to creditors & shareholders to enforce their rights. Prerequisite: BA 310. Grade only.

521 Industrial Marketing — 4 O.H.
A study of marketing decisions and practices as found in industry. Prerequisite: BA 315.

525 Administrative Decision-Making — 3 O.H.
Survey of quantitative decision-making methods. Linear programming, break-even analysis, simulation, PERT, cost analysis, marginal analysis and forecasting. College algebra is recommended as background for this course.

526 Management Administration — 4 O.H.
Study of basic ideas, concepts, and values of management, supplemented with analysis of important problems.

530 Business Management Decision-Making — 4 O.H.
An interdepartmental seminar in which business cases are analyzed from the financial, personnel, marketing and production aspects just as top management would in a business.

531 Production Management & Inventory Control — 3 O.H.
Topics in production and inventory planning and control with an emphasis on modern computer methods including material requirements planning, capacity planning, priority control, and forecasting. Prerequisites: BA 207 and 370. Grade only.

542 Marketing Analysis — 3 O.H.
To update the discussion of marketing problems, practices and principles, to deepen the discussion of marketing topics of increased importance, such as product concept development and testing, product positioning, marketing control, and new marketing philosophies, to provide an opportunity to apply marketing thinking to real marketing situations through cases. Prerequisite: BA 315. Grade only.

545 Human Resource Development & Administration — 3 O.H.
Procedures used in managing the human resources in an organization so that the benefits to the organization and individual are maximized. Prerequisite: BA 370. Grade only.

560 Survey of Business Finance — 4 O.H.
Selected cases illustrating the trends and contemporary problems in financing business enterprises.

565 Small Business Consulting — 3 O.H.
Student teams counsel small business firms and help them improve profits or reduce losses. Course is offered under the auspices of the Small Business Administration. Prerequisites: 463G, 531, 542, 545, Accs 535. Grade only.

570 Problems in Business — 4 O.H.
This course gives the graduate student the opportunity to continue the study of selected topics in business or economics which have been introduced in other courses. Prerequisite: consent of instructor.

590 Seminar in Business — 4 O.H.
The study and application of current practices and major problems of business through the use of the case method and the techniques of role playing.

595 Business Policies — 3 O.H.
To integrate the major functional areas in business in an overall prospective representing the role of the manager at top management levels. Emphasis is placed on problems requiring effective action through leadership, organization, planning or control. This is basically an advanced course study of administration and administrators, organization objectives and need for policies, plans, and procedures designed to reach them, unusual operational and organizational problems in any functional area. Prerequisites: BA 463G, 531, 542, 545, Accs 535. Grade only.

599 Research or Thesis in Business — 3-6 O.H.
The report must show evidence of ability to carry on independent study and to employ scientific methods and procedures in the solution of an approved topic in the area of business or economics.

ECONOMICS COURSES

102 Introduction to Economics — 4 O.H.
Basic facts, concepts, institutions, and theories which are most essential to an understanding of the United States economy. Includes a unit on cooperatives. Students planning to take Econ 201, 202, and 203 should not take this course.

201 Principles of Economics I — 4 O.H.
Microeconomics. The private enterprise system, demand and supply and market interaction business costs and prices, forms of competition; the mixed economy. Includes a unit on cooperatives. No prerequisite.

202 Principles of Economics II — 4 O.H.
Macroeconomics. National income analysis; aggregate demand and supply; money, banking; business cycles, monetary and fiscal policy. No prerequisite.

203 Principles of Economics III — 4 O.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, 202.

300 Current Economic Issues — 1-6 O.H.
Analysis of current economic issues and problems. Techniques and models appropriate to problem situations will be presented.

302 Intermediate Microeconomic Analysis — 4 O.H.
A 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 Macroeconomic Analysis — 4 O.H.
National income accounting and measurement, theory of the determination of national economic activity; consumption; investment; government spending; discretionary and automatic fiscal and monetary policies. Prerequisite: Econ 202.

304 Money and Banking — 4 O.H.
History and theory of banking and currency; source of bank funds and their utilization, and problems of the bank's lending power and reserve; monetary policy. Prerequisite: BA 207. Econ 202.

320 Business-Government Relations — 4 O.H.
Government regulation of business including anti-trust legislation, consumer and investor protection and public enterprise. Prerequisites: Econ 203, 304, or Business 311 or consent of instructor.

398 Internship — 1-12 O.H.
Credits will not be counted in Economics major, but as general elective credit. Prerequisite: core courses completed. P/NC only.

399 Internship Problem — 4 O.H.
Prerequisite: 398. Grade only.

400G Public Finance — 4 O.H.
The application of economic principles to taxation, public expenditures, borrowing, and administration of public funds. Prerequisite: Econ 201, 202.

404G International Trade — 4 O.H.
A practical and theoretical approach to international trade. Principles of trade and theory of international flows; tariffs and quotas, gold flows, and contemporary international marketing agreements. Prerequisite: Econ 203.

410G Regional Economics — 4 O.H.
Included in the course are central tenets of location theory, input output analysis, regional structure and regional trade theory. Course is designed for those interested in regional planning and economics careers. Prerequisites: Econ 201, 202, 203 and 302.
Business Education and Office Administration

Sorrensen Hall Room 301 / 457-5165
Gorman (Chairperson), Elken, Smith

The department provides practical business and educational preparation for business teachers and administrative services personnel, such as office managers, executive secretaries, word processors, administrative assistants, and supervisors.

The vocational curricula, supported by a background of general business and general education courses, is designed to meet the educational needs of graduates in a rapidly changing technological environment.

The Business Education and Office Administration Department offers the following five options:

- **Option A**: Office Administration (Non-Teaching)
- **Option B**: Business Education (Teaching)
- **Option C**: Business Education, Except Shorthand (Teaching)
- **Option D**: Accounting & Data Processing Specialization (Teaching)
- **Option E**: Basic Business and/or Economics Specialization (Teaching)

**B.S. MAJOR**

70-90 Q.H.

**CORE PROGRAM REQUIREMENTS (38 Q.H.)**

**REQUIRED BUSINESS EDUCATION COURSES (14 Q.H.)**

- 202 Intermediate Typewriting (3)
- 320 Business Data Processing (4)
- 332 Business Report Writing (3) OR
- 333 Business Correspondence (3)
- 334 Business Organization & Office Management (4)

**ADDITIONAL REQUIREMENTS (24 Q.H.)**

*201 Principles of Economics I: Microeconomics (4)
*202 Principles of Economics II: Macroeconomics (4)
*203 Principles of Accounting I: (4)
*204 Principles of Accounting II (4)
310 Business Law (4)
315 Principles of Marketing (4)

*These courses may be used to satisfy certain general education requirements.

NOTE: All B.S. majors must meet general education requirements of 68 credits.

All teaching majors must meet the "Professional Education Sequence."

**OPTION REQUIREMENTS**

In addition to the 38 Q.H. of core requirements, a student selects one of the following five options:

- **Option A**: Office Administration (Non-Teaching)
- **Option B**: Business Education All Teaching
- **Option C**: Business Education, Except Shorthand (Teaching)
- **Option D**: Accounting & Data Processing Specialization (Teaching)
- **Option E**: Basic Business and/or Economics Specialization (Teaching)

**OPTION A - OFFICE ADMINISTRATION (NON-TEACHING)**

90 Q.H.

a. Core Program Requirements - 38 Q.H.

b. Major Option Requirements - 52 Q.H.
REQUIRED BUSINESS EDUCATION COURSES (38-42 Q.H.)
203 Advanced Typewriting (3)
206 Administrative Office Procedures (3)
210 Business Machines (2)
235 Word Processing Transcription (3)
240 Word/Information Processing I: Concepts and Applications (3)
335 Records Management & Micrographics (3)
336 Office Occupations Seminar: Effective Dictation Procedures (1)
340 Word/Information Processing II: Advanced Text-Editing (3)
350 Women & Men in Business (3)
350 Interpersonal Business Relations (3)
359 Internship (4-8)
433 Office Management II (3)
435 Word/Information Systems Management (4)

REQUIRED BUSINESS ADMINISTRATION COURSES (8 Q.H.)
203 Managerial Accounting (4)
375 Management of Human Resources (4)

MAJOR ELECTIVES (2-6 Q.H.)

OPTION B—BUSINESS EDUCATION ALL (COMPREHENSIVE TEACHING) 90 Q.H.

a. Core Program Requirements — 38 Q.H.
b. Major Option Requirements — 52 Q.H.

REQUIRED BUSINESS EDUCATION COURSES (45 Q.H.)
203 Advanced Typewriting (3)
206 Administrative Office Procedures (3)
210 Business Machines (2)
215 Personal Finance (4)
224 Advanced Gregg Shorthand (4)
234 Gregg Shorthand Transcription (2)
235 Word Processing Transcription (3)
240 Word/Information Processing I: Concepts & Applications (3)
335 Records Management and Micrographics (3)
350 Interpersonal Business Relations (3)
401 Accounting Teaching Methods (2)
402 Basic Business Teaching Methods (2)
403 Typewriting & Office Machines Teaching Methods (2)
433 Office Management II (3)
436 Word/Information Systems Management (4)

REQUIRED BUSINESS ADMINISTRATION COURSE (4 Q.H.)
203 Managerial Accounting (4)

MAJOR ELECTIVES (9 Q.H.)

OPTION D—ACCOUNTING & DATA PROCESSING SPECIALIZATION (TEACHING) 70 Q.H.

a. Core Program Requirements — 38 Q.H.
b. Major Option Requirements — 32 Q.H.

REQUIRED BUSINESS EDUCATION COURSES (11 Q.H.)
210 Business Machines (2)
360 Interpersonal Business Relations (3)
401 Accounting Teaching Methods (2)
435 Word/Information Systems Management (4)

REQUIRED BUSINESS ADMINISTRATION COURSES (16 Q.H.)
203 Managerial Accounting (4)
301 Intermediate Accounting I (4)
302 Intermediate Accounting II (4)
312 Business Computer Applications & Programming I (4)

MAJOR ELECTIVES (5 Q.H.)

OPTION E—BASIC BUSINESS AND/OR ECONOMICS SPECIALIZATION (TEACHING) 70 Q.H.

a. Core Program Requirements — 38 Q.H.
b. Major Option Requirements — 32 Q.H.

REQUIRED BUSINESS EDUCATION COURSES (12 Q.H.)
215 Personal Finance (4)
360 Interpersonal Business Relations (3)
402 Basic Business Teaching Methods (2)
433 Office Management II (3)

REQUIRED BUSINESS ADMINISTRATION & ECONOMIC COURSES (20 Q.H.)
110 Introduction to Business (4)
302 Intermediate Micro-Economic Analysis (4)
303 Intermediate Macro-Economic Analysis (4)
304 Money & Banking (4)
311 Business Law II (4)

B.S. MINOR
Note: The State of Minnesota does not offer teacher certification in business education minors.

TYPEWRITING AND ACCOUNTING (TEACHING) 35 Q.H.

REQUIRED BUSINESS EDUCATION COURSES (9 Q.H.)
202 Intermediate Typewriting (3)
203 Advanced Typewriting (3)
240 Word/Information Processing I: Concepts & Applications (3)

REQUIRED BUSINESS ADMINISTRATION COURSES (16 Q.H.)
110 Introduction to Business (4)
201, 202, 203, Accounting I, II, III (12)

ELECTIVES (3 Q.H.)

ADDITIONAL REQUIREMENTS (7 Q.H.)
398 AVT Internship (3)
401 Accounting teaching methods (2)
403 Typewriting & Office Machines teaching methods (2)

REQUIRED ECONOMICS COURSES (12 Q.H.)
201 Principles of Economics I (4)
202 Principles of Economics II (4)
304 Money & Banking (4)

B.S. MINOR
Note: The State of Minnesota does not offer teacher certification in business education minors.

BASIC BUSINESS 38 Q.H. (TEACHING)

REQUIRED BUSINESS EDUCATION COURSES (12 Q.H.)
202 Intermediate Typewriting (3)
334 Business Organization & Office Management I (4)
402 Basic Business teaching methods (2)
435 Word/Information Systems Management (3)

REQUIRED ECONOMICS COURSES (12 Q.H.)
Note: Economics 201 and 202 are required for admission to upper division courses in Business.
201 Principles of Economics I (4)
202 Principles of Economics II (4)
304 Money and Banking (4)

ELECTIVES (2 Q.H.)

REQUIRED BUSINESS ADMINISTRATION COURSES (12 Q.H.)
110 Introduction to Business (4)
315 Marketing (4)
375 Management of Human Resources (4)
MASTER OF SCIENCE REQUIREMENTS

The M.S. Degree with a field of concentration in Business Education and Office Administration requires that the candidates complete the following areas of concentration: Professional Education (9)

WITH THESIS: (45 Q.H.)
* Business Education and Office Administration (36)

WITHOUT THESIS: (51 Q.H.)
* Business Education and Office Administration (36)

Electives (6 Q.H.)

SPECIAL DEPARTMENTAL REQUIREMENTS

Certain courses in Business Education and Office Administration which must be pursued are listed in the Department Guidelines which are available in the Department Chairperson's Office.

Up to 12 quarter hours of Business Administration, Economics, and closely related courses may be taken as part of the 36 hours required for the degree. The 12 hours above must be approved in advance by the graduate advisor of the student.

* The graduate student should secure a copy of the revised Department of Business Education and Office Administration guidelines for more detailed information on the major. These guidelines can be secured from the Department Chairperson's Office.

VOCATIONAL-TECHNICAL INSTITUTE TRANSFER POLICY

Students who have completed a one- or two-year business program at a vocational school may apply for a transfer of 30-45 business credits. The student's transcript will be evaluated individually by a member of the Department of Business Education and Office Administration to verify the transferable credits in trust until the student has completed a minimum of 48 quarter hours of credit with a 2.00 GPA or above, and has been approved by the Department of Business Education and Office Administration. This transfer policy applies only to students majoring in business education.

COURSE LISTINGS

No courses in the department are open to declared majors and minors on a Pass/No Credit basis except 106, 398, and 399. Courses offered on a Pass/No Credit basis are designated in the course description. Any graduate course offered on a P/NC basis is designated in the course description.

105 Secretarial Accounting - 3 Q.H.
Primarily for secretarial students; the accounting functions of business normally performed by secretaries in different types of positions: medical, legal and executive. Offered yearly. P/NC Option.

106 Speedwriting - 2 Q.H.
An alphabetic shorthand system for personal use in note-taking and improvement of study skills using individualized instruction. Offered yearly. P/NC only.

201 Keyboarding/Beginning Typewriting - 3 Q.H.
 Elect either the keyboarding emphasis or the typing emphasis. Keyboarding - (ONLY for students with no previous typewriting instruction). Development of a touch-entry proficiency for a variety of electronic text/data entry devices: computer terminals, word processors, personal computers, CRT data display stations, and other keyboard activated equipment. Keyboard mastery and skill development. Typing - Beginning typing proficiency as a basic communication skill for hard copy production; keyboard mastery and skill building applied to letter forms, manuscripts, and tabulations. Offered quarterly. P/NC Option.

202 Intermediate Typewriting - 3 Q.H.
Continuation of 201, further skill development; problem solving and production. Instruction is individualized. Prerequisite: Beginning Typewriting or test of proficiency. Offered twice yearly. P/NC Option.

203 Advanced Typewriting - 3 Q.H.
Advanced production problems, further speed control and technique development. Instruction is individualized. Prerequisite: Intermediate Typewriting or test of proficiency. Offered yearly. P/NC Option.

205 Health/Recreation Office Management - 3 Q.H.
To provide students with sufficient background in accounting, office management, records management and financial budgeting for their future role as health and recreation managers. Offered yearly.

206 Administrative Office Procedures 3-4 Q.H.
The study of secretarial and administrative procedures and methods for carrying out the administrative support function. Application and integration of basic skills through simulations in such areas as communication services, processing information, telephonics, receptionist duties, and conference arrangements. Prerequisite: Typewriting proficiency. Offered yearly. P/NC Option.

210 Business Machines - 2 Q.H.
Development of proficiency on the electronic display calculator, electronic printing calculator, and programmable calculators by individualized instruction. Offered twice yearly. P/NC Option.

215 Personal Finance - 4 Q.H.
For all students. Consumer units include personal budgets, savings plans, insurance, real estate, interest, pensions, and estate planning. Offered yearly. P/NC Option.

221 Beginning Gregg Shorthand - 4 Q.H.
Study of principles, basic vocabularies, brief forms, and phrasing; elementary dictation; pretranscription training; development of speed and sustained writing ability. Offered yearly. P/NC Option.

222, Intermediate Gregg Shorthand - 4 Q.H.
Further development of techniques, speed building; and transcription ability on a time production output basis. Prerequisite: 221 or equivalent. Offered yearly. P/NC Option.

233 Intermediate Gregg Shorthand II - 4 Q.H.
Further development of techniques, speed building and transcription ability on a time production output basis. Prerequisite: 222 or equivalent and typewriting proficiency. Offered yearly. P/NC Option.

224 Advanced Gregg Shorthand - 4 Q.H.
Development of speed and sustained writing ability on business letters, reports, and literary material. Prerequisite: One year of shorthand and typewriting or test of proficiency. Offered yearly. P/NC Option.

224 Shorthand Transcription - 2 Q.H.
Transcription of business letters and manuscripts; transcription problems, office procedures. Course is taken in conjunction with Gregg Shorthand 224. Offered yearly. P/NC Option.

235 Word Processing Transcription - 3 Q.H.
To develop machine transcription proficiency required for word/information processing. Emphasizes production standards for office-style recorded dictation, rough draft copy, and longhand text origination. Includes skill-building techniques, language document processing procedures, and proofreading skills. Prerequisite: 202 or equivalent. Offered yearly. P/NC Option.

240 Word/Information Processing I: Concepts and Applications - 3 Q.H.
Foundations of word/information processing for text/data communications in any area: business, law, journalism, medical, technical, government, etc. Introduces basic terminology and concepts of word processing input, storage, and retrieval. Includes WP functions, procedures, and output equipment. Basic proficiency developed on electronic display word processor. Prerequisite: 201 or equivalent. Offered yearly. P/NC Option.

299 Word Processing Internship - 4 Q.H.
Supervised work experience in a word processing center. Provides opportunities for the application of course work to a specific organizational context and an actual word processing system. Contact department chairperson for requirements and materials. Offered quarterly. P/NC Option.

300 Secretarial Work Experience - 2-8 Q.H.
For the student who desires actual work experience. Each student performs stenographic and clerical duties. Offered on request. P/NC Option.

320 Business Data Processing - 4 Q.H.
The fundamental concepts of electronic data processing. Provides a vocabulary and understanding of the computer in business. Offered yearly. P/NC Option.

332 Business Report Writing - 3 Q.H.
Principles and practices for effective written reports in organizational communication. Emphasis on a functional writing style applied to routine, periodic, and analytical reports. Deals with planning, organizing, editing, displaying, and interpreting quantitative data as well as non-quantitative infor-
Analytical tool. Offered yearly. P/NC Option.

333 Business Correspondence - 3 Q.H.
The application of a functional writing style to producing effective business letters and memos. Includes claim, adjustment, credit, refusal, correspondence. Special emphasis on writing a successful application letter and resume. Offered yearly. P/NC Option.

334 Business Organization & Office Management I - 4 Q.H.
Organizing and planning administration office services; space management; furniture and equipment, communication services; information processing; supervision and staffing. Offered yearly. P/NC Option.

335 Records Management and Micrographics - 3 Q.H.
Knowledge and application of filing principles to different storage methods. Emphasis on the management of traditional and automated records systems including control policies and procedures, micrographic storage and retrieval systems, computer output microfilm, and legal information requirements. Offered yearly. P/NC Option.

336 Administrative Services Seminar - 1 Q.H.
A series of seminars to include such topics as time management, office layout, interpersonal office relations, legal aspects, active listening, and applied problem solving. Offered quarterly. P/NC Option.

340 Word/Information Processing II: Advanced Text-Editing - 3 Q.H.
Development of advanced concepts and procedures for electronic keyboarding, text-editing, and information processing. Includes decision-making for data communications, integrative tasks, special WP functions and procedures, introduction to systems and production control and WP workflow principles. Use of electronic dispensary processor for advanced production applications. Prerequisite: 202 or equivalent and 240 or equivalent. Offered yearly. P/NC Option.

345 Women & Men in Business: - 3 Q.H.
Study of the stereotypical values, attitudes, and beliefs affecting management decisions and how organizations use human resources. Focuses on an examination of research findings on the employment characteristics of men and women, role options, new work patterns, male-female employment trends, sex-based conflicts, androgynous leadership styles, and discriminatory employment practices. Strategies for equality of opportunity. Offered alternate years. P/NC Option.

360 Interpersonal Business Relations - 3 Q.H.
Recognizing, confronting and coping with interpersonal problems specific to the business/office environment. Focus is on analysis and strategies for managing productive relationships at work. Includes behavioral dimensions of leadership styles, power and authority, feedback skills, effective decision making, conflict resolution, nondefensive communications, and relating to minority groups. TA utilized as conceptual framework and analytical tool. Offered yearly. P/NC Option.

398 AVT Internship - 3 Q.H.
Methods, materials, and organization of individualized instruction; provides teaching experiences in a Center equipped with audio-visual-tutorial instruction. May be repeated for 6 Q.H. of credit. Offered quarterly. P/NC Option.

401 Accounting Teaching Methods - 2 Q.H.
A study of teaching strategies for accounting. Teaching practices are related to theories of learning and include specific techniques of classroom management, motivation, planning, evaluation, grading, and utilization of published and teacher-made tests. Offered alternate years.

402 Basic Business Teaching Methods - 2 Q.H.
A course for business teacher preparation in the methods and materials of basic business education. Focuses on the refinement of teaching abilities and competencies required in the teaching of business law, consumer education, general business, and economics. Offered alternate years.

403 Typewriting & Office Machines Teaching Methods - 2 Q.H.
A study of teaching strategies for typewriting and office machine training. Teaching practices will be related to theories of learning and the psychology of skill building. Techniques of planning, classroom management, motivation, evaluation, grading, and utilization of published and teacher-made tests will be studied. Offered alternate years.

404 Shorthand & Office Practice Teaching Methods - 2 Q.H.
Introduction will focus on basic methods, materials skills, and knowledge necessary for prospective teachers of these subjects. Emphasis will be placed on planning, testing, grading, and teaching procedures. Offered alternate years.

433 Office Management II - 3 Q.H.
Principles of office management for providing administrative support services in organizations. Office administration policies and procedures applied to such areas as leadership dynamics, employee motivation, team building, office personnel problems, performance appraisal, delegation, and administrative systems analysis. Emphasis on the effective dimensions of administrative support services. Offered every two years. P/NC Option.

435G Word/Information Systems Management - 4 Q.H.
A study of effective management for the information function in organizations. Focuses on the feasibility, design, justification, implementation, and evaluation of word/ information systems. Includes the integration of word, data, voice, and image processing; telecommunications, reprographics; electronic mail; executive workstations; and personnel considerations. Offered yearly. P/NC Option.

442G Word Processing: Materials & Methods - 3 Q.H.
Research and methods for developing composition, verbal communications, dictation skills, grammatical knowledge, and transcription skills; curriculum and methods of teaching word processing; competency-based materials and articulation. P/NC Option.

470G Seminar in Business Education - 1-3 Q.H.
Specific subject matter is arranged by the department. May be repeated when offered with different subject matter content and title. Enrollment to be approved by the department staff. Offered yearly. P/NC Option.

480 Independent Studies in Business - 1-6 Q.H.
Reading and/or research in relevant areas of student's special interest. Prerequisite: Consent of instructor. May be repeated to a total of 6 Q.H. Offered quarterly.

Courses for Graduate Students Only

510 Trends in Office Education - 3 Q.H.
Current philosophy, content, and innovations in office machines and office practice, analysis of classroom problems, methods, and materials.

511 Trends in Accounting and Data Processing - 3 Q.H.
Seminar analysis and evaluation of current trends in philosophy, content, methods, and materials, application to classroom problems.

512 Trends in Basic Business - 2-3 Q.H.
Critical study and evaluation of current philosophy, content, and curricular practices, applications to classroom problems and materials.

513 Tests and Measurements in Business Education - 3 Q.H.
Specialized testing techniques used in vocational and business education subjects. Problem solving procedures, terminology and statistical techniques.

515 Administration and Supervision of Business Education - 3 Q.H.
Problems of supervisor, department head, or teacher with administrative responsibility; local, state and federal programs; financial support; public relations and publicity; etc.

517 Curriculum Construction in Business Education - 3 Q.H.
Evaluation and development of instructional materials; study of appropriate curricula for business education in secondary schools, technical institutes and the junior college.

518 Current Problems in Research in Business Education Seminar - 3 Q.H.
Survey of fields, trends, and publications; scope and limitations of research; techniques; types of research.

550 Trends in Shorthand and Typewriting - 3 Q.H.
For experienced teachers of shorthand and typewriting; recent research and literature in the field; materials and methods of instruction.

551 Improved Teaching Techniques in Business Education - 3 Q.H.
For experienced teachers of shorthand and typewriting; recent research and literature in the field; materials and methods of instruction.

552 Trends in Data Processing - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

553 Trends in Business Education - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

554 Trends in Office Management - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

555 Trends in Business Organization - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

556 Trends in Records Management and Micrographics - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

557 Trends in Educational Technology - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

558 Trends in Educational Technology and Audio-Visual Instruction - 2-3 Q.H.
For experienced teachers of bookkeeping and basic business subjects. A study of recent research and literature in the field; materials and methods of instruction.

559 Research or Thesis in Business Education - 3-6 Q.H.
Individual research problems in Business Education. One to four hours.
Chemistry

Pasteur Hall Room 312 / 457-5290
Foss (Chairperson), Dressel, Dunbar, Fick, Rislove, Witt.

The B.S. Physical Science Major is offered for students wishing to teach chemistry (or chemistry and physics or physical science). The major meets Minnesota requirements but students preparing for certification in other states should consult with Dr. Foss or Dr. Fick to learn any necessary modifications.

The department also offers two bachelor of science majors to prepare students to enter business, industry, professional schools and graduate schools in chemistry. 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 being carried on by members of the department in crystallography by x-ray diffraction techniques, biochemistry of seed germination, synthesis and study of pyrroles, porphyrins and metalloporphyrins and analytical work for local industries.

The department also encourages students majoring in other fields to increase their understanding of science and to meet part of the General Education requirements by electing Chemistry 100, 108, 208 or 212.

B.S. MAJOR

PHYSICAL SCIENCE (TEACHING) 85–92 Q.H.

(No Minor Required)

REQUIRED CHEMISTRY COURSES

212, 213, 214 General Inorganic Chemistry (15)
350 Organic Chemistry (5) OR
340 Organic Chemistry Survey (4) PLUS
360 Chemical Literature (1)

REQUIRED PHYSICS COURSES (20 Q.H.)

201, 202, 203 General Physics (12) OR
221, 222, 223 College Physics (15)
ELECTIVES IN PHYSICS (5-8)

ELECTIVES IN CHEMISTRY OR PHYSICS

(12 Q.H.)
Chemistry 215 or 400, 450, 351, 360, 361, 412, 425, 465
Physics 326, 328, 330, 332, 340, 341, 345, 350, 360, 370

REQUIRED MATHEMATICS COURSES

(5-13 Q.H.)
Note: College Algebra and Trigonometry 220 may be substituted for 215, 216, or these courses may be omitted if the student has otherwise met the prerequisite for 225. 215 College Algebra (4) 216 Trigonometry (4) 225 Calculus I (5)

REQUIRED PHYSICAL SCIENCE COURSE

(4 Q.H.)
311 Teaching Science in the Secondary School (4)

ADDITIONAL REQUIREMENTS (MAY BE COUNTED IN GENERAL EDUCATION) (23 Q.H.)

Biology
207, 208 Botany (9) OR
210, 211 Zoology (9)
Geology
116 Physical Geology (5)
117 Historical Geology (5)
Philosophy of Science or Philosophy of
Technics, Economics & Culture (4)

WISCONSIN CERTIFICATION

REQUIREMENTS FOR CHEMISTRY CONCENTRATION (33 Q.H.)
(Select credits under "Required Courses" and "Electives" to give a concentration of 33 Q.H. of Chemistry).

Other Requirements for Wisconsin Certification
Biologl 104 or 204 (4)
Geology (4 or more Q.H.)
Biological Science (4 more Q.H.)

B.S. MAJOR

CHEMISTRY OPTION A

94–102 Q.H.

(No minor required)

REQUIRED COURSES (62 Q.H.)

Note: Students should begin the math and chemistry sequences at the same time.

212, 213, 214 General Inorganic Chemistry (15)
350, 351, 352 Organic Chemistry (10)
360, 361, 362 Chemical Literature (3)
412, 413, 414, 415, 416 Physical Chemistry I, II, III, and Lab (13)
425, 426 Analytical Chemistry (10)
450 Advanced Inorganic Chemistry (5)
475 Seminar in Chemistry (1)

ELECTIVES (2 Q.H.)
Electives in Chemistry to total 2 credits.

ADDITIONAL REQUIREMENTS (30–38 Q.H.)

Same as B.S. major (Option A) plus: 430 Individual Problems in Chemistry (3)

ELECTIVES (7 Q.H.)
Electives in Chemistry to total 7 credits.

ELECTIVES (2 Q.H.)
Electives in Chemistry to total 2 credits.

ADDITIONAL REQUIREMENTS (5–13 Q.H.)

Note: College Algebra and Trigonometry 220 may be substituted for 215, 216, or these courses may be omitted if the student has otherwise met the prerequisite for 225. 215 College Algebra (4) 216 Trigonometry (4) 225 Calculus (5)

B.S. MINOR

OPTION A

40–48 Q.H.

REQUIRED COURSES (33 Q.H.)

212, 213, 214 General Inorganic Chemistry (15)
350, 351 Organic Chemistry (10)
412 Physical Chemistry (3)
425 Analytical Chemistry (5)

ELECTIVES (2 Q.H.)
Electives in Chemistry to total 2 credits.

ADDITIONAL REQUIREMENTS (3-13 Q.H.)

Note: College Algebra and Trigonometry 220 may be substituted for 215, 216, or these courses may be omitted if the student has otherwise met the prerequisite for 225. 215 College Algebra (4) 216 Trigonometry (4) 225 Calculus (5)

B.S. MINOR

OPTION B

34-35 Q.H.

REQUIRED COURSES (34-35 Q.H.)

Note: 340 Organic Chemistry Survey (4) may be substituted for 350. 212, 213, 214 General Inorganic Chemistry (15) 350, 351 Organic Chemistry (9-10) 400, 401 Biochemistry (10)

ADDITIONAL REQUIREMENTS
None, however, it is recommended that the student elect at least one mathematics course.

COURSE LISTINGS

Undergraduate students may elect any
chemistry course on a pass/no credit basis except that students majoring or minor ing in chemistry may not count P/NC courses toward the chemistry major or minor.

100 Chemistry Appreciation — 4 O.H.
Selected chemistry concepts presented as lecture-demonstrations for students who wish to gain an appreciation of the chemical world. Meets General Education requirements; not intended as preparation for other chemistry courses. Does not preclude taking any other chemistry courses for credit. No laboratory. No prerequisite. Not open to students with credit in higher numbered chemistry courses. Offered quarterly.

108 Atoms, Molecules and Chemical Change — Introductory General Chemistry — 4 O.H.
Intended to introduce the students to chemistry. One two-hour laboratory period per week. For both general education and as a first course in chemistry for students who have not had high school chemistry and wish to prepare for entrance into other sequences of chemistry courses. Students completing this course may later elect Chemistry 212 for credit, or with permission of the department they may go directly into Chemistry 213. No prerequisite: Offered quarterly.

204 Unified Science I — 4 O.H.
(See Physical Science listings following chemistry listing for course description).

208, 209 General, Organic and Biochemistry I and II — Each 5 O.H.
An introductory sequence in the principles of chemistry emphasizing the molecular basis of life; descriptive, theoretical and laboratory topics. 208 covers basic principles of inorganic and physical chemistry. 209 deals with organic and biochemistry. Four lecture and two laboratory hours per week. Recommended for pre-nursing, pre-agriculture, pre-forestry and pre-veterinary science students. Chemistry 209 cannot substitute for Chemistry 213. This sequence should not be elected by students expecting to take Chemistry 340, 350, or 400. Offered yearly.

212, 213 General Inorganic Chemistry I and II — Each 5 O.H.
A study in descriptive principles of chemistry including atomic structure, chemical bond, solutions, kinetics, equilibrium and electrochemistry. Laboratory work includes basic qualitative and quantitative analysis. Chemistry 213 includes a short unit on organic chemistry. Prerequisite: high school intermediate algebra or concurrent registration in Mathematics 113 or in a higher-numbered mathematics course. Offered yearly.

214 General Inorganic Chemistry III — 5 O.H.
Continuation of 212 and 213. Emphasizes equilibrium, acid-base, oxidation-reduction, complex ion, and solubility. Taught in a frame-work of semi-micro qualitative analysis. Prerequisite: 213. Offered yearly.

215 Elementary Biochemistry — 3 or 5 O.H.
An introduction to the fundamentals of both organic and biochemistry. The course emphasizes the structure, composition and function of carbohydrates, lipids, proteins and nucleic acids. The material is designed to be taken by students in nursing and other premedical programs. This course should not be elected by those who have taken or will take Chem. 209, 340, 350 or 400. Prerequisite: Chem 213. Offered yearly. 5 O.H. with lab, 3 O.H. without lab.

311 Teaching of the Sciences in the Secondary Schools — 4 O.H.
(See Physical Science listings following chemistry listing for course description).

320 Environmental Chemical Analysis — 5 O.H.
Introduction to the principles and practice of environmental chemical analysis. Intended for those whose field requires greater knowledge and experience in chemical analysis than is provided in general chemistry. Prerequisite: One year of chemistry. Offered every three years.

340 Organic Chemistry Survey — 4 O.H.
A brief survey of the chemistry of organic compounds with emphasis on occurrence, synthesis, structure, properties, principles and mechanisms of reactions, instrumental methods, compound identification, and important biological and economic applications. Prerequisites: Chemistry 212 and 213. Not open to students who expect to take Chemistry 350. Offered yearly.

350, 351, 352 Organic Chemistry — Each 5 O.H.
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 350, Chemistry 212 and 213; for 351, Chemistry 340 or 350; for 352, Chemistry 351. Offered yearly.

354 Characterization of Organic Compounds — 2 O.H.
Laboratory methods of identification of organic compounds, including the separation of mixtures. Instrumental methods and functional group reactions will be employed. Prerequisite: Chemistry 351. Offered every four years.

360, 361, 362 Chemical Literature — Each 1 O.H.
Finding chemical information in the library. The use of chemical reference works, monographs, reviews, abstracts, abstract indexes and periodical literature. Prerequisite: for 360, credit or concurrent registration in Chemistry 340 or 350; for 361, Chemistry 340 or 350; for 362, Chemistry 340 or 350. Offered every two years.

399 Chemistry Internship — 1-8 O.H.
Supervised industrial, business, or government experience under the Weidman College 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 but up to 4 O.H. may be taken for letter grade. Prerequisite: Chemistry 425. Offered quarterly.

400G, 401G Biochemistry — Each 5 O.H.
Introduction to the chemistry of living organisms; emphasis on the structure and function of proteins, carbohydrates, lipids, and nucleic acids; the chemistry of metabolic processes in the living cell. Three lecture and four laboratory hours per week. Prerequisite: Chemistry 340 or 350. Offered yearly.

402G, 403G Foods and Nutrition — 4 O.H.
A study of the use of common foods, their preparation and preservation as a means of illustrating basic concepts in chemistry, physics, and biochemistry. This introductory discussion of food science is also open to non-teachers. Prerequisite: one year of natural science. Offered irregularly. P/NC Option for undergraduates.

408G, 409G Chemistry for Teachers in the Elementary School — Each 1-4 O.H.
An introductory sequence in chemistry for elementary teachers. Methods and concepts applicable to all sciences taught in a framework of chemical phenomena, facts, laws, principles, and theories. Not open to majors and minors in any of the sciences. No prerequisite. Offered summer, irregularly.

410G Polymer Chemistry — 3 O.H.
Chemistry of synthetic polymerization processes, and of monomers employed for addition an condensation polymers. Principal industrial applications of thermoplastic and thermosetting resins. Structure-property relationships of natural and synthetic polymers. Prerequisite: Chemistry 351. Offered every three years.

412G Physical Chemistry I — 3 O.H.
Thermodynamics, one component systems, chemical potential and activity, two component systems, chemical equilibria. Prerequisites: One year each of college chemistry and physics, and credit or concurrent enrollment in 225 Calculus. Offered every two years.

413G Physical Chemistry II — 3 O.H.
Thermodynamics of electrochemical cells, irreversible processes in solution, kinetic theory and chemical kinetics, spectroscopy. Prerequisite: Chemistry 412. Offered every two years.

414G Physical Chemistry Laboratory — 2 O.H.
Experiments accompanying Physical Chemistry 413. Laboratory work may be taken concurrently with 413 or following successful completion of the course. Offered every two years.

415G Physical Chemistry III — 3 O.H.
Quantum chemistry, molecular structure, statistical mechanics, symmetry, crystallography. Prerequisite: Chemistry 413. Offered every two years.

416G Physical Chemistry Laboratory — 2 O.H.
Experiments accompanying Physical Chemistry 415. Laboratory work may be taken concurrently with 415 or following successful completion of the course. Offered every two years.

420G Topics in Industrial Chemistry — 3 O.H.
Applications of chemistry in industry. The chemistry and technology of selected industrial processes with emphasis on industrial organic chemistry. Prerequisite: Chemistry 340 or 350. Offered every four years.

425G, 426G Analytical Chemistry — Each 5 O.H.
A sequence of courses stressing modern analytical chemistry. A study of the theory and practice of the quantitative examination
Communication and Theatre Arts

Performing Arts Center Room 215/457/5230
Reidelberger (Chair), Bratt, Carver, Fusillo, Siemers, Wilkinson

The Department of Communication and Theatre Arts strives to provide both academic and co-curricular experiences conducive to intellectual, artistic, personal, and professional growth. The department's endeavors are directed toward the student's individual and pre-vocational enhancement. Clarity of expression and confidence in one's ability to communicate—toward or to a thousand—is a touchstone of success in communication and public transactions and is the single element universally common to the successful pursuit of one's objectives and goals.

Communication is conversation, confrontation, debate, discussion, persuasion, and public address. It is interpretation—of prose, poetry, dramatic literature. It is Theatre—acting, directing and producing. The study of communication embraces both preparation and performance through participation in forensics and theatre activities.

Communication is the study of the use of language and the analysis, selection and perfection of formats for the presentation of information; precipitation of action and activity; creation of impressions and attitudes; for enlightenment and entertainment. It is preparation of persons to become teachers, directors, negotiators, personnel managers, information officers, consultants, facilitators, advisors, actors and technicians. A further aim of the department is to enable the student to enrich his or her understanding of and participation in the surrounding personal, social, political, and cultural world.

To these ends the department offers both traditional and unique curricular arrangements and experiences.

Students majoring in Communication and Theatre Arts are required to have a quarterly conference with their department advisor prior to registration.

B. A. MAJOR

COMMUNICATIONS CONCENTRATION

48 Q. H.

Minor required

Students majoring in Communications will select one of five emphases: Organizational Communication; Public Affairs/Public Information Communication; Personnel Communication; Communication Theory or Speech Communication. Prerequisites common to the first four of the emphases are listed first, followed by each option with the requirements and electives peculiar to that option.

Prerequisite: CTA 191—Introduction to Speech Communication

Recommended General Education courses: Math 208 Fundamentals of Statis-
COMMUNICATION AND THEATRE ARTS / 53

COMMUNICATION THEORY
OPTION
24 Q.H.

COMMUNICATION THEORY

CTA 288 Intrapersonal Communication (4)

CTA 375 Argumentation and Debate (4)

CTA 484 Studies in Ancient Rhetoric (4)

CTA 499 Independent Studies (1-4)

Electives — 10-12 quarter hours from a departmentally approved list of inter-disciplinary courses designated for this B.A. Communications option.

SPEECH COMMUNICATION
OPTION (Formerly Public Address)
48 Q.H.

Minor required

REQUIRED COURSES (40 Q.H.)
261 Public Speaking (4)
281 Crosscultural Communication (4)
284 Communication Theory (4)
287 Interpersonal Speech Communication (4)
288 Intrapersonal Speech Communication (4)
289 Persuasion (4)
371 Discussion and Small Group Dynamics (4)
375 Argumentation and Debate (4)
386 Organizational Communication (4)
461 History and Criticism of American Public Address (4)

ELECTIVES: (8 Q.H.)
051 Forensics Activities (1-2)
141 Oral Interpretation I (4)
381 Advanced Crosscultural Communication (4)
499 Independent Studies (1-8)

B.A. MAJOR
SPEECH—THEATRE ARTS
CONCENTRATION
48 Q.H.

Minor required

REQUIRED COURSES (24 Q.H.)
141 Oral Interpretation I (4)
201 Play Production (4)
211 Survey of Dramatic Literature I (4)
212 Survey of Dramatic Literature II (4)
261 Public Speaking (4)
284 Communication Theory (4)
287 Interpersonal Speech Communication (4)

ELECTIVES (24 Q.H.)
24 credits from all other CTA courses.

B.A. MAJOR
THEATRE ARTS CONCENTRATION
56 Q.H.

Minor required

REQUIRED COURSES (48 Q.H.)
006 Theatre Practicum (4)
119 Play Analysis (2)
141 Oral Interpretation I (4)
202 Stagecraft I (2) AND
203 Stagecraft II (2) OR
204 Stagecraft III (2)
206 Make-up I (2)
209 Theatre Management (2)
211 Survey of Dramatic Literature I (4)
212 Survey of Dramatic Literature II (4)
231 Acting I (4)
235 Stage and Body Movement (4)
307 Scene Design (4)
308 Stage Lighting (4)
321 Directing I (4)
405 Design Project (4) OR
425 Directing II (4) OR
433 Acting Recital (4)

ELECTIVES (8 Q.H.)
202 Stagecraft I (2) OR
203 Stagecraft II (2) OR
204 Stagecraft III (2)
213 Greek and Roman Drama (4)
239 Creative Dramatics (4)
241 Oral Interpretation II (4)
261 Public Speaking (4)
306 Make-up II (2)
325 Theories of Acting and Directing (4)
331 Acting II (4)
414 Shakespeare: Comedies and Histories (4)
415 Shakespeare: Tragedies (4)
418 Modern Drama (4)

B.S. MAJOR (TEACHING)
SPEECH—THEATRE ARTS
60 Q.H.

Minor required

PREREQUISITES (14 Q.H.)
CTA 191 with a grade of C or better is a prerequisite for courses in this program; completion of English 110 and 115 is recommended before enrollment in CTA courses above the 100-level and required before enrollment in CTA courses above the 200-level; Education 150 or 202 is a prerequisite for CTA 491 and 492.

REQUIRED COURSES (48 Q.H.)
006 Theatre Practicum (2)
051 Forensics Activities (2)
141 Oral Interpretation I (4)
201 Play Production (4)
211 Survey of Dramatic Literature I (4)
212 Survey of Dramatic Literature II (4)
261 Public Speaking (4)
284 Communication Theory (4)
321 Directing I (4)
371 Discussion and Small Group Dynamics (4)
375 Argumentation and Debate (4)
491 Teachers' Problems in Speech (2)
492 Coaching Forensics and Theatre (2)
MCOM 100 Introduction to Mass Media (4)

ELECTIVES (12 Q.H.)
Any CTA course, provided prerequisites have been met; Humanities 304, Approaches to Film (4); MCOM 101, Fundamentals of Broadcasting (4); MCOM 313, Mass Communication Theory and the Media (4); Psych 210, General Psychology (4); Psych 231, Statistics (4).
Licensure requires competencies in two of the three areas, speech, oral interpretation or debate.

B. A. MINOR

SPEECH—THEATRE ARTS CONCENTRATION

36 Q.H.

REQUIRED COURSES (24 Q.H.)
Same as B.A. Speech/Theatre Major

ELECTIVES (12 Q.H.)
12 credits from all other CTA courses.

B.A. MINOR

THEATRE ARTS CONCENTRATION

30 Q.H.

REQUIRED COURSES (26 Q.H.)
006 Theatre Practicum (2)
119 Play Analysis (2)
141 Oral Interpretation I (4)
201 Play Production (4)
202 Stagecraft I (2) AND
203 Stagecraft II (2) OR
204 Stagecraft III (2)
211 Survey of Dramatic Literature I (4) OR
212 Survey of Dramatic Literature II (4)
231 Acting I (4)
321 Directing I (4)

ELECTIVES
4 credits from courses available to B.A. Theatre Major

B.A. MINOR

COMMUNICATIONS CONCENTRATION

30 – 32 Q.H.

Prerequisite: CTA 191 – Introduction to Speech Communication

Recommended Pre-entry or Co-entry courses: Math 208, Fundamentals of Statistics, Phil 102, Practical Logic, Psych 210, General Psychology, and Soc 150, Human Society.

REQUIRED COURSES (20 Q.H.)
261 Public Speaking (4)
284 Communication Theory (4)
287 Interpersonal Speech Communication (4)
289 Persuasive Communication (4) OR
371 Discussion and Small Group Dynamics (4)
386 Organizational Communication and the Interview (4)

Internship Requirement: 4 Q.H. (To be taken during junior or senior year)

ELECTIVES (6 – 9 Q.H.)
Electives to be chosen by advisement from the interdisciplinary list of electives approved by the department for the B.A. Communications Minor.

B.A. MINOR

CROSSCULTURAL COMMUNICATION CONCENTRATION

28 Q.H.

261 Public Speaking (4)
281 Crosscultural Communication (4)
284 Communication Theory (4) OR
484 Studies in Ancient Rhetoric (4)
287 Interpersonal Communication (4) OR
371 Discussion and Small Group Dynamics (4)
289 Persuasion (4)
381 Advanced Crosscultural and International Communication (4)
386 Organizational Communication (4)

B.A. MINOR

SPEECH COMMUNICATION CONCENTRATION

32 Q.H.

REQUIRED COURSES (12 Q.H.)
261 Public Speaking (4)
284 Communication Theory (4)
287 Interpersonal Speech Communication (4)

ELECTIVES (20 Q.H.)
20 credits from the courses available to the B.A. Major in Speech Communication.

B.S. MINOR (TEACHING)

SPEECH—THEATRE ARTS CONCENTRATION

34 Q. H.

001 Theatre Activities (1)
051 Forensics Activities (1)
141 Oral Interpretation I (4)
201 Play Production (4)
211 Survey of Dramatic Literature I (4) OR
212 Survey of Dramatic Literature II (4)
371 Discussion and Small Group Dynamics (4)
261 Public Speaking (4)
284 Communication Theory (4)
321 Directing I (4)
375 Argumentation and Debate (4)
491 Teachers’ Problems in Speech (2)
492 Coaching Forensics/Theatre (2)

 COURSE LISTINGS

All courses may be taken on a pass/no credit basis except 191 and 499. CTA courses taken for a major or minor must be on a grade basis.

CTA 191 (Introduction to Speech Communication) or consent of instructor is a prerequisite for CTA 051, 141, 261, 287, 288, 371, 375, 386.

001 Theatre Activities – 1-2 Q.H.
Active participation in a major theatre production, as actor or as a technician. Credit to be arranged. Course may be repeated to 8 Q.H. Offered quarterly.

006 Theatre Practicum – 1 Q.H.
Production participation by theatre or speech/theatre majors and minors in non-performance aspects of theatre. Offered quarterly.

051 Forensics Activities – 1-2 Q.H.
Concentrated laboratory course in a specific area of speech, closely coordinated with the W.S.U. Forensics program. May be repeated for total of 8 Q.H. Offered quarterly.

111 Introduction to the Theatre – 4 Q.H.
General course designed for the general student who wishes to become familiar with theatre. Not open to CTA majors or minors. Offered quarterly.

119 Playscript Analysis – 2 Q.H.
Practice in applying the analytical methods of selected schools of criticism to various kinds of playscripts. Offered every two years.

141 Oral Interpretation I – 4 Q.H.
Study of the preparation of stories, study of literature, prose, poetry and drama through performance. Brings to life the printed symbol. Offered quarterly.

191 Introduction to Speech Communication – 4 Q.H.
Designed to introduce the student to the areas of interpersonal communication, small group discussion and public speaking as well as to lay the foundation for advanced speech work. Offered quarterly.

201 Play Production – 4 Q.H.
Study of the procedure and planning involved in the presentation of a stage play from audience analysis through play selection, casting, design, direction, business management, through performance and post-performance analysis and critique. Offered every two years.

202, 203, 204 Stagecraft I, II, III – Each 2 Q.H.
Fundamentals of scene construction and painting, theory, and practice. Offered yearly.

206 Stage Make-Up – 2 Q.H.
Theory and practice of stage make-up in the educational theatre. Offered every two years.

209 Theatre Organization and Management – 2 Q.H.
Study of the non-performance aspects of play production, beginning with audience assessment and including problems and procedures up to and including post-production critique. Offered every two years.

211 Survey of Dramatic Literature I – 4 Q.H.
Survey of the works of major Western playwrights through 1650. Offered every two years.

212 Survey of Dramatic Literature II – 4 Q.H.
Survey of the works of major Western playwrights from 1650 to 1950. Emphasizes the pertinence of classical scripts to contemporary society. Offered every two years.

213 Greek and Roman Drama – 4 Q.H.
Readings, lectures and discussions about Greek and Roman drama, 460 B.C. – 30 A.D. Emphasizes uses of materials, themes, historical development and tragedy and
comedy, and influences upon later playwrights. Offered yearly.

231 Acting – 4 Q.H.
Theory and practice of acting. Exercises in pantomime and scenes from classical and modern drama. Prerequisite: 141. Offered yearly.

233 Stage Movement – 4 Q.H.
Styles and forms of period movement and their media of expression in relation to needs of the theatre. Offered every two years.

239 Creative Dramatics for Children – 4 Q.H.
Study and application of techniques to enable teachers to vitalize literature through dramatic activity. Opportunity to practice techniques with children. Offered yearly.

241 Oral Interpretation II – 4 Q.H.
Utilizes oral interpretation, script preparation, staging and special effects to create a theatrical presentation called Theatre of the Mind. Prerequisite: 141. Offered yearly.

261 Public Speaking – 4 Q.H.
Selection and organization of materials and delivery of common types of speeches. Offered quarterly.

281 Crosscultural Communication – 4 Q.H.
Investigates the highly complex and dynamic activities of Crosscultural Communication and with cultural differences influencing communication. Principles of Communication Theory and Practice applied to Crosscultural Communication situations including sub-cultures within the U.S. as well as other cultures of the world. Prerequisite: 191. Offered yearly.

284 Communication Theory – 4 Q.H.
Study of human communications through verbal and nonverbal signals, codes, and networks encompassing an exploration and examination of information theory, syntax, pragmatics and semantics as they relate as they relate to communication. Offered yearly.

287 Interpersonal Speech Communication – 4 Q.H.
Designed to promote more effective use of communication activities for all majors. Individual projects stress interpersonal speech used in the diverse vocational fields of those taking the course. Offered yearly.

288 Intrapersonal Speech Communication – 4 Q.H.
Exploration and examination of mental communication, listening, future language evolution, memory, language of the mind, experiments in thought transmission and other internal language processes of the conscious and subconscious mind. Offered every two years.

289 Persuasive Communication – 4 Q.H.
Introduces students to the theory and practice of persuasion and social influence. Source, message, receiver, and environmental factors will be studied and their effects upon the persuasive process analyzed. Preparation of persuasive messages and campaigns also required. Offered yearly.

306 Stage Make-Up II – 2 Q.H.
Individualized projects in the application and expansion of basic techniques of make-up for the stage. Prerequisite: CTA 206. Offered every two years.

307 Sonic Design – 4 Q.H.
Principles and practice of designing scenery for the theatre. Prerequisites 202 and 203 or 204, or consent of instructor. Offered every two years.

308 Stage Lighting – 4 Q.H.
Study of the function, use, and control of stage-lighting instruments and accessories in various types of control systems. Theories of stage lighting including color in light. Prerequisite: 202. Offered every two years.

321 Directing I – 4 Q.H.
Study of problems in play selection, casting and rehearsals. Prerequisite: 141 or 231. Offered yearly.

325 Theories of Acting and Directing – 4 Q.H.
Survey of influential modern theorists, including Stanislavsk, Craig, Artaud, Grotowski, and Schechner. Offered on demand.

331 Acting II – 4 Q.H.
Advanced study in the theory and practice of acting. Exercises in pantomime and scenes from classical to modern drama. Prerequisite: 231. Offered yearly.

371 Discussion and Small Group Dynamics – 4 Q.H.
Use of discussion, participation and leadership to study interaction patterns and networks, while gaining practical and theoretical perspectives of small group theory. Offered yearly.

375 Argumentation and Debate – 4 Q.H.
Study of the principles and practice of argumentation and debate and the place of both in modern society. Offered yearly.

381 Advanced Crosscultural and International Communication – 4 Q.H.
Continuation of CTA 281, but emphasizes how to handle communication breakdowns that occur because of different cultural norms, customs, attitudes and values. Should prove valuable to those who plan to study, travel or work abroad. Prerequisite: CTA 281. Offered every two years.

386 Organizational Communication and the Interview – 4 Q.H.
Designed particularly for communications majors, prospective teachers and those planning a business career to facilitate understanding and promote better communication in the areas of business and organizational communication, conference speaking and the interview. Offered every two years.

405 Project in Design – 4 Q.H.
Design and supervision of the execution of scenery or lighting. Offered on demand.

414 Shakespeare I – 4 Q.H.
(See English 414 for description)

415 Shakespeare II – 4 Q.H.
(See English 417 for description)

418 Modern Drama – 4 Q.H.
(See English 424 for description)

425 Directing II – 4 Q.H.
Full responsibility for the selection, analysis, casting, and direction of a one-act play. Offered on demand. Prerequisite: 326.

435 Project in Acting – 4 Q.H.
Organization, rehearsal, and public performance of a thirty-minute acting recital. Prerequisites: 231, senior standing and consent of staff. Offered on demand.

461G History and Criticism of American Public Address – 4 Q.H.
Study of the history of public speaking in American from 1600 to present. Prerequisite: 261. Offered every two years.

484G Studies in Ancient Rhetoric – 4 Q.H.
Seminars and studies of development, changes, refinements in the heritage of rhetoric from Pericles to Seneca. Prerequisite: 261. Offered on demand.

491 Teachers’ Problems in Speech – 2 Q.H.
Assists prospective teachers explore the problems common to the classroom presentation of his subject and to offer some solutions. Prerequisite: Education 150 or Education 202. Offered every two years.

492 Coaching Forensics and Theatre Tournaments – 2 Q.H.
Intensive involvement in co-curricular speech and theatre activities including organization and management of festivals and tournaments. Prerequisite: Education 150 or Education 202. Offered every two years.

499G Independent Studies in CTA – 2 Q.H.
Offers the advanced student an opportunity to study independently in an area of special interest to him. May be repeated to a total of a total of 8 quarter hours. Prerequisite: Consent of instructor. Offered on demand.
Counselor Education

Gildemeister Hall Room 132 / 457-5335
Eiken (Chairperson), Hatfield, Van Kirk
Adjunct Professors: Buhler, Gardiner, Maher and Overy.

The department's major purpose is to provide students in the helping professions and in education with a background in the science of human behavior, learning, development, personality, counseling, and group process.

The department offers five programs leading to the Master of Science degree:

Professional Development Program.

This program provides a background in the behavioral sciences for persons in fields such as education, business and nursing. The program offers an opportunity to develop psychological understandings and skills needed in professions that involve working with people.

Community Counseling Program.

This program is designed to prepare graduates for employment in a variety of human services and mental health settings such as crisis counseling centers, substance abuse counseling centers, employment counseling agencies, pastoral counseling, corrections and community mental health centers.

Elementary School Counseling Program.

Successful completion of a school counseling program leads to a recommendation for licensure in Minnesota, Wisconsin, and other states.

Secondary School Counseling Program.

Successful completion of a school counseling program leads to recommendation for licensure in Minnesota, Wisconsin, and other states.

Interdisciplinary Program.

This program is primarily for those people who are interested in a broad interdisciplinary graduate preparation in counseling, psychology, education, and sociology.

Admission Requirements: In applying for admission, the student must follow this sequence:

1) Apply for admission to graduate study with the Graduate Office.
2) When accepted for graduate study, applicants will receive an application for admission to the Counselor Education Department. This application will require a written statement from the student explaining the basis for his/her decision to enter this field. It will also request the names of three (3) persons who will write recommendations for the applicant.
3) Prospective candidates are required to take C.E. 507 Intro to Counseling and C.E. 565 Personality Structure before completing the admission requirements. This will provide an opportunity for the applicant to become acquainted with the program and the field of counseling. If this is not possible, the applicant may make a written request for a personal interview with the staff.
4) Applications for admission to Counselor Education will be processed four (4) times a year. To be considered for admission, applicants must have fulfilled the above requirements prior to the admission date. All materials such as transcripts and recommendations must be received before an application can be processed. When admitted to a degree program, each student will be assigned an advisor.
5) Admission deadline dates are mid-term day fall, winter, spring and first summer session.
6) Applicants will be notified in writing about the department's decision.
7) Admission to graduate study is not complete until (a) candidacy forms are signed by the student's advisor, the department chairperson, the graduate dean and (b) the Graduate Record Examination has been taken. Students will be required to meet the program requirements that are in effect when all admission procedures are completed.

The University Catalog in effect at the time items (a) and (b) above have been completed will determine your program requirements in Counselor Education.

When admitted, the candidate will be given a "Student Guide" which will offer him/her guidance throughout the program.

Graduation Requirements:

1) In addition to successfully completing the required course work, the candidate must complete final written comprehensive examinations near the end of his/her program.
2) A master's paper also must be completed before graduation.
3) As an alternative to a master's paper, a candidate may elect the thesis plan which is a more extensive project requiring the use of scientific methods and procedures. The thesis must be approved by the candidate's advisor and an oral examination committee.
4) A student may take a maximum of twelve (12) credits of Pass/No Credit on the Master's degree in Counselor Education Programs.

II. COMMUNITY COUNSELING PROGRAM (54 Q.H.)

REQUIRED COURSES (44 Q.H.)
CE 507 Introduction to Counseling (3)
CE 520 Stress Management (3)
CE 522 Human Relations (4)
CE 555 Internship in Counseling (6)
CE 560 Group Process and Dynamics (3)
CE 564 Statistics, Tests and Measurements (3)
CE 565 Theories of Personality (4)
CE 566 Counseling Procedures (4)
CE 568 Individual Counseling Practicum (3)
CE 569 Group Counseling Practicum (3)
CE 582 Organization and Administration of Counseling Services (3)
CE 598 Program Synthesis (2)

NOTE: One development course is also required: child, adolescent, adult, or older adult (3).

ELECTIVES (10)

III. ELEMENTARY SCHOOL COUNSELING PROGRAM (60 Q.H.)

REQUIRED COURSES (50 Q.H.)
CE 507 Introduction to Counseling (3)
CE 513 Learning Disorders (3)
CE 515 Child Development (3)
CE 522 Human Relations (4)
CE 545 Career Development (3)
CE 555 Internship in Counseling (6)
CE 560 Group Process and Dynamics (3)
CE 564 Statistics, Tests and Measurements (3)
CE 565 Theories of Personality (4)
CE 566 Counseling Procedures (4)
CE 568 Individual Counseling Practicum (3)
CE 569 Group Counseling Practicum (3)
IV. SECONDARY SCHOOL COUNSELING PROGRAM (60 Q.H.)

REQUIRED COURSES (47 Q.H.)

CE 507 Introduction to Counseling (3)
CE 522 Human Relations (4)
CE 525 Adolescent Development (3)
CE 545 Career Development (3)
CE 555 Internship in Counseling (6)
CE 560 Group Process and Dynamics (3)
CE 564 Statistics, Tests and Measurements (3)
CE 665 Theories of Personality (4)
CE 566 Counseling Procedures (4)
CE 668 Individual Counseling Practicum (3)
CE 669 Group Counseling Practicum (3)
CE 570 Psychological Education (3)
CE 682 Organization and Administration of Counseling Services (3)
CE 598 Program Synthesis (2)

ELECTIVES (13 Q.H.)

Electives may be arranged in special interest areas such as special education, educational administration, chemical dependency, marriage and family, sexuality, child abuse, and death and grief counseling.

V. INTERDISCIPLINARY PROGRAM (51 Q.H.)

REQUIRED COURSES (27 Q.H.)

Sociology
SOC 405G Models of Intervention (4)
SOC 435G Family Roles and Relationships (4)

Psychology
PSY 416G Personality and Adjustment (4)
PSY 420G Abnormal Psychology (4)

Counselor Education
CE 564 Statistics, Tests and Measurements (3)
CE 565 Theories of Personality (4)
CE 566 Counseling Procedures (4)

ELECTIVES (24 Q.H.)

Major area of concentration 9-12 hours. Minor area of concentration 6-8 hours.

COURSE LISTINGS

495G Seminar - 1 - 4 Q.H.
Subject matter arranged by the department. Enrollment must be approved by the department staff. Course may be repeated when offered with different subject matter content and title.

500 Individual Problems in Counseling - 1 - 4 Q.H.
Opportunity for the qualified graduate student to work independently. Topics may include research, development of special projects, field experiences, selected readings, etc. Departmental permission required.

507 Introduction to Counseling - 3 Q.H.
An introduction to counseling concepts, strategies, and processes with an emphasis on personal skill-building and understanding of the counselor's role.

513 Learning Disorders - 3 Q.H.
Neurological, motor, emotional, cognitive and perceptual dysfunctions related to learning difficulties found in the elementary school.

515 Child Development - 3 Q.H.
Growth, development, and personality adjustment of the child in the home, school, and community, including function, structure and implementation of developmental guidance units at the elementary school level.

520 Stress Management - 3 Q.H.
Important issues and techniques related to the identification and management of personal stress. Class members will develop and monitor a personal stress management program for their own lives.

522 Human Relations - 4 Q.H.
Growth, discovery of one's impact on others, the effects of various kinds of prejudice on people, the clarification of values and development of morals, and improved self-esteem and appreciation of human differences. Listening, non-verbal communication, giving and receiving feedback, conflict resolution, labeling, manipulating and rejecting will all be covered.

525 Adolescent Development - 3 Q.H.
Perspectives on adolescent development, with emphasis on the normal psychological growth of young people. Applications to counseling and working with adolescents in a variety of settings.

535 Adult Development - 3 Q.H.
Major theories, issues, and trends in the field of adult development, life stages and lifelong adaptation to change.

540 Non-Verbal Communication - 3 Q.H.
Kinesics, proxemics, and paralanguage as they contribute to learning about oneself and others; messages and nuances of gestures, facial expressions, body language and territoriality.

545 Career Development - 3 Q.H.
Career development concepts, theory, and practice. Career development materials and counseling skills will be addressed, with a view toward application in a variety of settings.

550 Parent-Child Communication - 3 Q.H.
Parent-child communication and conflict resolution, to help parents develop specific communication and problem-solving skills while dealing with basic concerns such as discipline and family rules.

555 Internship - 1 - 16 Q.H.
To provide practical experience in counseling-related activities. Credit arranged. Internship materials may be picked up in the Counselor Education office. Prerequisite: Counseling Procedures and consent of instructor. Offered yearly.

560 Group Process and Dynamics - 3 Q.H.
Dynamics of group process in group guidance, group counseling and the classroom. Each student will participate as a group facilitator.

561 Transactional Analysis - 3 Q.H.
Personality theory and psychology of human relationships developing an understanding of ego states and interpersonal transactions with applications for the helping professions.

563 Chemical Dependency Counseling - 3 Q.H.
Designed as an introduction for people who want to develop skills for counseling with alcoholics and other drug-dependent people and working with the affected family members.

564 Statistics, Tests, and Measurements - 3 Q.H.
Practical experience in standardized psychological testing: evaluation, selection, administration, interpretation and use of tests and the effective communication of test results to counselees and when appropriate to parents or other professionals. Using instruments in personality and attitude assessment, intelligence, achievement, aptitude and career and life planning.

565 Theories of Personality - 4 Q.H.
The descriptive, explanatory and predictive attributes of personality theories. Major theoretical families - Psychoanalytic, Behavioral, and Phenomenological.

566 Counseling Procedures - 4 Q.H.
Exploration of a wide variety of counseling techniques and theories including experiment in simulated situations to identify an effective personal style of counseling. Prerequisites: CE 507 and 565.

568 Individual Counseling Practicum 3 Q.H.
Development of a personal counseling style which is effective for the client and rewarding for the counselor. Prerequisites: CE 566 and the permission of the staff.

569 Group Counseling Practicum - 3 Q.H.
Development of a group facilitation style which is effective for clients and rewarding for counselors. Course provides an opportunity to apply principles learned in CE 560. Prerequisites: CE 560, CE 566 and permission of staff.

570 Psychological Education - 3 Q.H.
Major theories and applications of cognitive-developmental inquiry relevant to counselors and teachers in schools, colleges and agencies.

580 Values Clarification - 3 Q.H.
Decision-making processes and the analysis of personal values and valuing systems as well as societal valuing systems.

582 Organization and Administration of Counseling Services - 3 Q.H.
Theory, consultation procedures, organization, administration (staffing and budgeting) of counseling services.
SEQUENCES REQUIREMENTS

Subject matter arranged by the department. Enrollment must be approved by the department staff. Course may be repeated when offered with different subject matter content and title.

Program Synthesis - 2 Q.H.

Part I: Writing techniques and research skills necessary for completion of Master's paper. To be taken midway through a candidate's program.

Part II: An update and synthesis of recent literature and counseling innovations with knowledge and understandings acquired in the program.

Gildemeister Hall Room 152 / 457-5350

Frank (Chairperson), Beighley, Billman, Carlson, Erickson, Grangaard, Keill, Kirk, Kaplin, McMillen, Munson, Palmer, Matson, Rocco, Sanford

The department aims to develop in prospective teachers a comprehensive, sound and workable philosophy of education, including knowledge of the nature and problems of the individual learner, understanding of the opportunities, objectives, and responsibilities of the school in a democratic society; proficiency in the art and science of teaching effectively and interestingly, and ability to work effectively with others in promoting continual improvement of the schools.

TEACHER EDUCATION PROGRAM

Students preparing to teach in the elementary schools must complete the elementary major and a minor as described in the following pages.

Students enrolled in the secondary school curriculum are required to complete a teaching major in addition to the 68 quarter hours in General Education and the Common Professional Sequence. Majors and minors are listed under respective departments.

Student teaching on the secondary level is required in all major fields. If a minor is required for graduation, the Director of Student Teaching will determine whether or not student teaching in the minor field is to be required.

PROFESSIONAL EDUCATION SEQUENCE -

The courses in the Common Professional Sequence are those courses which give students in the Bachelor of Science curriculum, elementary or secondary, a basic background in professional education. Several courses are offered as part of a block in which students register simultaneously in any one quarter. Students qualifying for the Bachelor of Science degree must complete the entire sequence which follows:

SEQUENCE REQUIREMENTS

39 Q.H.

Revision of program pending. Please contact the Education Department.

PREREQUISITES

Completion of English 110, English 115, and CTA 191 with a grade of "C" in each course.

Block I

The following is the first course in the Education Sequence (Prerequisite to Block II).

Ed. 190 Human Relations (4)

Block II

The following are prerequisite to all other courses in the Education Sequence and offered as a block of 10 credits.

Ed. 200 Child Growth and Development (2)
Ed. 201 Psychology of Learning (3)
Ed. 202 Educational Aide Experience (2)
Ed. 306 Evaluation (3)

Block III

Ed. 304 Instructional Media Technology (3)
Ed. 475 Education of Exceptional Children and Youth (3)

Block IV

Student Teaching (16)

Block V

Ed. 407 Curriculum and Philosophy (3)

ADDITIONAL REQUIREMENTS IN GENERAL EDUCATION (3 Q.H.)

Students must also complete Health 204. Students may repeat a course only once in the sequence.

B.S. MAJOR

ELEMENTARY EDUCATION

46 Q.H.

Revision of program pending. Please contact the Education Department.

NOTE:

Ed. 328, 329, 330, 333, 334, 335 require completion of Ed. 190, 200, 201, 202 and 306.

Math 110 Mathematics for Elementary Teachers (4)

History 215 Minnesota History (4)

Ed. 221 Children's Literature (4)

P.E. 275 Teaching Elementary Physical Education (3)

Art 300 Elementary Art Education (4)

Music 320 Music for Elementary Teachers (4)

Health 320 Health Education in the Elementary School (3)

Ed. 328 Teaching of Reading I (4)
Ed. 329 Teaching of Reading II (4)

To be taken at the end of a candidate's program.

Master's Thesis - 3-6 Q.H.

Master's thesis must show evidence of the candidate's ability to carry on independent study and to employ scientific methods and procedures in the solution of a problem in the students' field of concentration.

MINORS FOR ELEMENTARY MAJORS

Elementary Education majors should select from the following minors:

Computer Science
Early Childhood Education
Educable Mental Retardation
Foreign Languages
Health
Language Arts
Mathematics
Music
Physical Education
Science
Social Studies
Special Learning Disabilities

(For minors not listed in the Department of Education, please see appropriate departments).

KINDERGARTEN ENDORSEMENT - Students with a major in elementary education may earn a kindergarten endorsement by completing Ed. 411 and successfully completing eight quarter hours of student teaching in a kindergarten setting.

SPECIAL EDUCATION

ADMISSION TO PRACTICUM COURSES

Students wishing to register in the practicum courses in either Educable Mentally Retarded, or Learning Disabled programs must apply for admission to those courses at least two quarters in advance. Applications are available in the Department of Education Office. This requirement
applies to admission to summer session practicums as well as to those in the academic year.

TEACHING EDUCABLE MENTALLY RETARDED MINOR 30-32 O.H.

Revision of program pending. Contact the Education Department.

The following courses (30-32 credits) are required for EMR State Licensure and Winona State University undergraduate EMR Licensure minor. Licensure is for Grades K-12. This Minor is available to both elementary and secondary majors.

FOUNDATIONAL KNOWLEDGES
Ed. 204 Introduction to Special Education (11)
Ed. 475 Education of Exceptional Children and Youth (3) (Prerequisites: Block II or graduate standing)
Psy. 414 Psychology of Mental Retardation (4) (Prerequisites: Psy. 210, Block I, or graduate standing)
Ed. 427 Remedial Reading (3) (Prerequisite Block VI)

PROCEDURAL KNOWLEDGES
Ed. 430 Ed. of the M.R. in the Elem. School (3) (Ed. 455 must be taken concurrently; Prerequisites: 410, 414, 427, 475)
Ed. 455 Lab Experience in Special Ed. (Elem) (2)
Ed. 459 Ed. of the M.R. in the Sec. School (3) (Ed. 462 must be taken concurrently; Prerequisite: 430, 455)
Ed. 462 Lab Experience in Special Ed. (Sec.) (2)
Ed. 463 Student Teaching in Special Education (8) (Prerequisites: 430, 455, 458, 462)

Discretionary Requirements (1-4 Credits)
Ed. 490 Individual Problems in Teaching Mentally Retarded Students (persons unable to apply knowledges to effect change in mentally retarded students' behavior will be required to remediate deficiencies at the discretion of the 430, 459, 492 instructor).
Ed. 492 Practicum Trainable Mentally Retarded/Custodial Mentally Retarded (3)

SPECIAL LEARNING DISABILITIES MINOR 39-42 O.H.

Revision of program pending. Contact the Education Department.

The following courses (39-42 credits) are required for S.L.D. State Licensure and Winona State University undergraduate S.L.D. Licensure minor. Candidates for S.L.D. Licensure must be elementary or secondary education majors. Licensure is for grades K-12 for both elementary and secondary majors. Secondary education majors must complete an additional 13 credits (see below).

Note: Students must complete student teaching before enrolling in the L.D. Practicum.

FOUNDATIONAL UNDERSTANDINGS (24 CREDITS)
Ed. 427 Remedial Reading Methods (3) (Prerequisite: Block VI)
Ed. 434 Remedial Math Methods (3) (Prerequisite: Ed. 334 or Math 320)
Ed. 475 Education of Exceptional Children and Youth (3) (Prerequisite: Block II)
Ed. 476 Childhood Language Development (3) (Prerequisite: Block II)
Ed. 478 Behavioral Change Processes in the Classroom (3) (Prerequisite: Block II)
Ed. 479 Education of Emotionally Disturbed and Socially Maladjusted Children and Youth (3) (Prerequisite: Block II)
Ed. 481 Measurement and Learning Difficulties of Children and Youth (3) (Prerequisite: Block II)
Ed. 488 Individualizing Instruction (3) (Prerequisite: Block II)
Ed. 489 Administrative Principles & Procedures in Special Education (3) (Prerequisite: Block II)

PROCEDURAL KNOWLEDGES (12 CREDITS)
Ed. 470 Diagnosis and Remediation of Learning Disabilities I (3) (Ed. 473 must be taken concurrently; Prerequisites: 427, 476 and 481).
Ed. 471 Diagnosis and Remediation of Learning Disabilities II (3) (Ed. 474 must be taken concurrently; Prerequisites: 434, 478 and student teaching).
Ed. 473 Practicum: Diagnosis and Remediation of Learning Disabilities I (3)
Ed. 474 Practicum: Diagnosis and Remediation of Learning Disabilities II (3)

DISCRETIONARY REQUIREMENTS (1-4 CREDITS)
Ed. 490 Individual Problems in Remediation of Learning Disabilities (1-4) (Persons unable to apply knowledges to effect desired change in LD students' behavior will be required to remediate deficiencies at the discretion of the 473, 474 instructors).

Additional Requirements for SLD Licensure for Secondary Education Majors (Block II is prerequisite to all SLD Licensure courses for secondary education majors)
Ed. 328 Teaching of Reading I (4)
Ed. 329 Teaching of Reading II (4)
Ed. 330 Teaching of Language Arts in Elementary Grades (2)
Ed. 333 Teaching Social Studies in the Elementary School (3)
Ed. 334 Teaching Mathematics in the Elementary School (3)

EDUCATION / 59

EARLY CHILDHOOD EDUCATION MINOR 31 O.H.

Revision of program pending. Contact the Education Department.

(Note: WSU minor — not for licensure.)

SELECT ONE FROM THE FOLLOWING: (8 CREDITS)
Eng. 411 Teaching Language and Composition (4)
Eng. 418 Language and Style (4)
Eng. 420 Varieties of English (4)

SELECT ONE OF THE FOLLOWING: (4 CREDITS)
Eng. 121 Major British and American Fiction (4)
Eng. 122 Major British and American Drama (4)
Eng. 123 Major British and American Poetry (4)
Eng. 131 Masterpieces of American Literature (4)
Eng. 132 European Literature in Transition (4)

SELECT ONE FROM THE FOLLOWING: (3 OR 4 CREDITS)
Ed. 429 Teaching of Reading—Secondary (3)

OR
Eng. 400 Teaching Literature to Young Adults (4)

MATHEMATICS MINOR

(MINOR OPTION FOR ELEMENTARY EDUCATION MAJORS — 33-39 O.H.)

(Note: WSU minor — not for licensure.)
REQUIRED COURSES (21 or 24 Q.H.*)

- Math 220 may be substituted for Math 215 and Math 216.
- Math 201 Geometry for Elementary Teachers (4)
- Math 208 Fundamentals of Statistics (4)
- Math 130 Intro to BASIC Programming (4)
- Math 215 College Algebra (4)
- Math 216 Trigonometry (4)
- Math 401 The Metric System (1)
- Educ 434 Remedial Mathematics Methods (3)

ELECTIVES (8-11 Q.H.)

Electives must be selected in consultation with an advisor in the Department of Mathematics and Computer Science.

ADDITIONAL REQUIREMENTS (4 Q.H.)

- Math 110 Mathematics for Elementary Teachers (4)

SOCIAL STUDIES MINOR

(MINOR OPTIONS FOR ELEMENTARY MAJORS 40 Q.H.)

Note: WSU minor — not for licensure.

- Econ 102 Introduction to Economics (4)
- Geog. 110 World Regional Geography (4)
- Geog. 213 Cultural Geography (4)
- Soc. 150 Human Society (4)
- Psy. 210 General Psychology (4)

Select any two:

- Hist. 120 Western Civilization to 1500 (4)
- Hist. 121 Western Civilization to 1860 (4)
- Hist. 122 Western Civilization to Present (4)
- Hist. 230 American History: to 1828 (4)
- Hist. 231 American History: 1828 to 1900 (4)
- Hist. 232 American History: 1900 to Present (4)

Select one:

- Pol.Sci. 103 Intro. to Political Science (4)
- Pol.Sci. 220 American National Government (4)
- Pol.Sci. 221 State & Local Government (4)

ELECTIVES (8 Q.H.)

Choose from Economics, Geography, History, Political Science, Psychology, Sociology.

BROAD SCIENCE MINOR

(MINOR OPTION FOR ELEMENTARY MAJORS – 57-58 Q.H.)

REQUIRED BIOLOGY COURSES

- 207 Botany (5)
- 208 Botany (4)
- 210 Zoology I (5)
- 211 Zoology II (4)

REQUIRED GEOLOGY COURSES

- 116 Physical Geology (5)
- Choose one from the following:
  - 117 Historical Geology (5)
  - 220 Astronomy (4)
  - 230 Meteorology (4)
  - 200 Descriptive Oceanography (4)

REQUIRED CHEMISTRY COURSES

- 212 General Inorganic Chemistry (5)
- 213 General Inorganic Chemistry (5)

REQUIRED PHYSICS COURSES

- 201 General Physics I (4)
- 202 General Physics II (4)
- OR
- 203 General Physics III (4)

REQUIRED MATH COURSES

- 215 College Algebra (4)
- 216 Trigonometry (4)

OTHER REQUIRED COURSES

- Bio. 442 Philosophy of Science (4)
- OR
- Phil. 273 Technics, Economics and Culture (4)

ADMISSION TO TEACHER EDUCATION

If you wish to prepare for teaching, apply for admission to a program of teacher education during your first professional course which is Education 190. This normally takes place during the third quarter of the freshman year or during the sophomore year. Prerequisites for Ed. 190 are completion of English 110 & 115, and CTA 191 with a grade of "C" , or special permission from the Education Department Chairperson.

Criteria considered for acceptance include a cumulative grade point average of 2.00 in all completed course work and in each major field, in each minor field and a grade of "C" or better in each course in the common professional sequence. In addition, elementary education majors must have a grade of "C" or better in each course in the elementary major and in the following minors: EMR, LD and ECE. You should have completed the professional sequence with the exception of Ed. 407, which may be taken after student teaching. Elementary majors will have successfully completed Ed. 328, 329, 330, 334, and 335. Secondary majors will have successfully completed the methods course in their major and any other pre-student teaching requirement identified by their major department. The university reserves the right to consider as part of the admission, those personal qualities, general health and scholastic achievement, or such other standards that may be appropriate.

ADMISSION TO STUDENT TEACHING

Admission to student teaching is not automatic. It is contingent upon qualifications which respect the rights of pupils to have good teachers. To be eligible for a student teaching assignment, you must meet the following requirements: a cumulative grade point average of 2.00 in all completed course work, and a grade of "C" or higher in each major field, in each minor field and in Education 407. You should have completed the professional sequence during the Spring Quarter, to make application for student teaching for the succeeding year, you must submit your application before the end of the second week of the quarter preceding the quarter you plan to student teach. Applications are available in the Department of Education Office.

AMOSSION TO STUDENT TEACHING

A license to teach in the public schools of Minnesota may be issued to an applicant holding a Bachelor’s degree in teacher education programs from a Minnesota State University. Licenses are issued by the Board of Teaching/State Department of Education. Application for the license must be made during the last few weeks of the final quarter of attendance. Apply at the Office of the Registrar. Persons whose Bachelor’s degree is not in teacher education are asked to check Teacher Licensure requirements. See section on "Teaching Licensure” under “Academic Information.”
Minnesota Teacher Licensure requirements state that any secondary school teacher must have completed a discrete course in reading. To be licensed to teach in Wisconsin, all prospective secondary teachers must satisfy the following:

- Master of Science in Education, Mental Retardation Licensure (Plan B).
- Remedial Reading Licensure, Elementary Level (Plan C).
- Remedial Reading Licensure, Secondary Level (Plan D).
- Early Childhood Education Licensure (Plan E).

WISCONSIN LICENSURE

Students desiring licensure (both elementary and secondary) in Wisconsin must have completed a discrete course in reading. To be licensed to teach in Wisconsin, all prospective secondary teachers must satisfactorily complete at least one separate course in the teaching of reading.

For licensure in special fields (Art, Music, Industrial Education, Physical Education), persons must complete a Methods course and must student-teach at both the elementary and secondary level if licensure is desired for K-12. Only a Methods course and Secondary student teaching is required if a person wants one, secondary licensure.

Licensure in Science (Biology, Chemistry, Geology, General Science, Physics).

"Wisconsin licensure to teach any field of science requires a course which includes conservation of natural resources. A one year license can be issued even though conservation has not been completed, but within one year the requirement must be satisfied.

Licensure in Social Science (Geography, History, Political Science, Social Science, Sociology).

"Wisconsin licensure to teach any field of Social Science requires a course which includes conservation of natural resources and a course which includes consumers' cooperative/cooperative marketing. A one year license can be issued even through conservation and cooperatives have not been completed, but within one year both requirements must be satisfied.

GRADUATE PROGRAMS IN EDUCATION

Candidates who elect teaching in the elementary school as their concentration in the following areas.

1. Master of Science in Education, Plan A.
2. Master of Science in Education, Plan B.
3. Master of Science in Education, Plan C.
4. Master of Science in Education, Plan D.
5. Master of Science in Education, Plan E.
6. Master of Science in Elementary Education, Plan F.

Winona State University through the Department of Education, also offers non-degree licensure programs without the Master's Degree in the following areas.

1. Mental Retardation Licensure
2. Learning Disabilities Licensure
3. Remedial Reading Licensure, Elementary Level
4. Remedial Reading Licensure, Secondary Level
5. Developmental Reading Licensure, Secondary Level
6. Early Childhood Education Licensure

NOTE: Persons pursuing these programs must follow the admissions procedures and apply for the M.S. degree.

DEGREE PROGRAMS WITH THESIS OR RESEARCH OPTION

REQUIREMENTS

1. Admittance:
   a. File application for admission to the Graduate Office. The application must be submitted at least one month prior to registration. The advisor will review the applicant's qualifications and determine whether there are any deficiencies that must be removed.

   b. File application for admission to the Department's Master's program. An advisor will be appointed by the department in accordance with departmental policy. The advisor will review the applicant's qualifications and determine whether there are any deficiencies that must be removed.

NOTE: A letter of acceptance into a graduate program from the education department does not constitute acceptance by the Dean of Graduate Studies.

2. Coursework: Candidates must complete all course work required for the degree (48 credits minimum). All coursework must be approved by advisor and Graduate Office.

3. Graduate Writing Requirement
   a. Thesis Option Only: A research based thesis approved by the advisor, which demonstrates ability to use scientific methods and procedures is required.

   b. Research Paper Option Only: A graduate level paper, approved by the advisor in accordance with published departmental guidelines is required. Guidelines pamphlets are available in the education office.

4. Comprehensive Examination: A final written examination compiled by the advisor is required. The examination is based upon the candidates coursework.

5. Academic Average: Candidates must maintain a B average. No course credit will be counted for graduate credit if the earned grade is below C.

6. Timeline to be followed:
   a. Applications: File in the order listed.

   1. Graduate study application - Graduate Office
   2. Education Department Master's Program application - Education Office
   3. Licensure Program Application - Education Department
   4. With advisor, file WSU Master's candidacy program - Graduate Office
   5. Graduate Record Aptitude Test Results - Graduate Office

b. Completion of thesis or research paper one quarter in advance of graduation - Register for Research Project 599 during a regular registration period (Thesis option only).

c. The comprehensive examination based upon coursework must be arranged with advisor when the candidate registers for final quarter of coursework.

d. Complete oral examination of thesis one quarter in advance of graduation. (Thesis option only).

e. File application for graduation at least two calendar months prior to graduation in the Office of Graduate Studies.

f. Students under any plans take part in commencement exercises in accordance with current policy. Caps, gowns and hoods, are obtainable in the University Bookstore one month prior to commencement exercises.
REQUIREMENTS:

PLAN A

M.S. ELEMENTARY EDUCATION 48 Q.H.
Revision of program pending. Please contact the Education Department.

PROFESSIONAL EDUCATION (27 Q.H.)
Ed. 481G Measurement and Learning Difficulties of Children and Youth (3)
Ed. 500 Elementary School Curriculum (3)
Ed. 517 Elementary School and Classroom Organizational Patterns (3)
Ed. 518 Field Experience in Elementary Classroom.

PLAN B

REQUIREMENTS:

M.S. IN EDUCATION
EDUCABLE MENTAL RETARDATION CONCENTRATION 51-54 Q.H.
Revision of program pending. Please contact Education Department.

Admission to Practicum Courses: Students wishing to register in the practicum courses in the EMR program must apply for admission to those courses at least two quarters in advance. Applications are available in the Department of Education Office. This requirement applies to admission to summer session practicums as well as to those in the academic year.

Revision of Program Pending. Please contact the Education Department.

Admission to Practicum Courses: Students wishing to register in the practicum courses in the L.D. program and must apply for admission to those courses at least two quarters in advance. Applications are available in the Department of Education Office. This requirement applies to admission to summer session practicums as well as to those in the academic year.

Note: To become certified in L.D. the candidate must have a valid elementary or secondary school teaching certificate.

PROFESSIONAL EDUCATION (15 Q.H.)
Ed. 481G Measurement and Learning Difficulties of Children and Youth (3)
Ed. 500 Elementary School Curriculum (3)
Ed. 522 Historical Foundations of Education (3)

OR
Ed. 523 Philosophy of Education (3)
Ed. Ad. 570 Research and Writing (3)

Select one of the following three courses:
Ed. 512 Advanced Methods in Elementary Language Arts (3)
Ed. 513 Advanced Methods in Elementary Science (3)
Ed. 514 Advanced Methods in Elementary Mathematics (3)

SPECIALIZED COURSES 36 Q.H.

Ed. 427G Remedial Reading Methods (3)
Ed. 455G Lab Experience in Special Education (Elem.) (2)
Ed. 459G Education of the Mentally Retarded (3) (Secondary Majors only)
Ed. 563 Basic Concepts of Remedial Reading (3) (Elementary Majors only) Must enroll in 511 followed by 563.

Ed. 430G Education of the Mentally Retarded in the Elementary School (3) (Ed. 455G must be taken concurrently; Prerequisites: 410G, 414G, 427G OR 563, 475G)

Ed. 455G Lab Experience in Special Education (Elem.) (2)
Ed. 459G Education of the Mentally Retarded in the Secondary School (3) (Ed. 462G must be taken concurrently; Prerequisites: 430G, 456G)

Ed. 462G Lab Experience in Special Education (Sec.) (2)
Ed. 463G Student Teaching in Special Education (8) (Prerequisites: 430G, 456G, 462G)

Discretionary Requirement
Ed. 490G Individual Problems in Teaching Mentally Retarded Students (Persons unable to apply knowledge to effect desired change in mentally retarded students' behavior will be required to remediate deficiencies at the discretion of the 430G, 456G, 492G instructor).

Ed. 492G Practicum Trainable Mentally Retarded/Custodial Mentally Retarded (3)

REQUIREMENTS:

PLAN C

M.S. IN EDUCATION
LEARNING DISABILITIES CONCENTRATION 51 Q.H.
Revision of Program Pending. Please contact the Education Department.

Admission to Practicum Courses: Students wishing to register in the practicum courses in the L.D. program and must apply for admission to those courses at least two quarters in advance. Applications are available in the Department of Education Office. This requirement applies to admission to summer session practicums as well as to those in the academic year.

Note: To become certified in L.D. the candidate must have a valid elementary or secondary school teaching certificate.

PROFESSIONAL EDUCATION (15 Q.H.)
Ed. 481G Measurement and Learning Difficulties of Children and Youth (3)
Ed. 500 Elementary School Curriculum (3)
Ed. 522 Historical Foundations of Education (3)

OR
Ed. 523 Philosophy of Education (3)
Ed. Ad. 570 Research and Writing (3)

Select one of the following three courses:
Ed. 512 Advanced Methods in Elementary Language Arts (3)
Ed. 513 Advanced Methods in Elementary Science (3)
Ed. 514 Advanced Methods in Elementary Mathematics (3)

SPECIALIZED COURSES 36 Q.H.

Ed. 427G Remedial Reading Methods (3)
(Secondary Majors only)
Ed. 455G Lab Experience in Special Education (Elem.) (2)
Ed. 459G Education of the Mentally Retarded (3)
(Secondary Majors only) Must enroll in 511 followed by 563.

Ed. 430G Education of the Mentally Retarded in the Elementary School (3) (Ed. 455G must be taken concurrently; Prerequisites: 410G, 414G, 427G OR 563, 475G)

Ed. 455G Lab Experience in Special Education (Elem.) (2)
Ed. 459G Education of the Mentally Retarded in the Secondary School (3) (Ed. 462G must be taken concurrently; Prerequisites: 430G, 456G)

Ed. 462G Lab Experience in Special Education (Sec.) (2)
Ed. 463G Student Teaching in Special Education (8) (Prerequisites: 430G, 456G, 462G)

Discretionary Requirement
Ed. 490G Individual Problems in Teaching Mentally Retarded Students (Persons unable to apply knowledge to effect desired change in mentally retarded students' behavior will be required to remediate deficiencies at the discretion of the 430G, 456G, 492G instructor).

Ed. 492G Practicum Trainable Mentally Retarded/Custodial Mentally Retarded (3)

REQUIREMENTS:

PLAN C

M.S. IN EDUCATION
LEARNING DISABILITIES CONCENTRATION 51 Q.H.
Revision of Program Pending. Please contact the Education Department.

Admission to Practicum Courses: Students wishing to register in the practicum courses in the L.D. program and must apply for admission to those courses at least two quarters in advance. Applications are available in the Department of Education Office. This requirement applies to admission to summer session practicums as well as to those in the academic year.

Note: To become certified in L.D. the candidate must have a valid elementary or secondary school teaching certificate.
REQUIREMENTS:

PLAN D

M.S. IN EDUCATION

REMEDIAL AND DEVELOPMENTAL READING CONCENTRATION

48 O.H.

To be licensed at the elementary level (K-6), the applicant must have an elementary teacher’s license, based on a bachelor’s degree and have had two years of successful teaching experience.

To be licensed at the secondary level (grade 7 through adult), the applicant must have a secondary teacher’s license, based on a bachelor’s degree and have had two years of successful teaching experience.

PROFESSIONAL COURSES

Elementary (18 O.H.)

Ed. 500 Elementary School Curriculum (3)
Ed. 517 Elementary School and Classroom Organizational Patterns (3)
Ed. 522 Historical Foundations of Education (3) or Ed. 523 Philosophy of Education (3)
Ed.Ad. 570 Research and Writing (3)

Select two from the following four courses:

Ed. 512 Advanced Methods in Elementary Language Arts (3)
Ed. 513 Advanced Methods in Elementary Social Studies (3)
Ed. 514 Advanced Methods in Elementary Science (3)
Ed. 515 Advanced Methods in Elementary Mathematics (3)

Secondary (19 O.H.)

Ed. 502 Secondary School Curriculum (3)
Ed.Ad. 503 The Junior High School and Middle School (3) or Ed. 505 Principles of Secondary Education (3)
Ed. 522 Historical Foundations of Education (3) or Ed. 523 Philosophy of Education (3)
Ed.Ad. 570 Research and Writing (3)
Eng. 400G Teaching Language to Young Adults (4)
Ed. 508 Critical Teaching Skills Lab (3)

SPECIALIZED COURSES

Elementary (12 O.H.)

Ed. 511 Advanced Methods in Reading (3). A prerequisite to Education 563 Basic Concepts in Remedial Reading
Ed. 563 Basic Concepts in Remedial Reading (3). (Prerequisite: Ed. 511)
Ed. 564 Tests and Measurements in Remedial Reading (3) (Prerequisite: A grade of B or better in Ed. 563)
Ed. 565 Remedial Reading Methods and Media (3) (Prerequisite: same as for Ed. 564)
Ed. 566 Reading Practicum (Secondary) (8) (Prerequisite: Ed. 564 & Ed. 565)

One (1) of the following:

Ed. 475G Education of Exceptional Children and Youth (3)
Ed. 476G Childhood Language Development (3)
Ed. 478G Behavioral Change Processes in the Classroom (3)

Secondary (24 O.H.)

Ed. 511 Advanced Methods in Reading (3). Methods in Reading is a prerequisite to Education 563 Basic Concepts in Remedial Reading and Education 429G Teaching of Reading (Secondary)
Ed. 429G Teaching of Reading (Secondary) (3)
Ed. 563 Basic Concepts in Remedial Reading (3) (Prerequisite: Ed. 511)
Ed. 564 Tests and Measurements in Remedial Reading (3) (Prerequisite: A grade of B or better in Ed. 563)
Ed. 565 Remedial Reading Methods and Media (3) (Prerequisite: same as for Ed. 564)
Ed. 566 Reading Practicum (Secondary) (8) (Prerequisite: Ed. 564 & Ed. 565)

One (1) of the following:

Ed. 475G Education of Exceptional Children and Youth or Ed. 478G Behavioral Change Processes in the Classroom (3)

ELECTIVES

Elementary (9 O.H.)
Secondary (5 O.H.)

Note: The above program will qualify an elementary candidate to be licensed as an Elementary Remedial Reading Teacher. The above program will qualify a secondary candidate to be licensed as a Secondary and Adult Remedial Reading Teacher and as a Secondary Teacher of Developmental Reading.

REQUIREMENTS:

PLAN E

M.S. IN ELEMENTARY EDUCATION

READING SUPERVISORY OR CONSULTANT CONCENTRATION

58 O.H.

To be licensed the applicant must have completed three (3) years of successful teaching in an elementary school and/or one (1) year must have been as a remedial reading teacher. (One (1) year of L.D. teaching experience or a remedial reading practicum experience will substitute for the remedial reading experience.)

PROFESSIONAL COURSES

Ed. 500 Elementary School Curriculum (3)
Ed. 502 Secondary School Curriculum (3) or Ed. Ad. 504 Curriculum Development and Administration (3)
Ed. 517 Elementary School and Classroom Organizational Patterns (3)
Ed. 522 Historical Foundations of Education (3) or Ed. 523 Philosophy of Education (3)
Ed. Ad. 570 Research and Writing (3)
Ed. Ad. 578 Supervision of Instruction (3)
Ed. 512 Advanced Methods in Elementary Language Arts (3)
Ed. 475G Education of Exceptional Children and Youth (3)
Ed. 476G Childhood Language Development (3)
Ed. 478G Behavioral Change Processes in the Classroom (3)
Ed. 429G Teaching of Secondary Reading (3) (Prerequisite: Ed. 511)
Ed. 563 Basic Concepts in Remedial Reading (3)
Ed. 564 Tests and Measurements in Remedial Reading (3) (Prerequisite: a grade of B or better in Ed. 563)
Ed. 565 Remedial Reading Methods and Media (3) (Prerequisite: Same as for Ed. 564)
Ed. 566 Reading Practicum (Elementary) (6)
Ed. 567 Administration and Supervision of a Reading Program (3)
Ed. 568 Field Experiences in Administration and Supervision (4)

Note: No thesis or starred paper required. The above program will qualify an elementary candidate to be licensed as a Reading Supervisor or Consultant.

REQUIREMENTS:

PLAN F

M.S. ELEMENTARY EDUCATION

EARLY CHILDHOOD CONCENTRATION

58 O.H.

PROFESSIONAL EDUCATION (18 O.H.)

Ed. 500 Elementary School Curriculum (3)
Ed. 522 Historical Foundations of Education (3)
Ed. Ad. 570 Research and Writing (3)

Select one of the following three courses:

Ed. 511 Advanced Methods in Reading (3)
Ed. 512 Advanced Methods in Elementary Language Arts (3)
Ed. 513 Advanced Methods in Elementary Social Studies (3)

Elect two 500 level courses

SPECIALIZED COURSES (32 O.H.)

Ed. 411G Kindergarten Education (4)
Ed. 416G Pre-Kindergarten Education (4)
Ed. 418G Nursery School Education Practicum (2)
Ed. 422G Socialization of the Young Child (3)
Ed. 424G Organization and Administration of Early Childhood Education (3)
Ed. 461G Kindergarten Student Teaching (8)
Ed. 467G Nursery School Student Teaching (4)

Note: In addition, students will take a graduate level course in child development to be recommended by an advisor.

ADVANCED PROGRAMS FOR LICENSURE

REMEDIAL READING LICENSURE, ELEMENTARY LEVEL

Note: Persons applying for these programs follow the admissions procedure applicable to the M.S. degree.

Special Requirements:
1. An elementary teacher’s license based on a bachelor’s degree.
2. Two years of successful teaching experience before license can be issued.

SPECIALIZED COURSES
Ed. 511 Advanced Methods in Reading (3)
Ed. 563 Basic Concepts in Remedial Reading (3) (Prerequisite: Ed. 511)
Ed. 564 Tests and Measurements in Remedial Reading (3) (Prerequisite: a grade of B or better in Ed. 563)
Ed. 565 Remedial Reading Materials, Methods, Media, and Approaches (3) (Prerequisite same as for Ed. 564)
Ed. 566 Remedial Reading Practicum (Elementary) (6) (Prerequisites: Ed. 564 and Ed. 565)

Choose one from the following three courses:
Ed. 475G Education of Exceptional Children and Youth (3)
Ed. 476G Childhood Language Development (3)
Ed. 478G Behavioral Change Processes in the Classroom (3)

Note: Elementary licensed remedial teachers can also be licensed as a secondary remedial reading teacher taking Ed. 566 Remedial Reading Practicum (Secondary) and Ed. 429G Teaching of Reading (Secondary).

REMEDIAL READING LICENSURE, SECONDARY LEVEL

Special Requirements:
1. A secondary teacher’s license based on a bachelor’s degree.
2. Two years of successful teaching experience.

SPECIALIZED COURSES
Ed. 511 Advanced Methods in Reading (3); Education 511 Advanced Methods in Reading Ed. 563 Basic Concepts of Remedial (3) Secondary Majors only (Prerequisite: Ed. 511) a prerequisite to Education 563 Basic Concepts in Remedial Reading and Education 429G Teaching of Reading (Secondary).
Ed. 563 Basic Concepts in Remedial Reading (3) (Prerequisite: Ed. 511)
Ed. 564 Tests and Measurements in Remedial Reading (3) (Prerequisite: a grade of B or better in Ed. 563)
Ed. 565 Remedial Reading Materials, Methods, Media, and Approaches (3) (Prerequisite: same as for Ed. 564)
Ed. 429G Teaching of Reading (Secondary) (3)
Ed. 566 Remedial Reading Practicum (Secondary) (6) (Prerequisite: Ed. 429G, Ed. 564, and Ed. 565)

Note: See requirements for Developmental Reading Licensure, Secondary level, for additional license.

DEVELOPMENTAL READING LICENSURE, SECONDARY LEVEL

SPECIAL REQUIREMENTS:
1. A secondary teacher’s license, based on a bachelor’s degree.
2. No teaching experience requirements.
3. Successful completion of the Remedial Reading course requirements for secondary licensure.
4. English 400G Teaching Literature to Young Adults, (4)

LEARNING DISABILITIES LICENSURE

PREREQUISITE COURSES
Ed. 427G Remedial Reading Methods (3) (Elementary Majors only)
Ed. 563 Basic Concepts of Remedial Reading (3) (Secondary Majors only) (Prerequisite: Ed. 511)
Ed. 434G Remedial Math. Methods (3)
Ed. 475G Education of Exceptional Children and Youth (3)

SPECIALIZED COURSES
Ed. 476G Childhood Language Development (3)
Ed. 478G Behavioral Change Processes in the Classroom (3)
Ed. 479G Education of Emotionally Disturbed and Socially Maladjusted Children and Youth (3)
Ed. 481G Measurement and Learning Difficulties of Children and Youth (3)
Ed. 488G Individualizing Instruction (3)
Ed. 489G Administration Principles and Procedures in Special Education (3)
Ed. 530 Diagnosis and Remediation of Learning Disabilities I (3) (Ed. 531 must be taken concurrently.) Prerequisites: 476G, 481G, 427G or 563.
Ed. 531 Practicum: Diagnosis and Remediation of Learning Disabilities I (3)
Ed. 532 Diagnosis and Remediation of Learning Disabilities II (3) (Ed. 533 must be taken concurrently.) Prerequisites: 434G, 478G, 479G, and 531.
Ed. 533 Practicum: Diagnosis and Remediation of Learning Disabilities II (3)

Discretionary Requirements (1-4 Q.H.)
Ed. 490 Individual Problems in Remediation of Learning Disabilities (1-4) (Optional requirements at discretion of 532 533 instructor.)

EMOTIONALLY DISTURBED LICENSURE

This program qualifies the graduate to teach seriously emotionally disturbed students. The program is a cooperative licensure effort between WSU and the University of Minnesota. Students wishing to enroll in the program must see the Education Department advisor for details.

TEACHING EDUCABLE MENTALLY RETARDED LICENSURE

Students may now take a licensure program in the Teaching of the Educable Mentally Retarded. Elementary majors may use the courses required for licensure as a minor. Ed. 204 Introduction to Special Education (1)
Psy. 414G Psychology of Mental Retardation (4)
Ed. 427G Remedial Reading (3)
Ed. 430G Education of the Mentally Retarded in the Elementary School (3)
Ed. 459G Education of the Mentally Retarded in the Secondary School (3)
Ed. 455G Practicum Experience in Special Education (Elementary) (2)
Ed. 462G Practicum Experience in Special Education (Secondary) (2)
Ed. 463G Directed Special Education Teaching (8)
Ed. 475G Education of Exceptional Children and Youth (3)
Ed. 490 Individual Problems in Teaching Mentally Retarded Students (1-4) (Persons unable to apply knowledge to effect desired change in mentally retarded students’ behavior will be required to remediate deficiencies at the discretion of the 430G, 459G and 492G in-

EARLY CHILDHOOD EDUCATION LICENSURE

Ed. 411G Kindergarten Education (4)
Ed. 412 Infancy and Early Childhood (3)
Ed. 416G Pre-Kindergarten Education (4)
Ed. 418G Nursery School Education Practicum (2)
EDUCATION / 65

Ed. 422G Socialization of the Young Child (3)
Ed. 461G Kindergarten Student Teaching (8)
Ed. 467G Nursery School Student Teaching (4)

Note: An additional Early Childhood course to be recommended by advisor.

B.S. EARLY CHILDHOOD EDUCATION PREKINDERGARTEN LICENSURE

This program designed for persons who have completed a B.S. degree or a B.A. degree at the secondary level.

Ed. 190 Human Relations (4)
Ed. 200 Child Growth and Development (2)
HPER 204 Personal & Community Health (3)
Ed. 412 Infancy and Early Childhood (3)
Ed. 416G Pre-Kindergarten Education (4)
Ed. 418G Nursery School Practicum (2)
Ed. 422G Socialization of the Young Child (3)
Ed. 424G Organization & Administration of Early Childhood Education (3)
Ed. 467G Student Teaching - Nursery School (8)

Note: An additional Early Childhood course recommended by the advisor.

COURSE LISTING

Courses offered on a pass/no credit basis are designated in the course description.

100 Introduction to Agricultural Education - 1 O.H.
Orientation to employment and service in agricultural education and an overview of the program of agricultural education in Minnesota.

115 Improving Reading and Study Skills - 2 O.H.
To assist students who may have problems with reading skills and to help them develop efficient habits of study to compete effectively in college level courses. Offered quarterly. P/NC Only.

150 Introductory Field Experience - 2 O.H.
A general elective teacher aide experience at a selected school level for either an introductory experience in the classroom or an additional aide experience. May be repeated once for two credits. Offered quarterly. P/NC Only.

NOTE: Persons enrolling in Ed. 150 must make schedule arrangements with the Field Experience Coordinator in the Education Department at least two weeks prior to start of quarter.

190 Human Relations - 4 O.H.
Introduction to education as a profession. Provides exposure to commonly encountered interpersonal classroom problems. Skill development in communications, group interaction, interpersonal, and problem-solving. This course is a prerequisite to other Education courses. Prerequisites: completion of English 110, English 115, and CTA 191, with a grade of C. Offered quarterly. P/NC Option.

200 Child Growth and Development - Part of Block II - 2 O.H.
Factors of growth, development of language, nature of personality development and psychomotor skills. Offered quarterly.

201 Psychology of Learning - Part of Block II - 3 O.H.
Nature of intelligence, motivation, retention, as they relate to the teaching-learning process. Offered quarterly.

202 Educational Aide Experience - Part of Block II - 2 O.H.
An extended period of actual classroom participation as an educational aide. Offered quarterly. P/NC Only.

NOTE: Persons enrolling in Ed. 202 must make schedule arrangements with the Field Experience Coordinator in the Education Department at least two weeks prior to the start of the quarter.

204 Introduction to Special Education - 1 O.H.
Orientation to the field of mental retardation including history, classifications, etiology, and school and community resources. A programmed format is used. Offered quarterly.

210 Citizens' Roles in Public and Private Education - 4 O.H.
Trends, issues, problems and practices in contemporary education to enable knowledgeable participation in educational systems as parents, taxpayers, voters and decision-makers. Offered yearly. P/NC Option.

221 Children's Literature - 4 O.H.
Literature for children of the kindergarten, primary, and intermediate grades, with principles of selection and adaptation. Oral interpretation of children's poetry and storytelling. Offered quarterly.

304 Instructional Media Technology - 3 O.H.
A basic requirement in Teacher Education. Emphasis on audiovisual methods in teaching. Offered quarterly.

306 Evaluation - Part of Block II - 3 O.H.
Behavioral objectives, basic statistics, writing test items, standardized testing, marks, and grading. Offered quarterly.

328 Teaching of Reading I - Part of Block VI - 4 O.H.
Reading readiness and decoding. Junior or Senior status required. Offered quarterly.

329 Teaching of Reading II - Part of Block VI - 4 O.H.
Reading study skills and comprehension. Junior or Senior status required. Offered quarterly.

330 Teaching of Language Arts in Elementary Grades - Part of Block VI - 2 O.H.
All aspects of encoding. Junior or Senior status required. Offered quarterly.

331 Teaching of Social Studies in Secondary Schools - 4 O.H.
Materials and methods of teaching in geography, history, and civics, including the newest textbooks, maps, pictures, and other visuals. Block II prerequisite. Offered odd-numbered fall quarters.

333 Teaching Social Studies in the Elementary Schools - 3 O.H.
Development of teaching competencies in the areas of small group instruction, guiding student inquiry and conducting inductive-discovery lessons. Completion of Block II is required. Offered quarterly.

334 Teaching Mathematics in the Elementary School - 3 O.H.
Development of teaching competencies in assessing student needs in math, presentation of math concepts and skills, and the selection and use of a variety of current math teaching materials. Prerequisite: Block II. Offered quarterly.

335 Teaching of Science and Environmental Study in the Elementary School - 4 O.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 present and content courses in elementary curricula are developed through individual and group work as well as simulated experiences. Prerequisite: Block II. Offered quarterly.

407 Curriculum and Philosophy - 3 O.H.
Educational and personal goals, philosophies and value systems as related to curriculum; school organizational patterns; law as it affects the teacher. Prerequisite: Block II. Offered quarterly.

411G Kindergarten Education - 4 O.H.
Introduction to philosophies, goals, teaching strategies, and content of kindergarten programs. Offered yearly.

412 Infancy and Early Childhood - 3 O.H.
Traces the physical, emotional, social and cognitive development of children from conception through age six. Offered yearly.

EARLY CHILDHOOD EDUCATION

416G Pre-kindergarten Education - 4 O.H.
Curriculum models and historical foundations of early childhood education are examined. Planning activities which will meet the needs of infants, toddlers, and preschoolers in an educational setting is emphasized.

418G Nursery School Practicum - 2 O.H.
Supervised observation and participation in classroom activities related to nursery school programs. Offered yearly. Taken with 416G. P/NC Only, for undergraduates.

422G Socialization of the Young Child - 3 O.H.
Examines the child in the family, parent-child relations, home-school relations, and the social issues that impact on the family.

423G Young Children with Special Needs - 3 O.H.
Prepares early childhood teachers to meet the special needs of young children with handicaps and/or developmental lags.
424G Organization and Administration of Early Childhood Education - 3 O.H.

Local and state laws governing various types of early childhood programs including (1) financial aspects, buildings, (2) personnel and administrative matters pertaining to the establishment of nursery schools, day care centers, etc. Offered yearly.

427G Remedial Reading - 3 O.H.

Survey course in the diagnosis, prognosis, and remediation of reading difficulties. Prerequisites: Education 328 and 329 or 563. Offered yearly.

429G Teaching of Reading (Secondary) - 3 O.H.

Philosophy and trends in reading instruction at the junior high and senior high levels. Offered yearly.

430G Education of the Mentally Retarded in the Elementary School - 3 O.H.

Curriculum content, materials and instructional methods designed to meet the needs of the mentally retarded in the elementary setting. (455G must be taken concurrently for P/NC Only). Offered yearly.

433G Materials and Methods in Environmental Education - 3 O.H.

Curriculum material relating to the broad topic of man's impact upon his environment, group work, field trips, consultants and lectures. Offered on demand.

434G Remedial Mathematics Methods - 3 O.H.

Diagnostic and remediation techniques to facilitate student acquisition of basic mathematics skills. Prerequisite: Ed. 334 or equivalent. Offered yearly.

450G The Teaching, Discipline and the Law - 4 O.H.

The first half of the course will be concerned with classroom management and approaches to discipline in the schools. The second half will be concerned with school laws pertaining to students and teachers. Prerequisite: Block II. Offered yearly.

455G Practicum Experience in Special Education - 2 O.H.

Supervised observation and participation in the classroom and related activities for retarded children. 430G must be taken concurrently. Offered yearly. P/NC Only, for undergraduates.

459G Education of the Mentally Retarded in the Secondary School - 3 O.H.

Materials and methods to meet the needs of the mentally retarded in the secondary setting. Philosophy, administration, vocational and personal guidance, parent consultation and work programs. 450G must be taken concurrently. Offered yearly. P/NC Only.

460 Student Teaching-Elementary School - 16 O.H.

Teaching in the senior year by students in the elementary curriculum. One full quarter (16 hours) of student teaching on a full day basis in an elementary school. Offered quarterly. P/NC Only.

461G Student Teaching-Kindergarten - 8 O.H.

Responsibilities for planning and conducting kindergarten activities under supervision. Offered quarterly. P/NC Only.

462G Practicum Experience in Special Education - Secondary - 2 O.H.

Supervised observation and participation in the classroom and related vocational and recreational activities for retarded children in a secondary school setting. Ed. 459 must be taken concurrently. Offered yearly. P/NC Only.

463 Student Teaching-Special Education - 8 O.H.

Supervised teaching in classes for educable children. Offered quarterly. P/NC Only.

464 Student Teaching-Junior High School - 16 O.H.

Teaching in the junior or senior year by students in the secondary curriculum. One full quarter (16 hours) of student teaching on a full day basis or in a junior high school. Offered quarterly. P/NC Only.

465 Student Teaching-Senior High School - 16 O.H.

Teaching in the senior year by students in the secondary curriculum. One full quarter (16 hours) of student teaching on a full day basis in a senior high school. Offered quarterly. P/NC Only.

467G Student Teaching in the Nursery School - 4 O.H.

Supervised teaching in a nursery school program. Students enroll in the 4 credit nursery school experience. P/NC Only.

470 & 473 Diagnosis and Remediation of Learning Disabilities I Practicum - 3 O.H. Each

Demonstrations and evaluation of techniques for diagnosis and remediation of learning disabilities. Prerequisites: 427, 475, 476, and 481. Offered yearly.

471 & 474 Diagnosis and Remediation of Learning Disabilities II and Practicum - 3 O.H. Each

Demonstrations and evaluation of techniques for diagnosis and remediation of learning disabilities. Prerequisites: 434, 478 and 479. Offered yearly.

475G Education of Exceptional Children and Youth - 3 O.H.

Overview of information needed to help teachers and related professions understand children of all degrees of exceptionality, with emphasis on what the regular classroom teacher can do for the exceptional child. Offered quarterly.

476G Childhood and Language Development - 3 O.H.

Theories of and recent findings in childhood language development and functions of language. A study of language disorders, assessment and methods in special education as it relates to language development. Offered yearly.

477G Education of the Gifted - 3 O.H.

Study of the gifted learner and methods and strategies that the classroom teacher can employ. Offered on demand.

478G Behavioral Change Processes in the Classroom - 3 O.H.

Psychological principles governing behavior acquisition, maintenance, and change with an emphasis on modification and contracting. Offered yearly.

479G Education of Emotionally Disturbed and Socially Maladjusted Children - 3 O.H.

Characteristics of disturbed and maladjusted children and youth and the implications of these characteristics for educational objectives, curriculum, and methods. Offered yearly.

481G Measurement and Learning Difficulties of Children and Youth - 3 O.H.

The classroom teacher's role and limitations in the identification, referral, and remediation of learning difficulties. Offered yearly.

482G Diagnosis and Remediation of Learning Disabilities - 3 O.H.

Procedures for modification of the regular classroom curriculum to meet the individual needs of students with special learning problems at early childhood, elementary, secondary, or post-secondary levels. Prerequisites: 200, 201, 202, 305, and Methods Course in Major. Offered yearly.

486G Practicum in the Gifted - 4 O.H.

Practical experience in applying concepts and strategies to teaching gifted elementary pupils. Prerequisite: 477G. Offered on demand.

488G Individualizing Instruction - 3 O.H.

Approaches to individualizing instruction and techniques required in designed effective instruction. Offered yearly.

489G Administration Principles and Procedures in Special Education - 3 O.H.

Overview of special education including finances, legislation, philosophic considerations and organizational patterns of service. Offered yearly.

490G Individual Problems in Education - 1-4 O.H.

Opportunity for the qualified advanced undergraduate and graduate student to work independently. Topic may include research, development of special projects, selected readings, etc. Time arranged. Prerequisites: Consent of major advisor; completion of the Common Professional Sequence, and for Elementary majors, completion of the elementary education sequence. May be repeated to a total of 4 credits. Offered quarterly. P/NC Only for undergraduates.

492G Practicum Trainable Mentally Retarded/Custodial Mentally Retarded - 3 O.H.

Practicum for students in the Educable Mentally Retarded program who wish to have a trainable mentally retarded background and to get experience working with custodial mentally retarded students. Prerequisites: Ed. 455, Ed. 462. Offered yearly, P/NC only for undergraduates.

499G Workshops and Seminars - 1-4 O.H.

The subject matter to be developed by the Department and instructor prior to the workshop or seminar to be offered. The student may repeat the course without limitation on the number of credits as long as the subject matter is different. Offered on demand. P/NC Only.
COURSES FOR GRADUATE STUDENTS ONLY

500 Elementary School Curriculum — 3 O.H.
Theory and philosophy underlying the modern elementary curriculum, goals and learning outcomes; curriculum construction, instructional materials, trends and challenges.

502 Secondary School Curriculum — 3 O.H.
Social, political and economic influences upon the high school curriculum. Each area in the curriculum is examined in terms of problems and trends in content and teaching practices and technology.

505 Principles of Secondary Education — 3 O.H.
To define, clarify, and organize a variety of guiding principles and to develop sound concepts of teaching in the Secondary School.

508 Critical Teaching Skills Lab — 3 O.H.
A laboratory approach to self-analysis and growth in selected teaching skills through actual micro-teaching and reteaching with video tape recording replay.

511 Advanced Methods in Reading — 3 O.H.
Foundations and/or review of current trends and research in the field of developmental reading at the Elementary and Secondary levels. (Ed. 511 is a prerequisite to Ed. 563 and Ed. 429G, if 429G is taken as a required graduate course for a reading program.)

512 Advanced Methods in Elementary Language Arts — 3 O.H.
Current trends and contemporary research related to objectives, methods, and curriculum in language arts.

513 Advanced Methods in Elementary Social Studies — 3 O.H.
Current trends and contemporary research related to objectives, methods, and curriculum in the social studies.

514 Advanced Methods in Elementary Science — 3 O.H.
An opportunity to gain familiarity with the philosophical bases, the curriculum content and materials of instruction generated by major contemporary research.

515 Advanced Methods in Elementary Mathematics — 3 O.H.
Philosophical, psychological and mathematical foundations of current mathematics curricula. Special emphasis upon the inquiry approach and the use of math labs.

517 Elementary School and Classroom Organizational Pattern — 3 O.H.
Trends in classroom organizational patterns will be investigated. Outside sources and visits will be arranged.

518 Field Experience in Elementary Classroom Procedures — 3 O.H.
A culminating experience designed to encourage a student to apply principles and procedures learned during his graduate program. Students should take the course during the latter part of their program.

522 Historical Foundations of Education — 3 O.H.
Study of development of thought and practice in education to the present time, great movements, and individual leaders in education.

523 Philosophy of Education — 3 O.H.
A study of philosophies of education and their influence on American education.

530-531 Diagnosis and Remediation of Learning and Disabilities I and Practicum — 3 O.H. Each
Demonstration and evaluation of techniques for diagnosis and remediation of learning disabilities. Prerequisites: 427G, or 563, and 475G, 476G, 481G.

532-533 Diagnosis and Remediation of Learning Disabilities II and Practicum — 3 O.H. Each

538 School and Community Relations for Schools - 3 O.H.
Practices and procedures to be used in developing mutual understanding between patrons and professionals in local schools.

540 Current Educational Issues — 3 O.H.
Study of the recognized current issues and trends in education.

545 Problems in Child Development — 3 O.H.
Application of the biological and behavioral sciences to the varied aspects of child growth. Factors promoting or retarding the development of vitality, personality, intelligence, vocabulary and moral standards.

563 Basic Concepts in Remedial Reading — 3 O.H.
A survey course designed to introduce the experienced teacher to the nature and causes of reading disabilities. A foundation is established for diagnosis, prognosis, and therapy. (Ed. 511 Advanced Methods in Reading is a prerequisite).

564 Tests and Measurements in Remedial Reading — 3 O.H.
Principles and techniques of identifying legitimate remedial reading cases, etiological diagnosis and casual factors and the therapeutic diagnosis of casual factors and the therapeutic diagnosis of remedial difficulties.

565 Remedial Reading Methods and Media — 3 O.H.
Principles, techniques, and materials in the correction of reading problems. Prerequisite: 563.

566 Reading Practicum (Elementary or Secondary) — 8 O.H.
Classroom experience in diagnosing reading difficulties and giving individual and group help to students (Elementary or Secondary) with reading disabilities. Prerequisite: Ed. 563, 564, 565, plus Ed. 429G for Secondary Reading Practicum. (Ed. 511 Advanced Methods in Reading is a prerequisite to Ed. 563 and Ed. 429G, if 429G is taken as a required graduate course for a reading program.)

567 Administration and Supervision of Reading Programs — 3 O.H.
Current theory in the field of reading and the obligations of the administrator and/or supervisor of reading programs.

568 Field Experiences in Administration and Supervision of Reading Programs — 4 O.H.
(Phase I — 2 O.H.) The student will be required to supervise a remedial reading center under the supervision of a college instructor.
(Phase II — 2 O.H.) The student will be required to assume a role of a reading administrator and/or a reading supervisor on an overload basis in a school system. Prerequisites: Remedial Reading Certification and Ed. 567. Offered by arrangement.

571 Supervision of Student Teaching — 3 O.H.
A critical analysis of the procedures and policies practiced by supervising teachers in working with either elementary or secondary student teachers.

599 Master's Thesis — 6 O.H.
The report must show evidence of the candidate's ability to carry an independent study and to employ scientific methods and procedures in the solution of a problem in the area of the student's field of concentrations.

Educational Administration

Gildemeister Hall Room 135 / 457-5345
Nastrom (Chairperson), Walden. Adjunct Professors: Johnson, Mjoelness, Strand, Weiss.
The department provides programs leading to the degrees of Master of Science and Specialist in Educational Administration, and to the Sixth Year Certificate in Educational Administration. The Specialist Degree or the Sixth Year Certificate may emphasize general administration, elementary administration or secondary administration.

In Minnesota, students who receive a degree or certificate in elementary or secondary administration will be qualified, with the recommendation of the university, to secure an administrative entrance license for the positions of school principal or assistant school principal in areas of their emphasis if they have had three years of teaching experience while holding licenses valid for the position or positions in which the experience was gained. Elementary school principals must have at least three years of teaching experience at the elementary level, and secondary school principals must have at least three years of teaching experience at the secondary level. Students who receive a Specialist Degree or Sixth Year Certificate in general administration...
SPECIALIST DEGREE PROGRAM

Candidates must earn a minimum of ninety-three (93) graduate credits beyond the Bachelor's Degree which have been approved by their Graduate Committee.

MAJOR FIELD COURSES (48 O.H.)

1. Required of all candidates:
   - Ed.Adm. 504 Curriculum Development and Administration (3)
   - Ed.Adm. 510 School Law (3)
   - Ed.Adm. 527 School Business Management (3)
   - Ed.Adm. 528 Personnel Administration in Education (3)
   - Ed.Adm. 535 Public Relations for Management (3)
   - Ed.Adm. 578 Supervision of Instruction (3)
   - Ed.Adm. 580 Foundations of Educational Administrations (3)
   - Ed.Adm. 583 School Finance (3)
   - Ed.Adm. 604 Seminar in Curriculum and Supervision (3)
   - Ed.Adm. 608 Seminar in Problems and Trends of Educational Administration (3)
   - Ed.Adm. 680 Practicum in Educational Administration (9) OR
   - Ed.Adm. 681 Internship in Educational Administration (9)

NOTE: Ed.Adm. 680 or 681 may be waived if the candidate has had appropriate experience. Certain 495G or 610 courses may substitute for Ed.Adm. 527.

2. Required of candidates specializing in Elementary Administration:
   - Ed.Adm. 524 Elementary School Management (3)

3. Required of candidates specializing in Secondary Administration
   - Ed.Adm. 520 Secondary School Management (3)

4. Required of candidates specializing in General Administration
   - Ed.Adm. 520 Secondary School Management (3)
   - Ed.Adm. 524 Elementary School Management (3)
   - Ed.Adm. 552 Planning of School Facilities (3)

ELECTIVES IN EDUCATIONAL ADMINISTRATION (6-15 O.H.)

Courses at 600, 500 and 400G levels.

RESEARCH COURSES (15 O.H.)

Required of all candidates:
   - Ed.Adm. 526 Educational Measurement & Evaluation (3)
   - Ed.Adm. 570 Research and Writing (3)

REQUIRED FIELD STUDY (9 O.H.)

Ed.Adm. 699 Specialist Degree Field Study (9)

RELATED EDUCATION COURSES (9-21 O.H.)

Graduate level courses

COGNATE COURSES (9-21 O.H.)

Graduate level courses

COMPREHENSIVE EXAMINATIONS

Candidates will be required to pass written comprehensive examinations during the quarter they expect to graduate. The examinations will emphasize the area of specialization.

FIELD STUDY

Candidates will submit four copies of an approved field study to the Office of Graduates Studies.

ORAL EXAMINATION

Candidates will present a satisfactory oral defense of their field study to their committee.

SIXTH YEAR CERTIFICATE PROGRAM

Candidates must earn a minimum of ninety-three (93) credits beyond the Bachelor's degree, including at least forty-five (45) units beyond the master's degree.

MAJOR FIELD COURSES (48-60 O.H.)

1. Required of all candidates:
   - Ed.Adm. 504 Curriculum Development and Administration (3)
   - Ed.Adm. 510 School Law (3)
   - Ed.Adm. 527 School Business Management (3)
   - Ed.Adm. 528 Personnel Administration in Education (3)
   - Ed.Adm. 578 Supervision of Instruction (3)
   - Ed.Adm. 580 Foundations of Educational Administrations (3)
   - Ed.Adm. 583 School Finance (3)
   - Ed.Adm. 604 Seminar in Curriculum and Supervision (3)
   - Ed.Adm. 608 Seminar in Problems and Trends of Educational Administration (3)
   - Ed.Adm. 680 Practicum in Educational Administration (9) OR
   - Ed.Adm. 681 Internship in Educational Administration (9)

NOTE: Ed.Adm. 680 or 681 may be waived if the candidate has had appropriate experience. Certain 495G and 610 courses may substitute for Ed.Adm. 527.

2. Required of candidates specializing in Elementary Administration:
   - Ed.Adm. 524 Elementary School Management (3)

3. Required of candidates specializing in Secondary Administration
   - Ed.Adm. 520 Secondary School Management (3)

4. Required of candidates specializing in General Administration
   - Ed.Adm. 520 Secondary School Management (3)
   - Ed.Adm. 524 Elementary School Management (3)
   - Ed.Adm. 552 Planning of School Facilities (3)

ELECTIVES IN EDUCATIONAL ADMINISTRATION (6-15 O.H.)

Courses at 600, 500 and 400G levels.

RESEARCH COURSES (15 O.H.)

Required of all candidates:
   - Ed.Adm. 526 Educational Measurement & Evaluation (3)
   - Ed.Adm. 570 Research and Writing (3)

REQUIRED FIELD STUDY (9 O.H.)

Ed.Adm. 699 Specialist Degree Field Study (9)

RELATED EDUCATION COURSES (9-21 O.H.)

Graduate level courses

COGNATE COURSES (9-21 O.H.)

Graduate level courses

NOTE: Ed.Adm. 680 and 681 may be waived if the candidate has had appropriate experience. Certain 495G and 610 courses may substitute for Ed.Adm. 527.

2. Required of candidates specializing in Elementary Administration:
   - Ed.Adm. 524 Elementary School Management (3)

3. Required of candidates specializing in Secondary Administration
   - Ed.Adm. 520 Secondary School Management (3)

4. Required of candidates specializing in General Administration
   - Ed.Adm. 520 Secondary School Management (3)
   - Ed.Adm. 524 Elementary School Management (3)
   - Ed.Adm. 552 Planning of School Facilities (3)
ELECTIVES IN EDUCATIONAL ADMINISTRATION (6-15 O.H.)
Courses at 600, 500 and 400G levels only.

RESEARCH COURSES (9-15 O.H.)
Required of all candidates:
Ed.Adm. 526 Educational Measurement & Evaluation (3)
Ed.Adm. 570 Research and Writing (3)

RELATED EDUCATION COURSES (9-21 O.H.)
Graduate level courses

COGNATE COURSES (9-21 O.H.)
Graduate level courses

MASTERS DEGREE PROGRAM

COURSE REQUIREMENTS
1. Candidates must earn a minimum of forty-eight (48) graduate credits approved by their advisor.
2. Candidates must meet the professional education requirements as listed in this bulletin.

MAJOR FIELD COURSES (24 O.H.)
1. Required of all candidates:
   Ed.Adm. 504 Curriculum Development and Administration (3)
   Ed.Adm. 510 School Law (3)
   Ed.Adm. 528 Personnel Administration (3)
   Ed.Adm. 535 Public Relations (3)
   Ed.Adm. 578 Supervision of Instruction (3)
   Ed.Adm. 580 Foundations of Educational Administration (3)
   Ed.Adm. 583 School Finance (3)
2. Required of candidates specializing in Elementary School Administration:
   Ed.Adm. 524 Elementary School Management (3)
3. Required of candidates specializing in Secondary School Administration:
   Ed.Adm. 520 Secondary School Management (3)

RESEARCH COURSES (6 O.H.)
Required of all candidates:
Ed.Adm. 526 Educational Measurement & Evaluation (3)
Ed.Adm. 570 Research and Writing (3)

 ELECTIVES (6-12 O.H.)
Graduate level courses in Educational Administration or related education areas. Students seeking certification as principals in Wisconsin must include Ed.Adm. 680 (3 O.H.).

COGNATE COURSES (6-12 O.H.)
Graduate level courses

WRITING REQUIREMENTS
With thesis: Candidates must complete a thesis for six (6) credits, demonstrating their ability to use scientific methods and procedures in the solution of an independent study project in the area of school administration. The six credits will be applied to administration course requirements in Major Field Courses.
Without thesis: Candidates must write one comprehensive paper to show proficiency in research and writing at the graduate level. The topic for this paper must be applicable to educational administration courses listed under Major Field Courses and must be approved by the faculty advisor. Guides for the form and style may be secured from the Department of Educational Administration.

EXAMINATIONS
With thesis: Each candidate must pass a comprehensive written examination and an oral examination on the thesis paper.
Without thesis: Each candidate must pass a comprehensive written examination and may be required to pass a final oral examination.
Note: The student should secure a copy of the Educational Administration Department's guidelines for the Master of Science in Education Degree.

COURSE LISTINGS

495G Special Topics - 1-3 O.H.
The department arranges specific subject matter. Offered yearly. P/NC Option.

COURSES FOR GRADUATE STUDENTS ONLY

503 The Junior High School and Middle School - 3 O.H.
Purpose, organization, and administration of the schools for the middle years.

504 Curriculum Development and Administration - 3 O.H.
The K-12 curriculum, including a review of historical development and an analysis of conditions affecting change.

510 School Law - 3 O.H.
Laws affecting education.

520 Secondary School Management - 3 O.H.
Roles and responsibilities of secondary school principals in relation to students, staff and community. Special attention to scheduling.

524 Elementary School Management - 3 O.H.
Roles and responsibilities of the elementary school principal in relation to students, staff and community.

525 Educational Statistics - 3 O.H.
An introduction to statistics with emphasis on the analysis of data as a means of improving decision-making. Fundamentals of descriptive and inferential statistics including hypothesis testing procedures.

526 Educational Measurement and Evaluation - 3 O.H.
The use of measurement and evaluation in educational decision-making. Emphasis on use and interpretation of tests.

527 School Business Management - 3 O.H.
Business management activities, including procedures for budgeting and accounting.

528 Personnel Administration in Education - 3 O.H.
The nature and scope of the personnel function, with special attention to major current issues.

530 Collective Bargaining in Education - 3 O.H.
The development, process and impact of collective bargaining at K-14 level. Practice in simulated bargaining sessions.

535 Public Relations for Management - 3 O.H.
Purpose, techniques and problems of school-community relations.

552 Planning of School Facilities - 3 O.H.
Procedures for solving facilities problems, with emphasis on techniques for developing and securing technical information.

556 Administrative Decision-Making - 3 O.H.
Application of decision-making processes utilizing simulation, role play, case studies and decision groups.

570 Research and Writing - 3 O.H.
Form, style and appropriate research procedures in education.

578 Supervision of Instruction - 3 O.H.
Improvement of the total teaching-learning process with emphasis on organizations, human behavior and instructional leadership.

580 Foundations of Educational Administration - 3 O.H.
The organization and governance of American education.

583 School Finance - 3 O.H.
Financing education, including current policies, sources of revenue, and trends in fiscal structure and operation.

590D Individual Research - 1-4 O.H.
Conducting and reporting research under the supervision of a member of the educational administration staff. Prerequisite: Consent of the student's advisor.

599 Master's Thesis - 6 O.H.
Must show candidate's ability to employ scientific methods and procedures in an independent study in his/her field of concentration.

604 Seminar in Curriculum and Supervision - 3 O.H.
Emphasis on developing a personal philosophy of curriculum and supervision in the total teaching-learning process. Prerequisites: 578 and 504 or equivalent.

608 Seminar in Problems and Trends - 3 O.H.
Within the context of needs of individual students, a review of the practical application of administrative theories. Prerequisite: Four courses in Educational Administration.

610 Workshop in School Administration - 1-3 O.H.
Topics vary according to needs of interested administrators and students. P/NC Option.

680 Practicum in Educational Administration - 3-9 O.H.
The student will function in an administra-
The Department of English is concerned with the English language as art and as communication. At the lower academic levels, courses are designed to help you acquire competence in reading and writing, in thinking critically, and in understanding and responding to aesthetic values. At the upper levels, the emphasis shifts increasingly to sophisticated forms of writing.

B.A. MAJOR

72 Q.H.

(Minor not required)

Students majoring in English should complete the lower-division requirements in English before registering for courses in the upper-division.

REQUIRED ENGLISH COURSES (44 Q.H.)

Note: Only one course in the English novel and one course in the American novel may be counted as part of the specified requirements. Other novel courses will be counted as electives.

201 Literary Studies: An Introduction (4)

210 Advanced Expository Writing I (4) OR

310 Story Writing (4) OR

312 Writing Poetry (4)

223 Classical Mythology (4) OR

224 The Bible as Literature (4)

405 Chaucer (4)

414 Shakespeare: Comedies and Histories (4) OR

417 Shakespeare: Tragedies (4)

418 Language and Style (4) OR

420 Varieties of English (4)

447 Modern Literary Criticism (4) OR

448 History of Criticism (4)

330 English Novel I (4) OR

406 Studies in 16th Century Literature (4) OR

407 Studies in 17th Century Literature (4) OR

445 Studies in 18th Century Literature (4)

331 English Novel II (4) OR

435 Literature of the Romantic Era (4) OR

437 Victorian Literature (4)

315 American Novel I (4) OR

351 American Literature I (4) OR

352 American Literature II (4) OR

422 Emerson and Thoreau (4)

316 American Novel II (4) OR

424 Modern Drama (4) OR

425 Modern British and American Prose (4) OR

432 European Masterpieces in Translation (4) OR

450 Modern British and American Poetry (4)

ELECTIVES IN ENGLISH (28 Q.H.)

Electives must be taken in courses above the 100 level including at least sixteen hours in courses numbered 300 or above. (Note: English 250 may be counted only once.)

B.A. MAJOR

WITH EMPHASIS IN WRITING

71-72 Q.H.

REQUIRED WRITING COURSES (31-32 Q.H.)

Eng. 201 Literary Studies: An Introduction (4)

Eng. 210 Advanced Expository Writing I (4)

Eng. 310 Story Writing (4) OR

Eng. 312 Writing Poetry (4)

MCOM 215 Beginning Reporting (4)

MCOM 217 Advanced Reporiting (4)

MCOM 337 Specialized Reporting (4) OR

BEOA 332 Business Report Writing (3)

Eng. 418 Language and Style (4)

Eng. 439 Technical Writing (4) OR

Eng. 449 Scientific Writing (4)

Other Required English Courses (12 Q.H.)

Eng. 224 The Bible as Literature (4)

Eng. 405 Chaucer (4) OR

Eng. 414 Shakespeare: Comedies and Histories (4) OR

Eng. 417 Shakespeare: Tragedies (4)

Eng. 425 Modern British and American Prose (4)

Eng. 450 Modern British and American Poetry (4)

Electives may be counted as part of the specified requirements. Other novel courses will be counted as electives.

201 Literary Studies: An Introduction (4)

400 Teaching Literature to Young Adults (4)

405 Chaucer (4)

411 Teaching Language and Composition (4)

414 Shakespeare: Comedies and Histories (4) OR

417 Shakespeare: Tragedies (4)

418 Language and Style (4) OR

420 Varieties of English (4)

447 Modern Literary Criticism (4) OR

448 History of Criticism (4)

330 English Novel I (4) OR

406 Studies in 16th Century Literature (4) OR

407 Studies in 17th Century Literature (4) OR

445 Studies in 18th Century Literature (4)

331 English Novel II (4) OR

435 Literature of the Romantic Era (4) OR

437 Victorian Literature (4)

315 American Novel I (4) OR

351 American Literature I (4) OR

352 American Literature II (4) OR

422 Emerson and Thoreau (4)

B.S. MAJOR

72 Q.H. (TEACHING)

(Minor not required)

Students majoring in English should complete the lower-division requirements in English before registering for courses in the upper-division.

REQUIRED ENGLISH COURSES (48 Q.H.)

Note: Only one course in the English novel and one course in the American novel may be counted as part of the specified requirements. Other novel courses will be counted as electives.

201 Literary Studies: An Introduction (4)

210 Advanced Expository Writing I (4)

400 Teaching Literature to Young Adults (4)

405 Chaucer (4)

411 Teaching Language and Composition (4)

414 Shakespeare: Comedies and Histories (4) OR

417 Shakespeare: Tragedies (4)

418 Language and Style (4) OR

420 Varieties of English (4)

447 Modern Literary Criticism (4) OR

448 History of Criticism (4)

330 English Novel I (4) OR

406 Studies in 16th Century Literature (4) OR

407 Studies in 17th Century Literature (4) OR

445 Studies in 18th Century Literature (4)

331 English Novel II (4) OR

435 Literature of the Romantic Era (4) OR

437 Victorian Literature (4)

315 American Novel I (4) OR

351 American Literature I (4) OR

352 American Literature II (4) OR

422 Emerson and Thoreau (4)
### Required English Courses (20 Q.H.)

- **Eng. 351 American Literature I** (4)
- **Eng. 449 Scientific Writing** (4)
- **Eng. 310 Story Writing** (4) OR
  - **Eng. 439 Technical Writing** (4) OR
  - **Eng. 418 Language and Style** (4)
- **MCOM 215 Beginning Reporting** (4)

Electives must be taken above the freshman level and may include only one of the following courses:
- Eng. 250 or Humanities 305.

Except in unusual circumstances, the English Department will recommend for student teaching only those students who have at least a 2.50 grade point average in all major courses and who have completed, with no less than a 3.00 grade point average, the following: Eng. 201, 210, and 411.

### B.A. Minor

**36 Q.H.**

Students minoring in English should complete the lower-division requirements in English before registering for courses in the upper-division.

### Master of Science

#### WITH THESIS (45 HOURS)

- **English Electives (25)**
- **English Electives (13)**
- **Thesis (6)**

#### WITHOUT THESIS (51 HOURS)

- **English Electives (25)**
  - Three "Approved" Papers
  - *This requirement will be waived if you have taken an equivalent course as an undergraduate.

### Master of Arts

#### WITH DEPARTMENT REQUIREMENTS:

- **See Department of English "Requirements for the M.S." for complete details of the program.**
- **The written permission of the Department of English is required before you may apply to take the terminal examination required for the degree.**

#### PREREQUISITES:

1. An undergraduate major in English equivalent to that required by Winona State University. (In the event that one or more requirements for the under-
graduate English major have not been met prior to admission to Winona State University, these may be made up after admission, but you will not be admitted to candidacy for the M.A. degree until all undergraduate requirements have been fulfilled.)

2. A "B" average (or 3.00 average figured on a basis of 4.00 for "A") in undergraduate English courses.

3. The Graduate Record Examination Aptitude Test. Although the Graduate Record Examination Advanced Test: Literature in English is not normally required, you may be required to take it if your undergraduate major was not English or if your undergraduate G.P.A. was below 3.00. Cases of these sorts will be decided on an individual basis by the departmental Graduate Studies Committee.

REQUIREMENTS (20 HOURS)

One 500-level seminar in English or American literature (4)

English 447G and 448G* (8)

English 418G and 420G* (8)

The courses will be waived if you have taken equivalent courses as an undergraduate.

PLAN A - THESIS (45 HOURS)

English Electives (10)

Thesis (maximum) (6)

Non-English Electives (maximum) (9)

PLAN B - NON-THESIS (45 HOURS)

English Electives (16)

Non-English Electives (maximum) (9)

Three "Approved" Papers

SPECIAL DEPARTMENTAL REQUIREMENTS

See Department of English "Requirements for the M.A. in English" for complete details of the program.

The written permission of the Department of English is required before you may apply to take the terminal examination required for the degree.

COURSE LISTINGS

NO courses in the Department except internships are open to declared English majors or minors on a pass/no credit basis.

ANY course in the Department except 108, 110 and 115 may be taken on a pass/no credit basis by a student who is not a declared English major or minor.

105 Publications - 1-4 Q.H.

A laboratory course involving projects in college publications or information services. Consent of Head of Department of English required. Must be arranged well in advance of registration period. Course may be repeated for a maximum of eight hours credit. No prerequisites: Offered quarterly.

106 English for Non-Native Speakers - 4 Q.H.

Intensive advanced drill in speaking, reading, and writing English. Designed to prepare the non-native speaker for English 110. Course may be repeated for a maximum of eight hours credit. Offered yearly.

108 Introduction to College Writing - 4 Q.H.

Intensive writing practice with special focus on the fundamentals of sentence and paragraph structure. Offered quarterly.

110 Freshman Composition I - 4 Q.H.

The fundamentals of narrative, descriptive and expository writing based on reading or personal experience. Systematic work with English grammar, mechanics, and style. Prerequisite for English 115. Offered quarterly.

115 Freshman Composition II - 4 Q.H.

Continuation of 110 with a stress on analytical and persuasive writing, research, and the documentation of supporting evidence. Prerequisite: 110. Offered quarterly.

121 Major British and American Fiction - 4 Q.H.


122 Major British and American Drama - 4 Q.H.

Emphasis on the careful reading of a limited number of landmark British and American plays from Shakespeare to the present and from tragedy to musical comedy. Offered yearly. P/NC Option.

123 Major British and American Poetry - 4 Q.H.

An introductory study of the poetry of a selected number of significant British and American poets. Offered yearly. P/NC Option.

131 Masterpieces of American Literature - 4 Q.H.

An introduction to major works by great American writers, including works of all forms, and of both the pre-Twentieth Century and modern periods. Offered Yearly. P/NC Option.

132 Masterpieces of European Literature in Translation - 4 Q.H.

An introduction to the literature of modern Europe, in translation. Offered yearly. P/NC Option.

151 American Indian Literature - 4 Q.H.

A study of the prose, poetry, ritual, art and cultural forces, and personal narratives of American Indians in a historical and literary context, and the relationship of the literature to modern periods. Offered Yearly. P/NC Option.

153 American Indian Literature II - 4 Q.H.

A study of the prose, poetry, ritual, art and cultural forces, and personal narratives of American Indians in a historical and literary context, and the relationship of the literature to modern periods. Offered Yearly. P/NC Option.

201 Literary Studies: An Introduction - 4 Q.H.

An introduction to the advanced study of British and American literature. The course includes an introduction to criticism, to the study of literary history, to prosody and the study of prose styles, and to the use of library material particularly important for the literary student. Prerequisites: 110 and 115. Offered twice yearly.

210 Advanced Expository Writing - 4 Q.H.

An advanced course in writing essays, stressing the development of a mature writing style and evaluative abilities. Prerequisites: 110, and 115. Offered yearly. P/NC Option.

223 Classical Mythology - 4 Q.H.

The great myths of ancient Greece and Rome as they appear in classical literature. Prerequisites: 110 and 115. Offered yearly. P/NC Option.

224 The Bible as Literature - 4 Q.H.

The King James version of the Bible as work of literature, and as an influence on British and American writers. Prerequisites: 110 and 115. Offered yearly. P/NC Option.

250 Popular Literature - 4 Q.H.

A study of works that have broad popular appeal. No prerequisites: Offered yearly.

310 Story Writing - 4 Q.H.

Study and practice in the techniques and forms of fiction writing. Prerequisites: 110 and 115. Offered yearly.

312 Writing Poetry - 4 Q.H.

This course is designed to help students express themselves in poetry. Emphasis is on the techniques of writing poetry as applicable to poems students themselves write. Prerequisites: 110 and 115. Offered every other year. P/NC Option.

315 American Novel I - 4 Q.H.

The beginnings to the late nineteenth century. Prerequisites: 110 and 115. Offered every other year. P/NC Option.

320 American Novel II - 4 Q.H.

The development of the American novel from its origins to the end of the eighteenth century. Prerequisites: 110 and 115. Offered every other year. P/NC Option.

331 American Novel III - 4 Q.H.

The development of the American novel from the Romantic period to the end of the nineteenth century. Prerequisites: 110 and 115. Offered every other year. P/NC Option.

351 American Literature I - 4 Q.H.

The beginning to the Civil War. Not a prerequisite for English 352. Prerequisites: 110 and 115. Offered yearly. P/NC Option.

352 American Literature II - 4 Q.H.

The Civil War to modern times. Prerequisites: 110 and 115. Offered yearly.

399 Internship - 1-16 Q.H.

Supervised, practical experience in a wide variety of fields. Prerequisites: 110 and 115. Offered quarterly. P/NC Only.

400G Teaching Literature to Young Adults - 4 Q.H.

A study of literature appropriate for use in junior and senior high schools, and of effective methods for presenting this literature to secondary school students. Prerequisites: 110 and 115. Offered yearly.

405G Chaucer - 4 Q.H.

The Canterbury Tales. Prerequisites: 110 and 115. Offered yearly.

406G Studies in Sixteenth Century Literature - 4 Q.H.

Non-dramatic literature of the Tudor period. Prerequisites: 110 and 115. Offered every other year.

407G Studies in Seventeenth Century Literature - 4 Q.H.

Non-dramatic literature of the seventeenth century. Prerequisites: 110 and 115. Offered every other year.
Foreign Languages

Sonne Hall, Room 301 / 457-5165
Maur, Chairperson, German-French-Polish; Steigwaid, German-Spanish-French

Departmental offerings are designed to develop proficiency in understanding, speaking, reading, and writing a second language, as well as an appreciation of the respective culture, so that students who complement other occupational skills with a knowledge of a foreign language may enhance their chances of employment with multi-national corporations, governmental agencies, and humanitarian organizations.

The following on campus study options are provided:

a) Complete B.A. major and minor program in German
b) Elementary French
c) Elementary and Intermediate Spanish
d) Spoken Norwegian
e) Occasional courses in Polish and Arabic

NOTE: Under a special Tri-College Program Winona State University students can complete major and minor requirements in Spanish and French or complete teacher licensure requirements in foreign languages at local private colleges. For details, contact the department chairperson.

Placement and Credit for Previous Language Study

Students who studied foreign languages in high school are encouraged to enroll in WSU classes that are beyond the beginner's level. Generally, two years of foreign language study in high school corresponds to the needs of the individual student. Offered by previous arrangement only. The consent of the instructor is required. Prerequisites: 110 and 115. Offered quarterly.
STUDY ABROAD

WSU students who wish to immerse themselves in a foreign culture and language or for one or two or three academic quarters, have the following options for credit:
1) study in Germany, France or Spain — "Common Market" arrangement with St. Cloud State University.
2) study in Mexico — "Common Market" arrangement with Mankato State University.

B.A. MAJOR
GERMAN
40 Q.H.

REQUIRED COURSES (40 Q.H.)
320 Readings and Syntax (4)
322 German Civilization and Culture (4)
325 German Short Story (4)
332 Conversation and Composition (4)
333 Advanced Conversation and Composition (4)
335 Contemporary Topics in the German Press (4)
370 Lyrics, Ballads, Folk Songs (4)
410 Periods of German Literature I (4)
411 Periods of German Literature II (4)
450 Individual Author(s) (4)

B.A. MINOR
GERMAN
24 Q.H.

Same as Major except delete 325, 333, 370 and 450.

COURSE LISTINGS

All courses in the department may be taken on a pass/no credit basis except for those taken to fulfill major or minor requirements. Elementary and intermediate courses (110, 111, 112, 213, and 214) do not constitute part of the major or minor — qualified students are encouraged to "test out" of any of these courses and earn Credit By Examination.

ELECTIVE COURSES

Elective Courses — offered in English, no prerequisites
350 Germania, USA

GENERAL

200 Exploratory Foreign Language—2 Q.H.
Presentation of French, German and Spanish alphabets, common expressions, idiomatic phrases, proverbs, geographic and personal names in a comparative way; discussion of grammatical features and cultural aspects so that participants may decide which of the three most commonly taught foreign languages might be best suited for them. Offered yearly. P/NC Option.

209 Foreign Language for Travelers—1-4 Q.H.
Useful words and phrases in the target language are presented, discussed, and practiced to help beginning and slightly advanced participants prepare for real or various overseas experiences related to customs clearance, shopping, eating out, sightseeing, hotel reservations, auto rental or repairs, medical consultations and other situations travelers may need to deal with. Cultural and historical glimpses of countries in which the language is spoken will also be provided with the help of audiovisual aids. Course may be repeated with different language covered. Offered yearly. P/NC Option.

220 Applied Foreign Language — 1-4 Q.H.
Variable topics are offered periodically such as the following: Practical Spanish for Medical Personnel, French for Business, German for Business, Scientific French, Scientific German, Scientific Russian, Practical Arabic, Introductory Polish, etc. May be repeated with different topic covered. Offered on demand and on availability of qualified instructor. P/NC Option.

FRENCH

110 Elementary French I — 4 Q.H.
Introductory French for students with little or no prior French training. Instruction in speaking, listening, reading, and writing through classroom drill and language lab work. Prerequisite: None. Offered yearly.

111 Elementary French II — 4 Q.H.
Continuation of 110. Prerequisite: 110 or one year of high school French or equivalent. Offered yearly.

112 Elementary French III — 4 Q.H.
Continuation of 111. Prerequisites: 110 or two years of high school French or equivalent. Offered yearly.

213 Intermediate French I — 4 Q.H.
Further development of communication skills. Study of grammar essential to skills. Selected readings in French. Prerequisites: 112 or equivalent of three years of high school French.

214 Intermediate French II — 4 Q.H.
Further development of communication skills. Study of grammar essential to skills. Selected readings in French. Prerequisite: 213 or equivalent of four years of high school French.

215 Intermediate French III — 4 Q.H.
Continuation of 214. Prerequisite: 214 or equivalent. Offered yearly.

230 German Civilization and Culture — 4 Q.H.
The German way of life from past to present, with glimpses of regional differences. Prerequisite: 214 or equivalent. Offered every other year.

250 Origins and Development of German Culture — 4 Q.H.
An overview of German culture from Indo-European beginnings to the present with special emphasis on the advantages and disadvantages of the major periods and movements as they related to developments elsewhere. Offered every other year. P/NC Option.

320 German Readings and Syntax — 4 Q.H.
Readings in German with stress on development of advanced reading skill, special emphasis on particular problems in reading different kinds of writings. In addition to language majors, this course serves bilingual secretaries, correspondents, international business or marketing experts, bankers, science and technical majors, etc. Prerequisite: 214 or equivalent. Offered every other year.

322 German Civilization and Culture — 4 Q.H.
The German way of life from past to present, with glimpses of regional differences. Prerequisite: None. Offered yearly.

325 The German Short Story — 4 Q.H.
Selected German short stories and novels will be read and discussed in terms of content, structure, literary significance, and applicability in today's world. Prerequisite: 214 or equivalent. Offered every other year.

333 Advanced Conversation and Composition — 4 Q.H.
A continuation of 332. German composition with work in stylistics, including common formalized expressions used in letter writing. In addition to German majors and minors, bilingual business and science majors will find this course helpful. Prerequisite: 332 or equivalent. Offered every other year.

335 Contemporary Topics in German Press — 4 Q.H.
Topics of concern to Germans today are discussed on the basis of articles that have appeared in German newspapers. Prerequisite: 214 or equivalent. Offered: Every other year.

350 Germania, USA — 4 Q.H.
A contrastive analysis of the linguistic, sociological, cultural, economic and political impact of German immigrants to the United States, as compared to German minorities in East-Central Europe. Prerequisite: None, since the textbooks and the discussions are in English.
Geography

See Sociology. Text and course listings at end of Sociology.

Geology

Pasteur Hall, Room 114B / 457-5260
Nielsen (Chairperson), Bayer, Donovan, Meyers.

The department offers the Bachelor of Science program for prospective teachers of earth science and the Bachelor of Science program for students planning on graduate studies and professional careers in geology. The department aims to provide a sound understanding of the principles and processes of geology. Field excursions as well as practical laboratory experience are an integral part of most courses.

Majors will pursue studies enriched with the closely related disciplines of chemistry, mathematics, and physics. Students preparing for teaching will also take courses in astronomy, meteorology and biology.

B.S. MAJOR
EARTH SCIENCE
94 Q.H. (TEACHING)

(No minor required)

REQUIRED GEOLOGY COURSES (34 Q.H.)
116 Physical Geology (5)
208 Botany I (5) OR 320 Igneous & Metamorphic Petrology (4)
210 Zoology I (5) OR 321 Sedimentary Petrology II (4)
211 Zoology II (4)

117 Historical Geology (5)
220 Astronomy I (4)
221 Astronomy II (4)
230 Meteorology (4)
250 Mineralogy I (4)
251 Mineralogy II (4)
320 Igneous & Metamorphic Petrology (4)

ELECTIVES IN GEOLOGY (10 Q.H.)
REQUIRED CHEMISTRY COURSES (10 Q.H.)
212 General Inorganic Chemistry I (5)
213 General Inorganic Chemistry II (5)

REQUIRED PHYSICS COURSES (12 Q.H.)
201 General Physics I (4)
202 General Physics II (4)
203 General Physics III (4)

REQUIRED COURSES
Mathematics (12)
215 College Algebra (4)
216 Trigonometry (4)
208 Fundamentals of Statistics (4) OR 231 Introduction to FORTRAN (4)

REQUIRED COURSES
Biology (8-10)
207 Botany I (5) OR 320 Igneous & Metamorphic Petrology (4)
208 Botany II (4)
210 Zoology I (5) OR 321 Sedimentary Petrology II (4)
211 Zoology II (4)

Chemistry
311 Teaching of Physical Science in the Secondary Schools (4) AND Biology
442 Philosophy of Science (4) OR Philosophy
273 Philosophy of Technics, Economics, and Culture (4)

CERTIFICATION REQUIREMENTS FOR EARTH SCIENCE
Other Requirements
Biology 104 or 204 (4 Q.H.)
Biological Science (2-4 or more Q.H.)
Chemistry (2 more Q.H.)

B.S. MAJOR
GEOL OGY

REQUIRED CORE COURSES (39 Q.H.)
116 Physical Geology (5)
117 Historical Geology (5)
250, 251 Mineralogy I, II (8)
316 Geomorphology (4)
320 Igneous and Metamorphic Petrology (4)
321 Sedimentary Petrology II (4)
350 Invertebrate Paleontology (4)
380 Structural Geology (4)
475 Earth Science Seminar (1)
OPTION A (MINOR REQUIRED)
87 Q.H.

REQUIRED CORE COURSES (39 Q.H.)

ELECTIVES (8 Q.H.)
Select from the following list:
200 Oceanography (4)
325 Geology and Land-Use Planning (4)
330 Quaternary and Glacial Geology (4)
370 Photogeology (4)
385 Regional Geology (4)
400 Individual Problems (1-4)
405 Geology of Minnesota (4)
410 Economic Geology (4)
414 Sedimentology (4)
415 Stratigraphy (4)
420 Stream and Groundwater Geology (4)
425 Geophysics (4)
426 Water Resources (4)
430 Geochemistry (4)
431 Surface Geology (4)
435 Geological Field Techniques (4)

ADDITIONAL REQUIREMENTS (40 Q.H.)
NOTE: May be used for minor or general education.
221, 222, 223 College Physics I, II, III (15)
212, 213 General Inorganic Chemistry (10) (Chem 214 strongly recommended)
225, 226, 227 Calculus I, II, III (15)

OPTION B (NO MINOR REQUIRED)
101-105 Q.H.

REQUIRED GEOLOGY COURSES (51 Q.H.)
Required Core Courses (39)
Geology 414, 415, 425, 480 (16)

ELECTIVES (10 Q.H.)
Select from the listing for Option A

ADDITIONAL REQUIREMENTS (36-40 Q.H.)
212, 213 Chemistry (10) (Chem 214 strongly recommended)
201, 202, 203 Physics (12) OR 221, 222, 223 Physics (15)
225, 226 Mathematics; plus 227 OR 208 OR 231 Mathematics (14-15)

B.S. MINOR GEOLOGY
40-44 Q.H.

REQURED COURSES (22 Q.H.)
116 Physical Geology (5)
117 Historical Geology (5)
250, 251 Mineralogy I, II (8)
320 Igneous and Metamorphic Petrology (4)

ELECTIVES (8-12 Q.H.)
Electives are to be chosen from the following to a total of 8-12 quarter hours.
200 Oceanography (4)
315 Geomorphology (4)
321 Sedimentary Petrology (4)
325 Geology and Land-Use Planning (4)
330 Quaternary and Glacial Geology (4)
350 Invertebrate Paleontology (4)
370 Photogeology (4)
380 Structural Geology (4)

ADDITIONAL REQUIREMENTS (10 Q.H.)
212, 213 General Inorganic Chemistry (10)

COURSE LISTINGS

All courses in the department may be taken under the pass/no credit option, except for fulfilling major and minor requirements.

101 Introduction to Geology - 4 Q.H.
A basic introduction to the principles of Geology including earth materials, processes and history. Required for the non-science major desiring a general overview of the science of geology. Lectures and laboratory.

102 Geology of Energy and Mineral Resources - 3 Q.H.
Introduction to the geology of fossil fuels (oil, coal) and mineral resources (metals, nonmetals), including origin, exploration, location and costs. No prerequisite. Offered quarterly.

116 Physical Geology - 5 Q.H.
An examination of the geologic processes at work and within the earth. Lectures and laboratory. Optional field trip. Offered yearly.

117 Historical Geology - 5 Q.H.
The origin and geologic history of the earth and the forms of life it has supported throughout geologic times. Lectures and laboratory. Field trip. Offered yearly.

200 Descriptive Oceanography - 4 Q.H.
An introduction to the oceans and the marine environment including the ocean floor, marine sediments, seawater, ocean currents, waves and tides, and oceanic resources. Lecture and laboratory. Offered yearly.

220 Astronomy I - 4 Q.H.
History and instruments of astronomy: the sun and stellar origin, planets of our system, origin of the universe and our solar system. Lectures, laboratory and observation. Offered quarterly. No prerequisite.

221 Astronomy II - 4 Q.H.
Examination of the universe outside of our solar system and what is known about its origin, structure and evolution. Lectures and laboratory. Offered every two years.

230 Meteorology - 4 Q.H.

250 Mineralogy I: Crystallography, Physical, Chemical Mineralogy - 4 Q.H.
An introduction to minerals as naturally occurring inorganic chemical compounds. Crystallographic and chemical properties of minerals. Theory of optical properties. Lectures and laboratory. Prerequisite: Physical Geology, 116. Offered yearly.

251 Mineralogy II: Descriptive, Optical Mineralogy - 4 Q.H.
Classification and description of minerals, with emphasis on the rock-forming minerals. Optics of minerals determined by the petrographic microscope. Prerequisite: 250. Offered every two years.

315 Geomorphology - 4 Q.H.
An analysis of the processes of weathering and the development of landforms through the action of the geologic processes. Lectures and laboratory. Prerequisite: 116 or consent of instructor. Offered yearly.

320 Igneous and Metamorphic Petrology - 4 Q.H.
An introduction to the major igneous and metamorphic rock types of the earth; to mineral equilibria, mineralogical phase rule and metamorphic facies. Rock identification by megascopic and petrographic techniques. Lectures and laboratory. Prerequisite: 251. Offered every two years.

321 Sedimentary Petrology - 4 Q.H.
Sedimentary petrology deals with the description and classification of sedimentary rocks in hand specimen and thin section, and the interpretation of the factors which control their origin. Prerequisite: Geology 251. Offered every two years.

325 Geology and Land-Use Planning - 4 Q.H.
The study of geologic and hydrologic processes operating in various terrestrial environments including how these processes relate to land use, land-use planning, and geologic hazards. Lectures and laboratory. Prerequisite: 101 or 116 or consent of instructor. Offered every two years.

330 Quaternary and Glacial Geology - 4 Q.H.
A worldwide view of Pleistocene events as recorded in the geologic record. The origin, history, and products of glaciation are emphasized. Lectures and laboratory. Prerequisite: Geology 315. Offered every two years.

350 Invertebrate Paleontology - 4 Q.H.
The classification, morphology, ecology and evolution of the major invertebrate phyla. Lectures and laboratory. Required field trip. Prerequisite: Consent of instructor. Offered yearly.

370 Photogeology - 4 Q.H.
Techniques of using aerial photographs and their interpretation in geologic work. Offered every two years.

380 Structural Geology - 4 Q.H.
The study of primary and secondary structures of rocks, mechanics of rock deformation and structural techniques. Lectures and laboratory. Prerequisites: Geology 250. Offered yearly.

385 Regional Geology of the United States - 4 Q.H.
A study of the physiographic provinces of the continental United States with emphasis on the geomorphology, structural history, stratigraphy and mineral deposits of each province. Lectures and laboratory. Prere-
COURSES (43 Q.H.)

323 Biology - General Physiology (5) OR
205 Biology - Bacteriology (4)
233 Biology - General Human Anatomy (5)
201 Biology - Anatomy (5) OR
125 Health Education Core I (5)
111 Cardiopulmonary Resuscitation (1)

and recreational efficiency. HEALTH EDUCATION

B.S. MAJOR

An analysis of current topics and issues relevant to the earth sciences. The subject matter to be offered will be announced in advance by the department. May be repeated as topics change. Offered yearly.

404G Current Topics in Geology - 1-4 Q.H.

The study of streams and groundwater with particular emphasis given to their chemistry, mode of transport. Lecture and laboratory. Prerequisite: 114 or 116 or consent of instructor. Offered every two years.

420G Stream and Groundwater Geology - 4 Q.H.

GEOLOGY

425G Organization and Administration of Health Education (3)
426 Pol. Sci. - Public Budgeting (4)

Independent study of a selected geologic field and/or laboratory problem with subsequent preparation of written report. Oral seminar report. May run two quarters concurrently. May be repeated up to 4 credits. Admission by consent of instructor. Offered yearly.

401G Earth Science Workshop - 3 Q.H.

Designed to acquaint elementary and junior high school teachers with the basic principles of geology and the materials of the earth's crust. Local field trips to collect rocks and fossils. Not open to majors or minors in geology. No prerequisites. Offered summer only.

404G Individual Research Problems - 1-4 Q.H.

An analysis of current topics and issues relevant to the earth sciences. The subject matter to be offered will be announced in advance by the department. May be repeated as topics change. Offered yearly.

320, 340, 426

Prerequisite: Consent of instructor. Offered yearly.

430G Principles of Geochemistry - 4 Q.H.

Prerequisite: Consent of instructor. Offered yearly.

430G Principles of Geochemistry - 4 Q.H.

Geochemistry includes the understanding and application of chemical principles to geological problems. The chemistry of formation of the three major rock groups will be studied, along with the origin and distribution of chemical elements in the earth. Prerequisite: Chemistry 212, 213; Geology 320 (may be waived for chemistry majors). Offered every other year.

475G Earth Science Seminar - 1 Q.H.

Prerequisite: Consent of instructor. Offered yearly.

Health, Physical Education and Recreation

Memorial Hall, Room 122 / 457-5200
Behnke (Chairperson), Fiereck, (Dir. Women's Athletics) Grob, Gunner, Juaraire (Dir. Intramurals), Keister, Kelley, Mullen, Locks, Marston (Dir. Men's Athletics), Martin, Miller, Moravec, Nauman, Smith.

Mathematics

B.S. MAJOR

SCHOOL AND COMMUNITY HEALTH EDUCATION

81 Q.H.

(No minor required)

REQUIRED THEORY — PROFESSIONAL COURSES (42 Q.H.)

125 Health Education Core I (5)
127 Health Education Core II (4)
111 Cardiopulmonary Resuscitation (1)
201 Biology - Anatomy (5) OR
322 Biology - General Physiology (5) OR
233 Biology - General Human Anatomy (5)
205 Biology - Bacteriology (4)

205 Bus. Ed. - Health-Recreation Administrative Services (3)
214 Standard First Aid and Personal Safety (5)
325 Program Planning in Health Education (4)
354 Safety Ed.—Principles of Safety Education (3)
428G Health Science Strategies (3)
429G Community Health (4)
425 Organization and Administration of Health Education (3)
432 Health Education Seminar (1)

ELECTIVES (22 Q.H.)

Electives (any 12 Q.H. from the following)
320 Pol. Sci. — Constitutional Law (4)
322 Pol. Sci. — Political Parties and Interest Groups (4)
324 Pol. Sci. — Urban Planning (4) OR
329 Pol. Sci. — Municipal Administration (4)

Electives (any 12 Q.H. from the following)
320 Pol. Sci. — Constitutional Law (4)
322 Pol. Sci. — Political Parties and Interest Groups (4)
324 Pol. Sci. — Urban Planning (4)
329 Pol. Sci. — Municipal Administration (4)

ADDITIONAL REQUIREMENT

Sociology

410 Pol. Sci. — Approaches and Methods in Political Science (4)
426 Pol. Sci. — Public Budgeting (4)

Mathematics

130 Political Science

320, 340, 426

250, 366, 415, 416, 420

212, 216, 350, 410, 412, 450

205, 206, 320, 411, 422, 431, 490

HPER

GEOLOGY / HEALTH, PHYSICAL EDUCATION AND RECREATION / 77
B.S. MAJOR

SCHOOL AND COMMUNITY
HEALTH EDUCATION
65 Q.H. TEACHING

(No minor required)

Prerequisites for approval to Student Teach
HPER 125
HPER 127
BIO 201 OR 233 OR 323
BIO 205
HPER 214
HPER 325 (must have a “C” grade)
HPER 425

REQUIRED THEORY – PROFESSIONAL COURSES (44 Q.H.)
78 / HEALTH, PHYSICAL EDUCATION AND RECREATION

202 Biology – Human Physiology (5)
214 Standard First Aid & Personal Safety (3)
222 Foundations and Principles of Physical Education (2)
271 Prevention and Care of Athletic Injuries (3)
275 Teaching Elementary Physical Education (3)
303 Tests and Measurements in Physical Education (3)
314 Kinesiology (3)
315 Adapted Physical Education (3)
317 Curriculum and Methods of Physical Education (4)
413 Organization and Administration of Physical Education (3)
435G Physical Education for the Mentally Retarded (3)
445G Motor Learning (3)
455 Physiology of Exercise (3)
470G Mechanical Analysis of Motor Skills (3)

Additional Requirements (May be counted in General Education)
233 Biology—General Human Anatomy (5)

REQUIRED ACTIVITY COURSES FOR MAJORS (15 Q.H.)
166 Activity Core – Badminton, Soccer, Golf (3)
167 Activity Core – Tennis, Bowling, Archery (3)
168 Activity Core – Track & Field, Softball (3)
169 Activity Core – Football, Wrestling (3)
171 Activity Core – Gymnastics, Tumbling (3)
173 Activity Core – Volleyball, Basketball (3)

REQUIRED CORES FOR MAJORS (15 Q.H.)
Select 5 of the 6 core classes

209 OR 211, 215, 219, 220, 227, 228, 230, 319, 364, 425, 460 (only 2 credits of this four credit class may apply as activity credits)

REQUIRED TECHNIQUES CLASSES (5 Q.H.)
**301 Techniques of Teaching Rhythmic Activities (3)

One of the following techniques of coaching classes:
304 Techniques of Coaching Football (2)
305 Techniques of Coaching Basketball (2)
306 Techniques of Coaching Track & Cross Country (2)
307 Techniques of Coaching Softball & Baseball (2)
308 Techniques of Coaching Wrestling (2)
310 Techniques of Coaching Volleyball (2)
312 Techniques of Coaching Gymnastics (2)
313 Techniques of Coaching Tennis (2)

**Two dance classes prerequisite. Classes to be taken under general education.

B.S. MAJOR

RECREATION AND LEISURE STUDIES

(No minor required)

OPTION A – GENERAL RECREATION – 94–96 Q.H.

REQUIRED THEORY – PROFESSIONAL COURSES (67 Q.H.)
203 Biology – Nature Study (4) OR
204 Biology – Conservation of the Environment (4)
205 Bus. Ed. – Health/Recreation Administrative Services (3)
214 Standard First Aid & Personal Safety (3)
215 Art – Crafts (3)
239 CTA – Creative Dramatics for Children (4)
229 Intro. to Principles and Philosophies of Recreation and Leisure (3)
203 Intramural Activities (2)
239 Camp Crafts (3)
324 Music – Recreational Music (3)
326 Administration and Supervision of Recreation and Leisure (3)
350 Legal and Financial Aspects of Recreation (3)
292 Ind. Ed. – Craft Activities (4)
414 Recreational Leadership (3)
421 Outdoor Education (3)
426 Planning and Maintenance of Park and Recreation Facilities (4)
465 Therapeutic Recreation and Services (3)
399 Internship Experience (16)

PHYSICAL EDUCATION ACTIVITIES (5 Q.H.)

Note: These 5 credits of activity are in addition to those taken for General Education. These activities may be chosen from the following list:
103, 104, 118, 117, 118, 151, 152, 153 OR 253, 155, 190, 201, 202, 207, 208 OR 218, 209 OR 211, 215, 219, 220, 227, 228, 230, 319, 364, 425, 460 (only 2 credits of this four credit class may apply as activity credits)

INTERDISCIPLINARY ELECTIVES (23-25 Q.H.)

A. Art, Industrial Education (7-8 Q.H.)
Art
114, 118, 220, 225
Industrial Education
241, 260
Safety Education
354

B. Sociology, Psychology, Political Science (7-8 Q.H.)
Sociology
216, 212, 414, 421, 423
Psychology
250, 301, 415, 416
Political Science
228, 221
C. Biology, Geology and Communication and Theatre Arts (8 Q.H.)
   Biology
   Geology
   Communication and Theatre Arts

OPTION B – THERAPEUTIC RECREATION (80-82 Q.H.)

REQUIRED THEORY – PROFESSIONAL COURSES (74 Q.H.)

NOTE: 74 Q.H. includes 1 Q.H. of Physical Education Activity.

102 Biology – Human Physiology (5)
105 Bus. Ed. – Health/Recreation Administrative Services (3)
214 Standard First Aid and Personal Safety (3)
239 CTA – Creative Dramatics for Children (4)
216 Art – Crafts (3)
229 Introduction to Principles and Philosophies of Recreation and Leisure (3)
233 Biology – Anatomy (5)
239 Camp Crafts (3)
314 Kinesiology (3)
315 Adapted Physical Education (3)
324 Music – Recreation Music (3)
326 Administration and Supervision of Recreation and Leisure (3)
350 Legal and Financial Aspects of Recreation (3)
450 Soc. – Sociology of Aging (4)
455 Physiology of Exercise (3)
456 Therapeutic Recreation and Services (3)
475 Ed. – The Exceptional Child (3)
399 Internship Experience (16)

ADDITIONAL REQUIREMENTS (6-8 Q.H.)

470 Edu. – Education of Emotionally Disturbed and Socially Maladjusted Children (3) OR
416 Psy. – Adjustment and Personality (4)

One of the following:
414 Psy. – Psychology of Mental Retardation (4)
435 Physical Education for the Mentally Retarded (3)

B.S. MINOR

SCHOOL AND COMMUNITY HEALTH

34-35 Q.H. TEACHING

REQUIRED THEORY – PROFESSIONAL COURSES (31 Q.H.)

125 Personal and Community Health (5)
127 Current Problems in Health Education (4)
201 Biology – Anatomy (5) OR
232 Biology – General Physiology (5) OR
232 Biology – General Human Anatomy (5)
214 Standard First Aid & Personal Safety (3)
225 Curriculum and Methods of Health Education (4)

325 Organization and Administration of Health Education (3)
411 Health Education Appraisal (3)
429 Public Health (4)

ELECTIVES (3-4 Q.H.)

Biology
205, 206, 310, 312
Psychology
415, 416
Sociology
212

Health, Physical Education and Recreation
206, 320, 428, 431, 432

MASTER OF SCIENCE PROGRAM

GENERAL INFORMATION

The Department of Health, Physical Education and Recreation offers a Master of Science Degree with either a concentration in Health Education or Physical Education. A student could complete both concentrations by using the 18 elective hours for the second concentration; however, it is strongly recommended that a student elect one of the Certification Programs for his/her elective hours.

PREREQUISITES

A minimum of thirty-six (36) undergraduate credits in the area of concentration, either health education or physical education. Each candidate pursuing a concentration in physical education must have completed an undergraduate course in anatomy and kinesiology.

REQUIREMENTS – PLAN A AND PLAN B

REQUIREMENTS (33 Q.H.)

HPER 501 (3)
HPER 515 (3)

PLAN A – Health Education Concentration

Health Education Electives (18)

Professional Education (9)

PLAN B – Physical Education Concentration

Physical Education Electives (18)

Professional Education (9)

THESIS OPTION (45 Q.H.)

Thesis 1-6 credits as a part of the 18

Health Education or Physical Education electives depending on concentration pursued.

NON-THESIS OPTION (51 Q.H.)

General Electives (18)

COMPREHENSIVE EXAMINATION

Upon completion of the course work under Plan A, Health Education or Plan B, Physical Education, each student will take a six question comprehensive examination based on the area of concentration. It is suggested that the student consult with his/her advisor before applying to the Graduate Office for permission to take the comprehensive examination.

ADDITIONAL INFORMATION

In addition to the required courses, 501 and 515, the following courses will apply to either Plan A – Health Education or Plan B – Physical Education: 513, 526, 530, 540, 541, and 599.

The following courses may be applied to Plan A – Health Education 428G, 429G, 431G, 502, 503, 504, 505, and 506.


CARDIAC REHABILITATION PROGRAM

Sidney Hughes, M.D.
Medical Director

Carmen Scudiero, M.D.
Associate Medical Director

Randolph W. Miller, Ph.D.
Certified Exercise Specialist

Independent study, selected course work, laboratory and exercise leadership practicums prepare the student for the American College of Sports Medicine practical and written examinations for Certified Exercise Technologist/Specialist. A complete stress test facility, a human performance laboratory and a cardiac exercise rehabilitation program are based in the University. Clinical internship experience available at a variety of locations including the Mayo Clinic, Rochester, Minnesota.

COACHING LICENSURE (18 Q.H.)

REQUIRED THEORY – PROFESSIONAL COURSES (12 Q.H.)

214 Standard First Aid and Personal Safety (3)
271 Prevention and Care of Athletic Injuries (3)
*330 Sports Science (3)
406 Coaching Practicum (40 Lab Hours) (3)

ADDITIONAL REQUIREMENTS (6 Q.H.)

304 Techniques of Coaching Football (2)
305 Techniques of Coaching Basketball (2)
306 Techniques of Coaching Track & Field Cross Country (2)
307 Techniques of Coaching Baseball & Softball (2)
## COURSE LISTINGS

Courses offered on a pass/no credit basis are designated in the course description. All activity classes, except major and minor three-credit courses, are offered on pass/no credit option.

### HEALTH

All students entering with advanced credit must consult the department for evaluation of credits and assignment of proper classes.

111 Cardiopulmonary Resuscitation - 1 O.H.

This is a basic life support course which includes the life saving techniques used in respiratory and circulatory emergencies for both adults and children. P/NC Option. Offered quarterly.

125 Health Education Core I - 5 O.H.

Designed to acquaint the prospective health educator with ways in which levels of energy and vitality can be raised by intelligent attention to habits, attitudes, knowledge and appreciations. This course specifically includes the study of the effects of narcotics and alcohol upon the human system as required by MSA 126.05. Offered yearly.

127 Health Education Core II - 4 O.H.

Designed to acquaint the prospective health educator with pertinent health issues. Offered yearly.

204 Personal and Community Health - 3 O.H.

Principles of health, their application, facts, habits, and attitudes as they relate to the home and community, and including effects of narcotics and alcohol upon the human system, as required by MSA 126.06. Offered quarterly.

214 Standard First Aid and Personal Safety - 3 O.H.

American Red Cross Standard course. Upon satisfactory completion the student may pursue the Red Cross instructor courses. Offered quarterly.

318 Curriculum and Methods of Health Education for Nursing Personnel - 3 O.H.

Philosophy and curriculum of the total school/community health education program and the implications for nursing service personnel. Prerequisites: Admission to Nursing Major or permission of instructor. Offered on demand.

320 Health Education in the Elementary School - 4 O.H.

Healthful school environment, health services and instruction for majors in Elementary Education. Prerequisite: Health 204. Offered quarterly.

325 Program Planning in Health Education - 4 O.H.

Philosophy, curriculum and teaching methods as applied to health education. For health majors and minors. Prerequisites: Health 125 and 127. Offered yearly.

380 Techniques of Emergency Health Care I - 3 O.H.

An introduction to emergency medical care for lay medical workers. Offered on demand.

381 Techniques of Emergency Health Care II - 4 O.H.

A continuation of HPER 380. Credit will be granted only upon successful completion of the examination of the National Registry for Emergency Medical Technicians. Offered on demand.

411 Health Education Appraisal - 3 O.H.

A study and practice of the various types of health protection and maintenance of elementary and secondary school students. Opportunity for teachers, nurses, and other health education personnel to practice under a laboratory atmosphere, the screening measures, and the follow-up procedures of the results of health testing. Prerequisites: Health 204 and 320 OR Health 125 and 325. Offered yearly.

422 Standard First Aid and Personal Safety Instructor and Basic First Aid Instructor Course - 3 O.H.

For certification as a Red Cross Instructor in Basic First Aid and Standard First Aid and Personal Safety. Offered on demand.

425 Organization and Administration of Health Education - 3 O.H.

School health services, health environment, and the Health Education program. Prerequisites: Health 125, 127, 325. Offered yearly.

428G Health Science Strategies - 3 O.H.

For the major in health education for further study through experiences provided in the health science laboratory. Prerequisites: 125, 225, 325. Offered yearly.

429G Community Health - 4 O.H.

Role of public health and its relationship to the school health program, including opportunity to observe the operation and function of a public health program. Offered yearly.

431G Health Problems Workshop - 1-3 O.H.

For teachers, school nurses, school administrators and others interested in strengthening school health programs. May be repeated for credit.

432 Health Education Seminar - 1 O.H.

Recent issues and developments in health education at the local, state and national levels. Prerequisites: 125, 225, 325, 428 and student teaching or internship in health education completed or currently enrolled. Offered twice yearly.

### PHYSICAL EDUCATION

All students entering with advanced credit must consult the department for evaluation of credits and assignment of proper classes.

All students are urged to participate in at least one seasonal intramural activity.

Women's varsity teams are maintained in volleyball, basketball, gymnastics, golf, softball, tennis, and track and field. Men's varsity teams are maintained in football, basketball, cross country, baseball, golf, track and field, and tennis.

It is recommended that all students majoring in physical education participate in at least two varsity sports as a player, manager or assistant coach.

### PHYSICAL EDUCATION BASIC THEORY AND PROFESSIONAL COURSES

110 Introduction to Movement and Music - 2 O.H.

A comprehensive, practical study of fundamental dance movement and its relationship with music. Offered on demand.

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203 Intramural Activities - 2 O.H.

Policies and procedures in conducting intramural programs. Offered yearly.

205 Diet and Weight Control - 3 O.H.

A study of well-balanced diets, fad diets and weight-control programs. The students will help plan their own program and goals for the immediate ten week period and suggestions for continuation. Offered yearly. P/NC Option.

206 Exercise and Relaxation - 2 O.H.

A study of the various types of exercise programs which include relaxation as a goal. The student will select a program and actively participate in it. Offered yearly. P/NC Option.

222 Foundations and Principles of Physical Education - 2 O.H.

Acquaints the prospective physical education teacher with a broad concept of foundations and principles. Offered twice yearly.

271 Prevention and Care of Athletic Injuries - 3 O.H.

Laboratory course in taping and support methods used in preventing athletic injuries; including the use of therapeutic aids. Prerequisites: Biology 233 and Health 214. Offered quarterly.

275 Teaching Elementary Physical Education - 3 O.H.

Principles of activity selection, program planning, and the teaching of motor skills through exploration and problem solving methods. Offered quarterly.

301 Techniques of Teaching Rhythmic Activities - 3 O.H.

Fundamentals of rhythm and practice in
308 Techniques of Coaching Wrestling (2)
310 Techniques of Coaching Volleyball (2)
312 Techniques of Coaching Gymnastics (2)
313 Techniques of Coaching Tennis (2)

*Course waived for students taking 233 Biology, HPER 314 and HPER 455

NOTE: Students are strongly recommended to take Biology 233 as a general education natural science elective.

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A continuation of HPER 380. Credit will be granted only upon successful completion of the examination of the National Registry for Emergency Medical Technicians. Offered on demand.

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A study and practice of the various types of health protection and maintenance of elementary and secondary school students. Opportunity for teachers, nurses, and other health education personnel to practice under a laboratory atmosphere, the screening measures, and the follow-up procedures of the results of health testing. Prerequisites: Health 204 and 320 OR Health 125 and 325. Offered yearly.

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For certification as a Red Cross Instructor in Basic First Aid and Personal Safety. Offered on demand.

425 Organization and Administration of Health Education — 3 Q.H.
School health services, health environment, and the Health Education program. Prerequisites: Health 125, 127, 325. Offered yearly.

428G Health Science Strategies — 3 Q.H.
For the major in health education for further study through experiences provided in the health science laboratory. Prerequisites: 125, 225, 325. Offered yearly.

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Role of public health and its relationship to the school health program, including opportunity to observe the operation and function of a public health program. Offered yearly.

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For teachers, school nurses, school administrators and others interested in strengthening school health programs. May be repeated for credit.

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PHYSICAL EDUCATION

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Policies and procedures in conducting intramural programs. Offered yearly.

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A study of well-balanced diets, fad diets and weight-control programs. The student will help plan their own program and goals for the immediate ten week period and suggestions for continuation. Offered yearly. P/NC Option.

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A study of the various types of exercise programs which include relaxation as a goal. The student will select a program and actively participate in it. Offered yearly. P/NC Option.

222 Foundations and Principles of Physical Education — 2 Q.H.
Acquaints the prospective physical education teacher with a broad concept of foundations and principles. Offered twice yearly.

271 Prevention and Care of Athletic Injuries — 3 Q.H.
Laboratory course in taping and support methods used in preventing athletic injuries; including the use of therapeutic aids. Prerequisites: Biology 233 and Health 214. Offered quarterly.

275 Teaching Elementary Physical Education — 3 Q.H.
Principles of activity selection, program planning, and teaching of motor skills through exploration and problem solving methods. Offered quarterly.

301 Techniques of Teaching Rhythmic Activities — 3 Q.H.
Fundamentals of rhythm and practice in
teaching various rhythmic forms. Prerequisite: 2 quarter hours of dance activity or consent of instructor. Offered yearly.

303 Test and Measurements in Health and Physical Education — 3 Q.H. Theory and practice of measurement in health and physical education, selection and administration of appropriate tests and interpretation of test results by fundamental statistical procedures. Offered yearly.


314 Kinesiology — 3 Q.H. Mechanics of the moving body; principles of leverage and application of muscular forces. Prerequisite: Bio 233 General Human Anatomy. Offered twice yearly.

315 Adapted Physical Education — 3 Q.H. A study of the physically and mentally handicapped child and the part that the physical education teacher plays in his rehabilitation. Offered yearly.

316 Rules and Officiating — 2 Q.H. Rules for officiating in men's sports. The techniques followed by officials and correct rulings on difficult decisions. Offered on demand.

317 Curriculum and Methods of Physical Education — 4 Q.H. Curriculum and teaching methods of physical education. Prerequisites: P.E. 222, 280. Offered twice yearly.

321 Officiating — Volleyball — 2 Q.H. Methods of officiating women's volleyball. Offered on demand.

322 Officiating — Basketball — 2 Q.H. Methods of officiating women's basketball. Offered on demand.

324 Officiating — Gymnastics — 2 Q.H. Methods of officiating women's gymnastics. Offered on demand.

330 Sports Science — 3 Q.H. Study of anatomical, kinesiological and exercise physiological concepts as they relate to the practice of coaching. This course will fulfill the coaching licensure requirement for the science of sports principles. Offered yearly.

406G Coaching Practicum — 1-3 Q.H. Directed supervision in coaching. Graduate credit granted only for coaching in higher education. Offered quarterly.

413 Organization and Administration of Physical Education — 3 Q.H. School programs and problems concerning administration of budget, personnel, facilities, public relations and legal responsibilities. Prerequisites: P.E. 222, 276, 317. Offered twice yearly.

417G Physical Education Workshop — 1-3 Q.H. Review and re-evaluation of current trends in elementary school physical education programs with special practical work. Offered on demand.

420G The Administration of High School Athletics — 3 Q.H. Administrative procedures for managing the business affairs of high school athletic programs and a study of state high school league regulations for boys and girls programs. Offered on demand.

435G Physical Education for the Mentally Retarded — 3 Q.H. Motor characteristics of the mentally retarded, the curriculum planning needed to meet these characteristics and organization and administration of such a program. Offered on demand.


455 Physiology of Exercise — 3 Q.H. Study of the relationships existing between muscular activity and the functioning of the human body. Results of research in physiological laboratories are studied. Prerequisite: Biology 202. Offered yearly.

470G Mechanical Analysis of Motor Skills — 3 Q.H. Analysis of sports skills in terms of the fundamental principles of body mechanics. Prerequisites: Biol. 233 General Human Anatomy, 314 Kinesiology. Offered yearly.

480G Coaching Clinic — Football — 3 Q.H. For anyone coaching or working toward coaching certification, lectures, films, demonstrations, and panel discussions covering offensive and defensive drills, special techniques, pre-season programs, off-season programs, practice sessions, conditioning, and care and prevention of athletic injuries. Offered yearly. P/NC Option, for undergraduates.

483G Coaching Clinic — Track and Field — 3 Q.H. The clinic will provide the opportunity for registrants to gain valuable approaches, methods, and techniques from highly qualified men and women track and field coaches in sprinting, hurdles, middle and long distance running, relays, long jump, triple jump, high jump, shot put, discus, javelin, and pole vault. Offered on demand. P/NC Option, for undergraduates.

485G Dance Clinic — 3 Q.H. This course covers these approaches to teaching dance: locomotor, body movement, rhythmic, spatial, sensory, and ideational. Areas of dance to be covered are folk, square, modern, ballroom, jazz, and ballet. Offered yearly. P/NC Option, for undergraduates.

490 Independent Study in Health and Physical Education — 1-3 Q.H. Opportunity for undergraduates to work independently. Prerequisites: Junior or Senior standing, preparation of proposed outline and consent of major advisor. Offered quarterly.

492G Physiological Applications to Sport — 3 Q.H. Concepts of human physiology applied to exercise physiology, sports training and individualized training regimens with specific reference to the cardiovascular, respiratory and muscular systems. Offered on demand.

**ACTIVITY ALL STUDENTS**

All one credit activity courses have the P/NC Option.


102 Softball — 1 Q.H. Development of skills and techniques in softball. Offered yearly. P/NC Option.

103 Racquetball — 1 Q.H. Development of techniques, knowledge of rules, terms, strategy and participation in racquetball. Offered quarterly. P/NC Option.

104 Basketball — Women's Rules — 1 Q.H. Development of techniques, knowledge of rules, terms, strategy, and participation in team play. Offered on demand. P/NC Option.

105 Basic Smallbore Rifle — 1 Q.H. Skills in shooting the basic four positions found in indoor rifle shooting: prone, sitting, kneeling and offhand. Knowledge of target scoring, safe gun handling and an understanding of recreational range operation. Offered yearly. P/NC Option.

106 Flag Football — 1 Q.H. Development of skills and techniques in flag football. Offered on demand. P/NC Option.

107 Trap and Skeet — 1 Q.H. Skills in shooting the basic four positions found in indoor rifle shooting: prone, sitting, kneeling and offhand. Knowledge of target scoring, safe gun handling and an understanding of recreational range operation. Offered yearly. P/NC Option.

108 Karate — 1 Q.H. Development of skills and techniques in Karate. Offered on demand. P/NC Option.

109 Fundamentals of Hatha Yoga — 1 Q.H. Designed to expose the student to the history and practice of the science of Hatha Yoga in order to give the student a higher degree of mental, physical and emotional self-control. Offered on demand. P/NC Option.

113 Personal Fitness — 1 Q.H. Techniques for acquiring physical fitness. Offered quarterly. P/NC Option.
115 Bowling - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner. Offered quarterly. PINC Option.

117 Canoeing - 1 Q.H.
Small craft safety, self-rescue, and the fundamental strokes of canoeing. Prerequisite: 211 or demonstrated ability. Offered yearly. PINC Option.

118 Archery - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner; includes both target and field archery. Offered on demand. PINC Option.

119 Aerobic Dance - 1 Q.H.
An aerobic dance class designed to increase fitness level. Offered yearly on demand. May be repeated one time for credit. PINC Option.

138 Dance Theatre - 1-3 Q.H.
Theory and practical experience in dance choreography culminating in participation in a dance theatre production. Offered yearly. PINC Option. May be repeated for credit.

150 Swimming for the Physically Handicapped - 1 Q.H.
Devoted to increasing swimming skills of those who in the opinion of the college physician have disabilities. Offered on demand. PINC Option.

151 Volleyball - 1 Q.H.
Skills and knowledge necessary for recreational purposes, power volleyball skills. Offered quarterly. PINC Option.

152 Fencing - 1 Q.H.
Skills and knowledge necessary for recreational purposes of the beginner. Offered yearly. PINC Option.

153 Beginning Skiing - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner. Offered yearly. PINC Option. May be repeated for credit. Additional Fee.

155 Handball - 1 Q.H.
Development of skills and techniques for handball. Offered on demand. PINC Option.

190 Cross Country Skiing - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner. Offered yearly. PINC Option.

195 Soccer - 1 Q.H.
Development of skills and techniques in soccer. Offered on demand. PINC Option.

201 Folk Dance - 1 Q.H.
Dances of various nations. Offered twice yearly. PINC Option.

202 Tumbling - 1 Q.H.
Development of skills in mat and rebound tumbling. Offered on demand. PINC Option.

207 Badminton - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner. Offered twice yearly. PINC Option.

208 Tennis - 1 Q.H.
Skills and knowledge necessary for the recreational purpose of the beginner. Offered twice yearly. PINC Option.

209 Beginning Swimming and Drowning-proofing - 1 Q.H.
For non-swimmers. Designed to develop the basic skills and confidence essential to survival and recreational swimming. Offered quarterly. PINC Option.

211 Swimming and Diving - 1 Q.H.
For swimmers beyond the beginning level. Designed to develop skill and endurance in the performance of basic swimming strokes and aquatic skills. Prerequisites: 209 or demonstrated ability. Offered quarterly. PINC Option.

215 Modern Dance - 1 Q.H.
Basic techniques of dance and composition. Offered twice yearly. PINC Option.

218 Intermediate Tennis - 1 Q.H.
Strokes, footwork, and strategy of tennis for the player. Prerequisite: 208 or demonstrated ability. Offered yearly. PINC Option.

219 Golf - 1 Q.H.
Skills and knowledge necessary for the recreational purposes of the beginner. (Additional Fee). Offered yearly. PINC Option.

220 American Country Dance - 1 Q.H.
Fundamentals of American Square dance. Offered twice yearly. PINC Option.

230 Brookline Dance - 1 Q.H.
Fundamentals of the Waltz, two step, rhumba, mambo, samba, tango, cha cha cha, and some of the latest fad dances. Offered twice yearly. PINC Option.

232 Beginning Ballet - 1 Q.H.
Beginning work in basic barre and center technique, with introduction to ballet as an art. Offered on demand. PINC Option.

241 Advanced Lifesaving - 1 Q.H.
Requirements for American Red Cross Certificate. Prerequisite: 211 or demonstrated ability. Offered yearly. PINC Option.

253 Intermediate Skiing - 1 Q.H.
A continuation of skills acquired in beginning skiing and tailored to the skill level of the individual. Prerequisite: 153 or demonstrated ability. Offered yearly. May be repeated for credit (Additional Fee). PINC Option.

295 Water Safety Instructor's Course - 2 Q.H.
Teaching techniques and methods for swimming, diving, and life saving. Organizing and conducting swimming programs for camp and recreational organizations. Requirements for the American Red Cross Water Safety Instructor Certificate. Prerequisite: Current ARC Senior Life Saving Certificate. Offered twice yearly. PINC Option.

VARSITY ATHLETICS

May be repeated once for credit by non-physical education majors.

217 Varsity Football - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

221 Varsity Basketball - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

223 Varsity Track and Field - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

224 Varsity Tennis - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

226 Varsity Baseball - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

231 Varsity Golf - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

235 Varsity Cross Country 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

236 Varsity Volleyball - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

237 Varsity Gymnastics - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

238 Varsity Softball - 1 Q.H.
Participation as a member of a varsity squad. Offered yearly. PINC Option.

ACTIVITY CORES FOR MAJORS AND MINORS

All courses include comprehensive development of skills, knowledge of rules, strategies, terminology, and participation in the designated activities. Open to physical education majors and minors only.

166 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Badminton, Soccer). Offered yearly.

167 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Tennis, Bowling, Archery). Offered yearly.

168 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Track & Field and Softball). Offered yearly.

169 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Football and Wrestling). Offered yearly.

171 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Gymnastics and Tumbling). Offered yearly.

173 Physical Education Activity Core for Majors and Minors - 3 Q.H. (Volleyball and Basketball). Offered yearly.

RECREATION

All students entering with advance credit must consult the department for evaluation of credits and assignments of proper classes.

229 Introduction to Principles and Philosophies of Recreation and Leisure - 3 Q.H.
History and development of recreation, and principles and philosophy of leisure. Offered yearly.

239 Camp Crafts - 3 Q.H.
Skills and knowledge basic to outdoor education and camping. Offered yearly.

240 Outdoor Recreation - River Canoeing - 4 Q.H.
Use of environment for leisure activities, learning camping skills, shake down trip and a several day camping experience. Offered summer only. Offered on demand. (Additional Fee).

326 Organization and Administration of Recreation - 3 Q.H.
Programming, personnel, finance and budgets, areas and facilities, and other administrative aspects of the recreation program. Prerequisite: 229. Offered yearly.

350 Legal and Financial Aspects of Recreation - 3 Q.H.
Introduces the student to the legislation, liability and legal matters concerning recreation, the technical and behavioral aspects of
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budgeting and the traditional and recent methods of financial park and recreation operations. Offered yearly.

414G Recreational Leadership — 3 Q.H.
Leadership problems of the recreation leader in school and community recreation programs, including actual laboratory experience. Offered yearly.

421 Outdoor Education — 3 Q.H.
Study of the organized modern camp, including practical experience in camping skills and camp leadership. Offered yearly.

426 Planning and Maintenance of Park and Recreation Facilities — 4 Q.H.
Procuring, planning and maintaining recreation and park facilities and equipment. Prerequisite: 229, 329, junior standing. Offered yearly.

465 Therapeutic Recreation and Services — 3 Q.H.
Introduces the student to the areas of therapeutic recreation, role of the leader, types of patients, leadership and program methods, and basically acquaints the student with commercial, industrial, and campus recreation. Offered yearly.

COURSES FOR GRADUATE STUDENTS ONLY

All graduate courses are offered every two or three years.

501 Research Methods in Health and Physical Education — 3 Q.H.
Methods and techniques of research potential and completed problems analyzed with view to selection of topics. Offered yearly.

502 Critical Issues in Health Education — 2-3 Q.H.
Current controversial issues are discussed to develop understanding and insight for organizing and teaching health units. May be repeated for credit.

503 Diseases of Man — 3 Q.H.
An overview of agents of disease and processes of diseases in man, including an introduction to ecology of man in health and disease.

504 Health Curriculum in Elementary and Secondary Schools — 3 Q.H.
Development and organization of the school health curriculum from K-12. For health instructors, elementary teachers and school administrators.

505 Decision Making Processing in Health Education — 3 Q.H.
Concepts and operational procedure for a management by objectives approach in health education.

506 Chemical Dependency Education — 3 Q.H.
An opportunity to update knowledge in Narcotic and Alcohol Education, new teaching techniques, and a review of recent research. Students who have taken 431G, Health Problems Workshop — Narcotics and Alcohol may not take this course.

510 Curriculum Construction in Physical Education — 3 Q.H.
A study of the construction and conduct of curriculum in physical education. A study of past experiences and results with due consideration for needs of the present and trends for the future.

513 Independent Study in Health or Physical Education — 1-3 Q.H.
A problems discovery and identification course. Each student selects a problem for intensive study and files a written report of his investigation and suggested solutions or recommendations. Prerequisite: Advance consent of cooperating staff member and approval of topic outline.

515 Tests and Measurements in Health and Physical Education — 3 Q.H.
History, and theory of measurement, the selection and administration of appropriate performance tests, and the interpretation of their results.

516 Laboratory Techniques in Human Performance — 3 Q.H.
Advanced work in the areas of exercise physiology and motor learning with particular emphasis on laboratory experience. Prerequisites: 314 Kinesiology and 400 Physiology of Exercise.

520 Psychology of Coaching — 3 Q.H.
Study of the emotional, attitudinal and personality problems of athletes, interpersonal behavior and motivational psychology.

524 Historical Implications for Current Trends and Issues in Physical Education
Relationship, from ancient to modern times, between physical education and factors in society with emphasis on influences on today’s physical education trends and issues.

525 Planning of Facilities in Health and/or Physical Education — 3 Q.H.
 Principles and standards for health and/or physical education equipment and facility planning, construction, use and maintenance.

528 Adapted Physical Education — 3 Q.H.
Analysis of physical education for the handicapped student with practical application in a laboratory situation and the legal implications.

530 Supervision of Health and Physical Education in Elementary and Secondary Schools — 3 Q.H.
The general aims and purposes of supervision, and the duties and relationships of the supervisor of health and physical education.

533 Administration Problems in Physical Education — 3 Q.H.
A study of administrative problems in Physical Education that confront the teacher and leader.

540 Test Construction in Health and Physical Education — 3 Q.H.
Principles of construction, selection, and interpretation of Health and Physical Education tests.

541 Current Literature and Research in Health or Physical Education — 3 Q.H.
A survey of professional literature and research in the fields of health education or physical education.

550 Physical Education in Higher Education — 3 Q.H.
An examination of the role of physical education in higher education, with special emphasis on problems in college teaching.

553 Physical Education in the Elementary School — 3 Q.H.
Examination of the role of physical education in the elementary school and an evaluation of trends in elementary physical education programs.

599 Master’s Thesis — 1-6 Q.H.
Must show evidence of the candidates ability to carry on independent study and to employ scientific methods and procedures in the solution of a problem in the student’s field of concentration. Offered by arrangement.

History

Minne Hall, Room 212/457-5400
Paleck (Chairperson), Byman, Henry, Hoyt, Hull, Meinhard, Mishark, Sobiesk.
The Department offers B.A. and M.S. Degree History programs as well as a B.A. minor in History. The Department coordinates and administers the B.S. Paralegal Program leading to careers in law, business, and government; and advises pre-law students. Students may select history as part of a double major to provide a broad liberal arts background. The programs in the History Department offer a well-rounded background. The study of history seeks to provide a knowledge and understanding of past human experiences. Through the study of the past we gain a sense of perspective on the world in which we live and on ourselves in modern society.
B.A. MAJOR
HISTORY
52 Q.H.

(Minor Required)

NOTE: Survey courses do not have to be taken in chronological sequence. Check specific prerequisites for upper level courses. Students of sophomore standing who have already taken two survey courses have the option of taking 300 or 400 level courses instead of the other two survey courses, provided they are History majors and have at least a 3.0 average both in History and their overall college GPA.

REQUIRED COURSES (16 Q.H.)
Any two of the following:
120 Western Civilization: To 1500 (4)
121 Western Civilization: 1500 to 1815 (4)
122 Western Civilization: 1815 to present (4)
170 African Civilization (4)

Any two of the following:
165 Latin American History: Columbus to Castro (4)
230 American History: To 1828 (4)
231 American History: 1828 to 1900 (4)
232 American History: 1900 to present (4)
233 Mexican History (4)

OTHER REQUIRED COURSES (24 Q.H.)
300-level or above:
European (12)
American (12)

ELECTIVES (12 Q.H.)

FOR TEACHING HISTORY:

B.S. MAJOR
SOCIAL SCIENCE
95 Q.H. TEACHING

(See Social Science Major)

B.A. MINOR
HISTORY
32 Q.H.

REQUIRED COURSES (16 Q.H.)
Any two of the following:
120 Western Civilization: To 1500 (4)
121 Western Civilization: 1500 to 1815 (4)
122 Western Civilization: 1815 to present (4)
170 African Civilization (4)

Any two of the following:
165 Latin American History: Columbus to Castro (4)
230 American History: To 1828 (4)
231 American History: 1828 to 1900 (4)
232 American History: 1900 to present (4)
233 History of Mexico (4)

ELECTIVES (16 Q.H.)
Electives must come from History courses 300 level or above to a total of 16 credits.

MASTER OF SCIENCE

PREREQUISITES:
Undergraduate major or a minimum of thirty-six (36) undergraduate credits in history and related disciplines.

REQUIREMENTS (24 Q.H.)
Any two of the following:
550 History Research and Writing (3)
552 Theories of History (3)
560 American Historiography (3)
565 European Historiography (3)
General Electives (9)
Professional Education (9)

WITH THESIS (45 Q.H.)
History Electives (15)
Thesis (History 599) (6)

WITHOUT THESIS (51 Q.H.)
History Electives (27)

The student should contact the History Department for further information regarding the Master’s Program.

COURSE LISTINGS

GENERAL EDUCATION AND PREREQUISITE COURSES

NOTE: 100 and 200 level survey courses do not have to be taken in chronological sequence. See department for information on courses offered for Pass/No Credit. All Pass-legal courses must be taken for grade only. Courses taken to fulfill the major or minor requirements, or for graduate credit, must be taken for grade only.

120 Western Civilization: To 1500 — 4 Q.H.
A survey of civilization from its beginnings in Egypt and Mesopotamia through Greece, Rome, and Middle Ages, and the Renaissance. Offered quarterly. P/NC Option.

121 Western Civilization: 1500-1815 — 4 Q.H.

122 Western Civilization: 1815 to present — 4 Q.H.
A survey of the origins, growth, and diffusion of Slavic culture from its beginnings in the Pript Marshes until the coming of the French revolution. Offered quarterly. P/NC Option.

132 Slavic Culture in Modern World (1789 to Present) — 4 Q.H.
Traces development of Slavic culture from the national awakenings through the two world wars and the transformation induced by the Communist takeover. Offered yearly.

165 Latin American History: Columbus to Castro — 4 Q.H.
A survey of Latin American history from pre-Columbian times to the present, including the colonial period, the struggle for independence, and the rise of modern Latin American nations. Special emphasis is on Argentina, Brazil, Chile, and Mexico. P/NC Option.

170 African Civilization — 4 Q.H.
African history from prehistoric times to the present; origin of prehistoric man in Africa; African cultures before contact with the European; the impact of slavery; the era of imperialism; the rise of nationalism and independence; and contemporary Africa. P/NC Option.

215 Minnesota History — 4 Q.H.
A comprehensive general study of the history, geography and citizenship of the State of Minnesota from the Indian control and early explorers to the present time. P/NC Option.

225 The World of the Jew: Past and Present — 4 Q.H.
A history of the Jew from Biblical times to the present; the ongoing in various parts of the earth; the ingoing to the Promised Land. P/NC Option.

230 American History: To 1828 — 4 Q.H.
The European discovery of America and development of early United States history with special interest in areas of White-Black-Indian interrelations; women, children, community structures; the American Revolution; and technology and science. Offered quarterly. P/NC Option.

231 American History: 1828 to 1900 — 4 Q.H.
A survey of the history of the United States as an industrial world power. Offered quarterly. P/NC Option.

232 American History: 1900 to present — 4 Q.H.
Progressive Era, World War I and peace settlements, the Twenties, the Depression, World War II, post-war problems, foreign and domestic. Offered quarterly. P/NC Option.

233 The History of Mexico — 4 Q.H.
A survey of the history and development of the Mexican nation from pre-historic times until the present, with attention to the Indian and Spanish roots of Mexican culture, and emphasis on the continuing Mexican Revolution. P/NC Option.

240 History of Christianity — 4 Q.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 structure of various historical ages. P/NC Option.

241 History of Non-Christian Religion in the West — 4 Q.H.
This course is a survey of non-Christian religions from pre-historic animism to the 19th and 20th century rationalistic and mystic movements. P/NC Option.

330 Psycho-history — 4 Q.H.
Concentration on the attitudes towards childhood from ancient times to the present.
370 Historical Attitudes Toward Death - 4 O.H.
A look at the attitudes toward death of various societies.

365 History of the American Judicial System - 4 O.H.
Traces the development of the American Legal System from its European heritage through the colonial period to the present day. The course is primarily concerned with the historical prospective of law development, law practices, and institutional developments which reflect upon the relations between institutions and individuals. Grade only. Offered yearly.

370 Legal Research - 3 O.H.
Techniques of Legal Research, the process of law review, the extent of legal reporting, and methods of researching court decisions. Prerequisites: admission to the Paralegal Major and History 365. Offered yearly.

371 Legal Proof: Introduction to - 3 O.H.
A study of 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. Prerequisites: admission to the Paralegal Major and History 370. Offered yearly.

372 Legal Proof: Exclusionary Rules of Evidence - 3 O.H.

373 Adversary System: Civil Procedure - 3 O.H.
Basic civil court procedures, such as pleading, pre-trial discovery, trials, and appeals, background of the adversary system, the role of the Advocate, Judge and Jury and how this process tends to establish truth. Prerequisites: admission to the Paralegal Major and History 370. Offered yearly.

374 Adversary System: Criminal Procedure - 3 O.H.
This course will supplement the course on the Adversary System - Civil Procedure. Criminal proceedings, the graded jury system, criminal pretrial discovery, post trial sentencing, administrative hearings, requirements of a fair hearing, and arbitration. Prerequisite: admission to the Paralegal Major and History 370. Offered yearly.

375 Legal Writing and Substantive Law I - 3 O.H.
The student will become acquainted with terminology commonly used, demonstration for precision in meaning, and how courts interpret documents; and a general acquaintance with: deeds, leases, negotiable instruments, business agreements, corporate minutes and by-laws, wills, briefs, and legal memoranda. Prerequisites: admission to the Paralegal Major and History 370. Offered yearly.

376 Legal Writing and Substantive Law II - 3 O.H.
Students will learn the basic rules of contract law, real property law, family law (divorce, separation, paternity), torts, writing negotiable instruments, and legal ethics. Prerequisites: admission to the Paralegal Major and History 370. Offered yearly.

377 Practical Legal Investigation Techniques - 4 O.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 also become acquainted with the technique of working with witnesses. Prerequisite: admission to the Paralegal Major and History 365, 370 and 375. Offered yearly.

380 Paralegal Internship - 16 O.H.
Field placement in a selected organization for the purpose of experience and training as a professional paralegal. Prerequisites: admission to the Paralegal Major and History 370, 371, 372, 373, 374, 375, 376, P/NC Only.

498 Historiography - 2 O.H.
An introduction to the methodology of historical research and writing, with emphasis on the theories of histories. Prerequisite: twelve credit hours of history or consent of instructor. Offered by arrangement.

499 Independent Readings in History - 1-4 O.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 quarterly.

SEQUENCE IN AFRICAN, ASIAN, AND LATIN AMERICAN HISTORY

461G Latin American Social Revolution - 4 O.H.
An analysis of Latin America's major revolutionary movements of the twentieth century. Special emphasis on Mexico, Bolivia, and Cuba. Prerequisite: Any history survey course.

462G The Cuban Revolution - 4 O.H.
Development of the Cuban Revolution. Special emphasis is given to prerevolutionary Cuban society, to the performance of the Castro regime, and to ideological developments in the revolution. Prerequisite: any history survey course.

469G History of Brazil - 4 O.H.
Brazilian history from discovery until the present, with emphasis given to exploration and colonization, the development of slavery and its abolition, and Brazil's struggle for industrialization and world power status. Prerequisite: any history survey course.

SEQUENCE IN AMERICAN HISTORY

310 History of the American Indian - 4 O.H.
Traces Indian civilization from pre-Spanish period to present. Emphasis is upon advanced Indian civilizations and changes in Indian civilization as a result of meeting the European civilization. The course also traces the development of governmental Indian policies. Offered yearly.

426G American Economic History to 1865 - 4 O.H.
American economic development during colonial and early national periods, transition from an underdeveloped extractive-commercial economy to the early stages of industrialism. Prerequisite: One of the following: History 230, 231, or consent of the instructor. Offered every two-three years.

427G American Economic History (1865-1939) - 4 O.H.
The economic development of modern America. The development of a national transportation system, national markets, and a national economy. Prerequisite: One of the following: History 231, 232, or consent of instructor. Offered two-three years.

428G History of the Upper Midwest - 4 O.H.
Historical development of the upper Mississippi Valley. The course includes Minnesota, Wisconsin, Iowa, North Dakota, South Dakota, Nebraska, and an interplay of historical forces since the nineteenth century. Prerequisite: One of the following History 215, 230, 231, 222, or consent of instructor. Offered two-three years.

429G The Age of Jackson - 4 O.H.
Jacksonian democracy, manifest destiny, the Mexican War, the deepening sectional rivalry. Prerequisite: History 231 recommended. Offered every two-three years.

479G The Civil War and Reconstruction - 4 O.H.
Origins of the war, political and military development of the war and post-bellum problems. Prerequisite: History 231 recommended. Offered every two-three years.

481G American Westward Expansion - 4 O.H.
Emphasis is placed upon the fur trader, cattleman, miner, and farmer on the Trans-Mississippi frontier with special attention given to the Western myth. Prerequisite: One or both of the following recommended: 230 and/or 231. Offered every two-three years.

483G The Progressive Era and the "Golden" Twenties (1901-1929) - 4 O.H.
Consideration will be given to progressivism, World War I, postwar adjustment problems, and social phenomena of the Twenties. Prerequisite: History 232 or consent of instructor. Offered every two-three years.

484G Depression, New Deal, War (1929-1945) - 4 O.H.
The Depression of 1929 with emphasis on the economic, social, and psychological causes and consequences, the New Deal, and the role of the United States in World War II. Offered every two-three years.

485G Contemporary American (1945-Present) - 4 O.H.
The causes and consequences of the Cold War, U.S. involvement in the Korean war, and selected post-war problems in foreign policy, mass society, and social alienation. Prerequisite: One of the following: History
The Honors Program was under revision at catalog deadline time. See The Honors Director and the Honors Program pamphlet for admissions requirements and program design.

1. To identify and support students of unusual talent and intellectual energy.
2. To provide academic opportunities of sufficient rigor to excite and challenge students so identified.
3. To promote the intellectual and personal development of such students by providing systematically for their mutual and meaningful interaction.
4. To establish an environment which will nurture the development and fulfillment of realistic aspirations and self-assessment.
5. To enhance those critical skills which will contribute to career development.

The Honors Program at Winona State University represents the university's commitment to academic excellence insofar as it addresses the needs and aspirations of WSU's most talented and highly motivated students. The Program provides an enriched, integrated, and alternative route through general education and elective requirements. The objectives of the Honors Program are:

**Honors Program**

Minne Hall, Room 323 / 457-5017
Salzberger, Director

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- To identify and support students of unusual talent and intellectual energy.
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- To promote the intellectual and personal development of such students by providing systematically for their mutual and meaningful interaction.
- To establish an environment which will nurture the development and fulfillment of realistic aspirations and self-assessment.
- To enhance those critical skills which will contribute to career development.

The Honors Program was under revision at catalog deadline time. See The Honors Director and the Honors Program pamphlet for admissions requirements and program design.

**SEQUENCE IN EUROPEAN HISTORY**

**400G Ancient Near East and Greece**
Pre-history and the development of civilization until the time of Rome, with emphasis on the Near East, Greece, and the Hellenistic world. Prerequisite: History 120 or consent of instructor. Offered every two - three years.

**401G Ancient Rome**
The rise of Rome from a small republic to empire, the decline and fall of the empire. The Roman contribution to western civilization. Prerequisite: History 120 or consent of instructor. Offered every two - three years.

**402G Early Middle Ages**
The decline of the Roman Empire, the reorganization of Europe, the early medieval Church, Islam, the Byzantine Empire, and the development of feudalism and manorialism. Prerequisite: History 120 or consent of the instructor. Offered every two - three years.

**403G High Middle Ages**
The life and institutions of Europe in the High Middle ages; the growth of capitalism and the rise of the city Scholasticism, representative institutions, and the emergence of nationalism. Prerequisite: History 120, consent of instructor. Offered every two - three years.

**406G French Revolution and Napoleon**
Political, economic, and intellectual origins of the French Revolution, a decade of revolution, the Napoleonic Era, and the impact of the revolution. Prerequisite: History 121 or consent of instructor. Offered every two - three years.

**407G Renaissance**
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. Prerequisite: History 120, 121, or consent of the instructor. Offered every two - three years.

**409G Reformation**
Causes of Reformation; Martin Luther and John Calvin. The Reformation in England, Anabaptist, Unitarians, Catholic Counter-Reformation, wars of religion. History 120, 121. Prerequisite: (History) 122 or consent of instructor other every two - three years.

**415G Twentieth Century Europe**
The peace settlements, the League of Nations, the rise of totalitarianism, World War II. Prerequisite: History 122, 232, or consent of instructors. Offered every two - three years.

**417G Hitler and Nazi Germany**
Emphasis will be given to the factors which led to fascism, the personality of Hitler, his drive for world domination and failure, and the Nuremberg trials. Prerequisite: History 122 or consent of the instructor. Offered every two - three years.

**421G Tudor and Stuart England (1471-1914)**
The transition from medieval to modern England, the Reformation, the Age of Elizabeth, and the constitutional and social conflicts of the seventeenth century. Prerequisite: History 120, 121, or consent of instructor. Offered every two - three years.

**423G Twentieth Century England**
England in the 20th Century from the height of imperial power to a Socialist government. Prerequisite: History 121, 122, or consent of the instructor. Offered every two - three years.

**432 Modern Germany**
The cultural, political, and economic development of Germany since 1815. Prerequisite: History 122 or consent of instructor. Offered every two - three years.

**434 Soviet Russia (1905-Present)**
The theory of Communism and its practice in Russia. The role of the Soviet Union in world affairs. Prerequisite: History 122, 232, or consent of instructor. Offered every two to three years.

**531 Independent Reading in History**
Course content will be determined by individual student needs. Supplements prior course work, opens new fields, or develops knowledge of various forms of historical materials. Credit arranged. May be repeated to the maximum of nine hours.

**550 Historical Research and Writing**
An introduction to the techniques of historical research, with emphasis upon application of the techniques in the preparation of a research paper.

**552 Theories of History**
An introduction to the various schools of historical thought and the philosophical problems basic to historical interpretation.

**560 American Historiography**
Analysis of historical interpretation of American history as revealed by leading American historians and major American schools of historical thought.

**565 European Historiography**
Analysis of historical interpretations of European history as revealed by leading American historians and major American schools of historical thought.

**599 Thesis**
Prerequisite: Consent of the History Department.

**NOTE:** Also see Social Science 555 for use as a History elective.
Individualized Study Program

Somsen Hall, Room 221 / 457-5015
Dan Willson, Advisor

This program allows individualized academic pursuit. There are, of course, certain requirements, particularly in general education. Beyond those requirements, however, you may base course selection entirely upon projected needs after graduation. Upon completing the program you are eligible for a bachelor of arts degree, but without a major. The degree may not be preparatory to graduate school. If you change to another program, all requirements of that program must be met.

B.A. DEGREE REQUIREMENTS
192 Q.H.

It is expected that all course prerequisites will be completed. All P/NC (Pass-No Credit) classes must be completed with a P, and must not exceed 48 quarter hours of credit. The student is limited to 36 credits (exclusive of those taken to satisfy General Education requirements) in any department offering a major and must complete the last 45 quarter hours of credit in residence during his junior and senior years. A cumulative grade point average requirement is 2.00.

BASIC REQUIREMENTS (8-16)
110, 115 English (8)
Mathematics (0-4)
Oral Communication (0-4)

BREADTH REQUIREMENTS (52 Q.H.)
Humanities (12 Q.H.)
Natural Sciences (12 Q.H.)
Social Sciences (12 Q.H.)
A Different Culture (8 Q.H.)
Contemporary Living (8 Q.H.)

ADDITIONAL REQUIREMENTS (124-132 Q.H.)

OPTION I – GENERAL
ADDITIONAL REQUIREMENTS (124-132 Q.H.)

The student must complete 96 credits of 300 and 400 level courses.

OPTION II – TECHNICAL

Credits from state-supported, public, post-secondary vocational technical schools will be treated as regular transfer credits, only credits from completed programs will be applicable. These credits will transfer only into the Individualized Study Major (Technical Option), and only as a block of credits with no specific designation.

A maximum of 12 vocational-technical credits per three-month quarter of vocational-technical school attendance will be allowed in transfer into the Individualized Study Major, Technical Option, with a maximum of 72 credits accepted.

Individuals shall be assigned to act as advisors for voc-tech transfer students.

ADDITIONAL REQUIREMENTS (124-132 Q.H.)

The student must complete 64 credits of 300 and 400 level courses.

Industrial Education

Watkins Hall, Room 103 / 457-5385
Morgan (Chairperson), Cramer, Dukes, Purzer, Tobin.

The department's basic purpose is to prepare students for careers as instructors in the public schools or for positions in the middle management level of industry. The Industrial Education Program prepares licensed Industrial Education teachers for junior and senior high schools. The Industry Major is designed for students seeking jobs with technical-managerial responsibilities in industry.

B.S. MAJOR
INDUSTRIAL EDUCATION
OPTION A

60 Q.H. (TEACHING)

Minor required.

REQUIRED COURSES (50 Q.H.)
121 Industrial Education Orientation (2)
420 Laboratory Planning (3)
491 Maintenance (2)
321 Industrial Education Teaching Methods (4)

Area 1 Manufacturing
211 Plastics (4)
241 Woods (4)
261 Metals I (4)

Area 2 Construction
230 Plumbing & Electrical Systems (3)
232 Masonry Construction (3)
231 Residential Construction (3)

Area 3 Graphic Communication
260 Graphic Arts (4)
266 Drafting (4)

Area 4 Power
270 Electricity-Electronics (3)
280 Heat Engines (4)
283 Fluid Power (3)

OPTION A-1

*Recommended as the most universal licensure in Option A.

LICENSURE TO TEACH INDUSTRIAL EDUCATION GRADES 5-12 REQUIRES:
ELECTIVES (10 Q.H.)
At least 10 credits of 300 and 400 level elective courses listed under Option B, with at least 5 hours of concentration in one area and with not less than 2 credits in each of the other numbered areas. Additional hour requirements may be met with courses from any numbered area of General Industrial Education Courses, but not more than 8 credits of internship.

OPTION A-2

LICENSURE TO TEACH INDUSTRIAL EDUCATION GRADE 9-12
ELECTIVES (10 Q.H.)
At least 10 credits of 300 and 400 level courses with at least 5 hours of concentration in one area. Additional hour requirements may be met with courses from any area or General Industrial Education Courses, but not more than 8 credits of internship.

B.S. MAJOR
INDUSTRIAL EDUCATION
OPTION B
76 Q.H. (TEACHING)

No minor required.

REQUIRED COURSES (50 Q.H.)
121 Industrial Education Orientation (2)
321 Industrial Education Teaching Methods (4)
420 Laboratory Planning (3)
491 Maintenance (2)
Area 1 Manufacturing
211 Plastics (4)
241 Woods (4)
251 Metals I (4)

Area 2 Construction
230 Plumbing & Electrical Systems (3)
231 Residential Construction (3)
232 Masonry Construction (3)

Area 3 Graphic Communication
260 Graphic Arts (4)
266 Drafting (4)

Area 4 Power
270 Electricity-Electronics (3)
280 Heat Engines (4)
283 Fluid Power (3)

OPTION B-1
*Recommended as the most universal Licenses in Option B.

LICENSES TO TEACH INDUSTRIAL EDUCATION GRADE 5-12 REQUIRES:

ELECTIVES (26 Q.H.)
At least 26 additional credits selected from 300 or 400 level elective courses with not less than 12 hours of concentration in one area and with not less than 5 credits in each of the other numbered areas. Additional hour requirements may be met with courses from any area or General Industrial Education Courses, but not more than 8 credits of internship.

OPTION B-2

LICENSES TO TEACH INDUSTRIAL EDUCATION GRADE 5-9 REQUIRES:

ELECTIVES (26 Q.H.)
At least 26 additional credits selected from 300 or 400 level courses with not less than 6 credits in each numbered area. Additional hour requirements may be met with courses from any area or General Industrial Education Courses, but not more than 8 credits of internship.

OPTION B-3

LICENSES TO TEACH INDUSTRIAL EDUCATION GRADE 9-12

ELECTIVES (26 Q.H.)
At least 26 additional credits selected from 300 and 400 level courses with not less than 12 hours of concentration in one area. Additional hour requirements may be met with courses from any area of General Industrial Education Courses, but not more than 8 credits of internship.

ELECTIVES
Area 1 Manufacturing
341 Cabinet & Furniture Making (4)
350 Hot Metals & Welding (3)
367 Technical Problems in Machine Drafting (4)
390 Materials Testing (3)
411 Reinforced Plastics (2)
450 Advanced Metalworking (4)
454 Manufacturing (4)

Area 2 Construction
341 Cabinet & Furniture Making (4)
350 Hot Metals & Welding (3)
433 Residential Construction Estimating (3)
434 Construction Practicum (3)
438 Building Heat Sources & Loads (4)
464 Architectural Drawing (4)

Area 3 Graphic Communications
362 Industrial Design (2)
363 Printing Processes (4)
364 Architectural Drawing (4)
367 Technical Problems in Machine Drafting (4)

Area 4 Power
378 Industrial Electronics (4)
481 Automotive (Brakes & Front-End) (3)
482 Automotive Tune-Up (3)

General Industrial Education Courses
399 Internship (1-8) (Special Arrangements Necessary)
453 Welding (3)
490 Special Problems (1-4)

B.S. INDUSTRY MAJOR

INDUSTRY OPTION I
124 Q.H.

No minor required

REQUIRED COURSES (41 Q.H.)
121 Industrial Education Orientation (2)

Area 1 Manufacturing
211 Plastics (4)
241 Woods (4)
251 Metals I (4)

Area 2 Construction
230 Plumbing & Electrical Systems (3)
231 Residential Construction (3)
232 Masonry Construction (3)

Area 3 Graphic Communication
260 Graphic Arts (4)
266 Drafting (4)

Area 4 Power
270 Electricity-Electronics (3)
280 Heat Engines (4)
283 Fluid Power (3)

CONSTRUCTION OPTION

REQUIRED BUSINESS
ADMINISTRATION COURSES (36 Q.H.)
201 Principles of Economics I (4)
201 Principles of Accounting I (4)
202 Principles of Accounting II (4)
310 Business Law (4)
315 Principles of Marketing (4)
318 Management of Promotion (4)
370 Business Organization and Management (4)
407 Introduction to Taxation (4)
440 Cost Accounting I (4)

REQUIRED INDUSTRIAL EDUCATION COURSES (14 Q.H.)
350 Hot Metals (3)
378 Industrial Electronics (4)
390 Materials Testing (3)
454 Manufacturing (4)

ELECTIVES — Industrial Education (15 Q.H.)
151 Introduction to Manufacturing (4)
341 Cabinet and Furniture Making (4)
362 Industrial Design (2)
367 Technical Problems in Machine Drafting (4)
411 Reinforced Plastics (2)
450 Metals II (4)
491 Maintenance (2)

ELECTIVES (18 Q.H.)
Business Administration
201 Economics (4)
203 Accounting III (4)
313 Business Computer Applications & Programming II (4)
315 Principles of Marketing (4)
335 Statistics for Business & Economics II (4)
375 Management of Human Resources (4)
419 Management Systems (4)

Business Education
332 Business Report Writing (3)
333 Business Correspondence (3)

Safety
354 Principles of Safety Education (3)

341 Cabinet and Furniture Making (4)
350 Hot Metals (3)
390 Materials Testing (3)
399 Internship (6)
411 Reinforced Plastics (2)
434 Construction Practicum (3)
436 Building Heat Sources and Loads (4)

ELECTIVES (18 Q.H.)
Business Administration
330 Production Management (4)
420 Insurance (4)
456 Labor Law and Legislation (4)

Business Education
210 Business Machines (2)
332 Business Report Writing (3)
333 Business Correspondence (3)
320 Business Data Processing (4)

Safety
354 Principles of Safety Education (3)
B.S. INDUSTRY
MAJOR
VOCATIONAL OPTION
72 Q.H.

No minor required.
The B.S. (Vocational Option) is designed for individuals who have successfully completed a two year trade and industry technical program at an Area Vocational Technical Institute and wish to pursue work toward a Baccalaureate Degree.

VOCATIONAL TECHNICAL INSTITUTE
TRANSFER POLICY

Students who enter this option, after completing a two year technical program at an approved Vocational Technical Institute, are eligible to receive a maximum of 50 Q.H. of credit for this technical background. Transfer credit is applicable toward only the major in the Vocational Option. Application is made by providing a valid transcript and the credit is recorded as a block. In some cases, individuals who have completed less than the full two year program may be granted fractional credit.

REQUIRED COURSES (20 Q.H.)

Because of the individualized nature of this major, the required courses will be jointly selected by the student and his advisor with the following guidelines.
1. All courses used to meet this requirement must have an IE prefix.
2. Courses may not duplicate the student area of technical competence.
3. The student must complete a minimum of 6 Q.H. in each of 3 numbered areas (See B.S. Industry Major — Option I)

ADDITIONAL REQUIREMENTS (62 Q.H.)

Elect 16 credits in the area of Natural Science
Elect 20 credits in the areas of Business Administration & Business Education
Elect 16 additional credits (200 and above)

Natural Science
Economics
Business Administration
Business Education
Industrial Internship in the area of potential employment (B credits maximum
SE 354 Principles of Safety (3)

WORK EXPERIENCE

Two summers of work experience in the area of potential employment is required. Internships are available.

COURSE LISTINGS

Courses offered on a Pass/No Credit basis are 131, 151, 166, and 482. Other courses may be taken Pass/No Credit by permission of the instructor. Certain courses may require expenditure for safety glasses and/or materials.

121 Industrial Education Orientation — 2 Q.H.
A broad analysis of industry and education with emphasis on employment potential, job benefits, employment philosophies and the literature of the two fields. Offered yearly.

131 Introduction to Construction — 4 Q.H.
Materials and processes used in the construction trade. Construction codes, specifications and the acquisition of the construction site. Offered yearly.

151 Introduction to Manufacturing — 3 Q.H.
Modern industry as found in today's society including laboratory experiences simulating industrial organization and production techniques. Offered yearly. P/NC Option.

166 Introduction to Drafting: The Language of Industry — 2 Q.H.
A study of industrial communication language through the application of basic drafting processes. Offered yearly. P/NC Option.

211 Plastics — 4 Q.H.
Plastic materials and processes utilizing both thermostetting and thermoplastic materials. Vacuum forming, compression, extrusion, injection, laminating, casting, forming, coating, impregnating and fabrication. Offered yearly.

230 Plumbing & Electrical Systems — 3 Q.H.
Water distribution, treatment and waste removal, electric power requirements and wiring practices, residential and commercial requirements. Offered yearly.

231 Residential Construction — 3 Q.H.
Foundations, framing and building materials. The laboratory experience involves actual construction on a job site. Offered yearly.

232 Masonry Construction — 3 Q.H.
A study of masonry construction for residential and light commercial building. Offered yearly.

241 Woods — 4 Q.H.
Fundamental tools and processes used in woodworking. Through the construction of required projects, the student will gain experience and skill in the use of hand tools and basic machine operations. Prerequisite: 266 or consent of instructor. Offered yearly.

251 Metals I — 4 Q.H.
Metallworking tools and processes. Students will construct projects to develop some general metalworking competencies. Prerequisite: 266 or consent of instructor. Offered yearly.

260 Graphic Arts — 4 Q.H.
Process of taking an idea or message and processing into an effective finished graphic product. Will work with mechanical and photographic methods. Offered yearly.

266 Drafting — 4 Q.H.
A study and application of mechanical drafting as it relates to industry and society. Units included will be orthogonal projection, auxiliary views, sectional views, isometric views, isometric sections, and oblique drawing. Offered yearly.

270 Electricity-Electronics — 3 Q.H.
A course designed to orient students with no electrical backgrounds to components, circuitry and systems. Offered yearly.

280 Heat Engines — 4 Q.H.
Power principles employed in all heat engines and the operation and maintenance of small 2 and 4 cycle engines. Offered yearly.

283 Fluid Power — 3 Q.H.
Introduction, general survey, to acquaint students with the fluid power language, and basic fundamentals of fluid mechanics as applied to fluid power systems. Offered yearly.

292 Craft Activities — 4 Q.H.
Survey of craft materials and processes, and activities for elementary and secondary education and youth activities. Offered yearly.

321 Industrial Education Teaching Methods — 4 Q.H.
Teaching techniques, methods and procedures in the different industrial education areas. Prerequisite: 121 and junior status. Offered yearly.

341 Cabinet & Furniture Making — 4 Q.H.
Fundamentals of cabinetmaking and the use of woodworking machines. Informational topics and related drawings. Prerequisite: 241. Offered yearly.

350 Hot Metals & Welding — 3 Q.H.
Laboratory course in the principles and practices used in the processing and fabrication of hot metals; arc welding, oxyacetylene welding, foundry, and forge work. Prerequisite: 251. Offered yearly.

362 Industrial Design — 2 Q.H.
Laboratory course dealing with function, materials and aesthetic considerations for mass produced industrial products. Designs will incorporate tool, and fixture requirements. Prerequisite: 241 or 251 or consent of instructor.

363 Printing Process — 4 Q.H.
Analytical study of the processes used in reproducing graphic products: US/N6 offset lithography. Prerequisite: 260 or consent of instructor.

364 Architectural Drawing — 4 Q.H.
Types of building design as applied to dwellings. Student draws a complete set of plans with specifications for a single family dwelling. Prerequisite: IE 266. Offered yearly.

367 Technical Problems in Machine Drafting — 4 Q.H.
Principles of designing machines will be discussed and applied, materials, processes, and procedures will be included. Detailed working drawings of machined parts, assembly drawings, and exploded views in isometric and isometric sections are included. Prerequisite: IE 266 or consent of instructor.

378 Industrial Electronics — 4 Q.H.
This course is a study of electrical and electronic circuits used in industrial control. It includes electrical motors and generators, motor controls, semiconductor devices and logic gates. Prerequisite: IE 270 or consent of instructor.

380 Materials Testing — 3 Q.H.
Experimental laboratory study of the composition, properties and strength of commonly used man-made and natural materials. Prerequisites: 211, 251, and 241.

411G Reinforced Plastics — 2 Q.H.
Fiberglass and other fibers and reinforcements with polyester resins. A major project will be required. Prerequisite: 241 or consent of instructor.

420 Laboratory Planning — 3 Q.H.
A study of the design of laboratory facilities and the selection of appropriate equipment for instruction in the area of Industrial Education. This course is for Industrial Educa-
Internship

399 General Internship - 1-16 O.H.
Specific details regarding the course are contained in internship program statements for the departments using it. There is a limit of 16 internship credits per quarter and 24 internship credits in total which may apply to majors. A cumulative grade point average of 2.0 or higher is required.

555 General Internship - 1-16 O.H.
Specific details regarding the course are contained in internship program statements for the departments using it. Students must consult the chairperson of the department in which they are majoring. Prerequisites: as set by departments. P/NC only, except 4 O.H. of work related to courses may be taken for grade with approval of department and area dean.

Mass Communications

Performing Arts Center, Room 216/
457-5230
Vivian (Chairperson), Bennett, Brooks, Daniel, MacDonald, Pack

Mass media are necessary in a free society to inform, survey, protect and enlighten the citizens. These vital industries are currently in a period of rapid growth, continually developing new technologies and opportunities. The WSU Mass Communications Department stresses the development of communicators with a strong sense of their responsibility and role in serving the community, as well as practical experience in the production and development of mass media content.

The program offers many opportunities for putting theory into practice as students work on the campus newspaper, at the 1300-watt radio station, in color and black-and-white television and in photography facilities. An internship program places students locally, statewide, nationally and internationally in work experience situations which have led many to professional positions in media and industry. The WSU program is also a basis for graduate work in mass communications.

WSU offers four mass communications emphases: journalism, broadcast, public relations and photojournalism. Each allows students to develop general skills in oral, visual and written communication, to gain an understanding of communication law and theory, and to receive specific information and experience in an area of special interest. Typing skills of 10 words per minute required.

COURSES FOR GRADUATE STUDENTS ONLY

591 Special Problems in Industrial Education - 1-6 O.H.
Problems non-technical such as school shop safety, personnel organization and inventory systems. Admission on approval of the instructor.

592 Industrial Tour - 2-6 O.H.
This course is a tour which includes experience in all Industrial Education clusters (Construction, Manufacturing, Communication, Power, and Transportation). Field trips are arranged with industries in several Minnesota communities. Students make their own arrangements for travel and lodging for the tour. Not more than 6 credits of Internship and tours may be applied to major. Offered summer session.

SAFETY EDUCATION

364 Principles of Safety Education - 3 O.H.
Overview of the scope and methods of safety education including traffic, occupational, home, farm, fire and public safety.

433G Residential Construction Estimating - 3 O.H.
A study and application of rules and procedures involved in estimating material cost in residential construction. Prerequisite: IE 231 or consent of instructor.

434G Construction Practice - 3 O.H.
The student will have the opportunity to frame and enclose a house as well as study current building techniques. Prerequisite: 231 or consent of instructor.

436G Building Heat Sources & Loads - 4 O.H.
This course teaches the concept of building heat loads. It includes building materials designed to reduce heat loss. A major part of the course includes traditional and energy alternative heating and cooling applications. Prerequisite: IE 131.

450 Advanced Metalworking - 4 O.H.
Student designs and constructs an advanced problem in metals with emphasis in the use of metalworking machine tools. Prerequisite: 251, or consent of instructor.

453G Welding - 2-3 O.H.
Welding as a basic fastening process used in metal fabrication industries. Basic metallurgy, fabrication techniques and newer industrial processes. Prerequisite: IE 251 or consent of instructor.

454G Manufacturing - 4 O.H.
Acquaints the industrial education major with the various aspects of modern industry. A portion of this course is devoted to the complete development of mass production products. Prerequisites: IE 211, 241 and 251.

481G Automotive (Brakes & Front End) - 3 O.H.
Principles involved in the automotive brake and steering systems. The student will develop the ability to analyze and make major adjustments and repairs on these two systems.

482G Automotive Tune-Up - 3 O.H.
The automotive engine with emphasis on the electrical and carburetion system and including testing and adjusting these systems using modern equipment. P/NC Option, for undergraduates.

490 Special Problems - 1-4 O.H.
An independent study course designed for seniors who want to carry out an independent research activity. Prerequisite: senior standing, approval of department chairperson and instructor.

491 Maintenance - 2 O.H.
Technical information on industrial education laboratory equipment, cutting theories and safety, maintenance and adjustment of power equipment, saw sharpening and general hand tool maintenance. Prerequisites: 241, 251 or consent of instructor. Offered yearly.

591 Special Problems in Industrial Education - 1-6 O.H.
Problems non-technical such as school shop safety, personnel organization and inventory systems. Admission on approval of the instructor.

592 Industrial Tour - 2-6 O.H.
This course is a tour which includes experience in all Industrial Education clusters (Construction, Manufacturing, Communication, Power, and Transportation). Field trips are arranged with industries in several Minnesota communities. Students make their own arrangements for travel and lodging for the tour. Not more than 6 credits of Internship and tours may be applied to major. Offered summer session.
B.A. MAJOR
MASS COMMUNICATIONS
64 Q.H.

The Mass Communications major offers four emphases: journalism, broadcast, photog​raphy, public relations.

REQUIRED CORE COURSES FOR ALL MASS COMMUNICATIONS MAJORS (32 Q.H.)
100 Introduction to Mass Communications (4)
101 Fundamentals of Broadcasting (4)
110 Visual Communication (4)
215 Newswriting I (4)
217 Newswriting II (4)
300 Mass Communications Law (4)
301 Principles of Public Relations & Advertising (4)
312 Mass Communication Theory and the Media (4)
318 Media Graphics (4)
310 Photojournalism (4)
318 Media Graphics (4)
338 Feature Writing (4)
337 Specialized Reporting (4)
399 Internship (4)
385 Issues in Mass Communications (2)
201 History of Photojournalism (2)
320 Broadcast Journalism (4) OR
324 Advanced Television Production (4)
218 News Editing (4)
217 Newswriting II - 4 Q.H.
Laboratory-lecture on operation of a newsroom—copyreading, gatekeeper decisions, headline writing, makeup. Prerequisite: 217 or consent of instructor.

250 Radio Practicum - 2 Q.H.
Staff work at KGAL-FM. General manager supervises and evaluates staff. Prerequisite: 200. May be repeated twice. P/NC Only.

251 Newspaper Practicum - 2 Q.H.
Production of student newspaper, the Winonan. Faculty adviser supervises and evaluates staff. Course may be repeated twice. Prerequisite: 215. P/NC Only.

300 Mass Communications Law - 4 Q.H.
Basics of mass communications law to acquaint students with major issues and survey current legal status of the media. Prerequisite: 100.

301 Principles of Public Relations and Advertising - 4 Q.H.
Nature, role and management of public relations and advertising. Case problems and projects. Prerequisite: 100.

302 Broadcast Management - 4 Q.H.
Techniques and organization for management of commercial, non-commercial and industrial radio and television. Prerequisite: 101.

310 Photojournalism - 4 Q.H.
The photograph as a means of visual reportage. Lab required. Prerequisite: 110.

313 Mass Communication Theory and the Media - 4 Q.H.
Theories of media influence on society and culture. Prerequisite: 100.

318 Media Graphics - 4 Q.H.
A survey of printing process and illustration techniques, design and format trends, and practical creative problems in the mass media. Prerequisite: 110.

320 Broadcast Journalism - 4 Q.H.
Exercises in reporting, writing, tapering and editing news for radio and television. Prerequisites: 200, 215 and 322.

322 Basic Television Production - 4 Q.H.
Single camera and studio television systems, including lighting, audio, producing, directing, camera operation.

323 Intermediate Television Production - 4 Q.H.
More advanced television presentations. Students work in teams on more complex programs. Prerequisite: 322.

324 Advanced Television Production - 4 Q.H.
Full-length television programs. Prerequisites: 210 and 323.

337 Specialized Reporting - 4 Q.H.
Interpretive reporting, investigative reporting, public affairs reporting, editorial persuasion, and other topics. May be repeated once for credit.

B.S. MAJOR
MASS COMMUNICATIONS
AND

PHOTOJOURNALISM EMPHASIS (32 Q.H.)

322 Basic Television Production (4)
289 -CTA Persuasive Communication (4)
439 -ENG Technical Writing (4)
318 Media Graphics (4)
310 Photojournalism (4)
338 Feature Writing (4)
399 Internship (4-8)
385 Issues in Mass Communications (2)
201 History of Photojournalism (2)
320 Broadcast Journalism (4) OR
324 Advanced Television Production (4)
218 News Editing (4)
217 Newswriting II (4)
318 Media Graphics (4)
310 Photojournalism (4)
318 Media Graphics (4)
337 Specialized Reporting (4)
318 Media Graphics (4)
338 Feature Writing (4)
338 Feature Writing (4)
337 Specialized Reporting (4)
318 Media Graphics (4)
338 Feature Writing (4)
338 Feature Writing (4)
337 Specialized Reporting (4)
318 Media Graphics (4)
338 Feature Writing (4)
338 Feature Writing (4)
337 Specialized Reporting (4)
318 Media Graphics (4)
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338 Feature Writing (4)
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337 Specialized Reporting (4)
318 Media Graphics (4)
338 Feature Writing (4)
338 Feature Writing (4)
337 Specialized Reporting (4)
318 Media Graphics (4)
338 Feature Writing (4)
338 Feature Writing (4)
credit on a second topic. Prerequisite: 217 or consent of instructor.

338 Feature Writing - 4 Q.H.
Developing, writing and marketing feature stories to a variety of media. Prerequisite: 217 or consent of instructor.

350 Television Practicum - 2 Q.H.
Production by student teams for educational-access cable television. May be repeated twice. Prerequisite: 322. P/NC Only.

351 Photojournalism Practicum - 2 Q.H.
Production and dissemination of news photographs. Students will work as staff members of the Winonan. May be repeated twice. Prerequisite: 110 and 310. P/NC Only.

352 Public Relations Practicum - 2 Q.H.
Print and broadcast experience of public relations work on university brochures, P.R. Functioning and strategies. Prerequisite: 110.

385 Issues in Mass Communications - 2 Q.H.
Ethics and responsibilities of the media; relationship to government; and other topics. May be repeated once for credit on a second topic. Prerequisite: 100.

399 Internship - 4-8 Q.H.
Departmentally approved, supervised practical experience in mass communication. P/NC Only.

400 Independent Study - 2-4 Q.H.
To meet the needs of the individual student. By previous arrangement only. Prerequisite: Junior status. May be repeated to a total of 8 hours.

401 Public Relations Case Studies - 4 Q.H.
Public relations problems in industry, government trade association, labor and other groups. Planning and preparation of communications materials for various media, and application of public relations techniques. Prerequisite: 301.

410 Problems in Photojournalism - 4 Q.H.
The picture, story, color theory and separation, sequential imagery and layout. (Students should have access to a full-adjustable camera.) Prerequisite: 110.

412 Sports Photography - 2 Q.H.
Specifics of action photography. Prerequisite: 410.

413 Public Relations Photography - 2 Q.H.
Photography for institutional, promotional needs. Prerequisite: 110.

PHOTOGRAPHY
Photography courses are offered to meet General Education requirements, to meet service requests from other departments, and to fulfill a variety of avocational student needs. Darkrooms for black-and-white processing and printing are located in Somsen 105, while color darkrooms are found in Somsen 123.

COURSE LISTINGS:
150 Photography - 4 Q.H.
An introductory course in the science and art of black-and-white photography. Materials, equipment, composition, processing, printing, and display are covered. Requires an average of two hours per week darkroom work. Not intended for Mass Communications majors or minors. P/NC Option.

151 Color Photography - 4 Q.H.
Introductory course with emphasis on darkroom work. Weekly lecture and laboratory work. May be repeated. P/NC Option.

235 History of Photography - 4 Q.H.
A general survey of photography from conception to the present with emphasis on the significant developments in technology and aesthetics in the United States. P/NC Option.

Mathematics and Computer Science

Gildemeister Hall, Room 311 / 457-5370
Union (Chairperson), Bozonic, Bunce, Gratias, Hayden, Johnson, Olson, F., Olson, S., Ouette, Van De Water, Weldon, Wolfe.

The department of Mathematics and Computer Science offers courses in mathematics, statistics and computer science designed to prepare you in teacher education, general education or preprofessional and professional fields.

B.A. MAJOR
OPTION A
57 Q.H.

REQUIRED COURSES (48 Q.H.)
218 Introduction to Discrete & Linear Mathematics (4)
225, 226, 227, 329 Calculus-I, II, III, IV (20)
316 Introduction to Modern Mathematics (4)
317 Abstract Algebra (4)
318 Probability (4)
330 Differential Equations (4)
417 Linear Algebra (4)
460 Advanced Calculus (4) OR
470 Intermediate Analysis (4)

ELECTIVES (9 Q.H.)
Electives from approved Math courses 300 and above, either Math 231 or 232 is acceptable.

B.A. MAJOR
OPTION B
80 Q.H.

(No minor required)

REQUIRED COURSES (60 Q.H.)
218 Introduction to Discrete & Linear Mathematics (4)
231 Intro to FORTRAN (4) OR
232 Intro to Pascal (4)
225, 226, 227 Calculus-I, II, III (15)
316 Introduction to Modern Mathematics (4)
317 Abstract Algebra (4)
318 Probability (4)
329 Geometry-Calculus IV (5)
330 Differential Equations (4)
417 Linear Algebra (4)
460, 461, 462 Advanced Calculus-I, II, III, (12) OR
470, 418, 419 Intermediate Analysis Mathematical Statistics (12)

ELECTIVES (20 Q.H.)
Electives from approved Math courses 300 and above to a total of 24 credits. Physics 221, 222, and 223 are acceptable as elective credits.

B.S. MAJOR
OPTION A
56 Q.H. (TEACHING)

To be recommended for student teaching by the Department of Mathematics and Computer Science, a student must have completed 39 credits of the major with a grade of C or better in each course; successful completion of Math 320 is highly desirable prior to student teaching.

REQUIRED COURSES (52 Q.H.)
NOTE: Math 215 and 216 may be substituted for Math 220.

130 Intro to BASIC Programming (4)
218 Introduction to Discrete & Linear Mathematics (4)
220 College Algebra and Trigonometry (5)
225, 226, 227 Calculus-I, II, III (15)
308 Statistics (4)
316 Introduction to Modern Mathematics (4)
317 Abstract Algebra (4)
318 Probability (4)
322 Modern Geometry (4)
417 Linear Algebra (4)

ELECTIVES (4 Q.H.)
Electives from Math courses 300 or above to a total of 4 credits. Math 231 or 232 is acceptable as elective credits.

ADDITIONAL REQUIREMENT (4 Q.H.)
320 Teaching Mathematics (4)
B.S. MAJOR
OPTION B
75-78 Q.H. (TEACHING)

To be recommended for student teaching by the Department of Mathematics and Computer Science, a student must have completed 39 credits of the major with a grade of C or better in each course; successful completion of Math 320 is highly desirable prior to student teaching.

(No minor required)

REQUIRED COURSES (68-71 Q.H.)
218 Introduction to Discrete & Linear Mathematics (4)
231 Introduction to FORTRAN (4) OR
232 Introduction to Pascal (4) OR
233 Structured COBOL Programming (4)
225, 226, 227 Calculus I, II, III, (15)
316 Introduction to Modern Mathematics (4)

ELECTIVES (7 Q.H.)
Electives from Math courses 300 or above or a total of 11 credits.

B.S. MAJOR
OPTION C
STATISTICS (TRI-COLLEGE)
66 Q.H.

REQUIRED COURSES (60-64 Q.H.)
218 Introduction to Discrete & Linear Mathematics (4)
231 OR 232 FORTRAN OR Pascal (4)
225, 226, 227, 329 Calculus I, II, III, and IV (20)
308 Statistics (4)
318 Probability (4)
410, 411 Applied Statistics I, II (8)
418, 419 Introduction to Mathematical Statistics I, II (8)
*ST 222 Data Collection and Analysis (4)
*ST 223 Non-Parametric Statistics (4)
492 Practicum in Statistics (4-8)

ELECTIVES (4-8 Q.H.)
Electives will be selected from available offerings at the College of St. Teresa, St. Mary's College and WSU, in consultation with your advisor. CST and SMC statistics electives are listed in the statistics minor below.

B.A. MINOR
30 Q.H.

REQUIRED COURSES (24 Q.H.)

NOTE: Math 215 and 216 may be substituted for Math 220.
218 Introduction to Discrete & Linear Mathematics (4)
220 College Algebra and Trigonometry (5)
225, 226, 227 Calculus I, II, III, (15)

ELECTIVES (6 Q.H.)
Electives from Math courses 300 or above to a total of 10 credits. Math 208, and either 231 or 232 are acceptable as elective credit.

B.S. MINOR
OPTION A (FOR SECONDARY TEACHERS)
36 Q.H. (TEACHING)

REQUIRED COURSES (32 Q.H.)

NOTE: Math 215 and 216 may be substituted for Math 220.
218 Introduction to Discrete & Linear Mathematics (4)
220 College Algebra and Trigonometry (5)
225, 226, 227 Calculus I, II, III (15)
316 Introduction to Modern Mathematics (4)
322 Modern Geometry (4)

ADDITIONAL REQUIREMENTS (4 Q.H.)
320 Teaching of Mathematics (4)

OPTION B (FOR ELEMENTARY TEACHERS)

(See Education for description)

OPTION C (STATISTICS)
32 Q.H.

REQUIRED COURSES (24-25 Q.H.)
Mathematics
218 Introduction to Discrete & Linear Mathematics (4)
221 Intro to Math with Applications (4) OR
215 College Algebra (4)
222 Calculus (4) OR
226 Calculus (5)
208 Statistics (4) OR
Business Administration
207 Statistics (4) OR
Psychology
231 Statistics (4)
Mathematics
410 Applied Statistics: Analysis of Variance (4)
411 Applied Statistics: Multiple Regression (4)

ELECTIVES (7-8 Q.H.)
One course from Group I and one course from Group II.

Group I
STATISTICS
Mathematics
318 Probability (4)

418 Mathematics Statistics I (4)
419 Mathematics Statistics II (4)
CST
ST222 Sampling (4)
CST
ST223 Nonparametric Statistics (4)
SMC
ST361 Operations Research (4-5)
SMC
ST381 Linear Statistical Models (4-5)

*Courses offered at College of St. Teresa. Prerequisite: Math 208 or 308 or Bus Adm 207 OR Psych 231

**Courses offered at St. Mary's College. Prerequisite: same as CST plus Math 417

Group II AREAS OF APPLICATION
Business Administration
418 Marketing Research (4)
Psychology
308 Experimental Psychology (4)
340 Differential Psychology (4)
350 Psychological Testing and Measurement (4)
Sociology
376 Social Research Methods (4)
476 Laboratory in Social Research (4)
NOTE: Students must plan their General Education program so that they obtain the prerequisite(s) for the course of their choice in Group II.

B.S. MAJOR
COMPUTER SCIENCE
69 - 71.5 Q.H.

REQUIRED COMPUTER COURSES
(36-40 Q.H.)
Math 231 Introduction to FORTRAN (4) OR
Math 232 Introduction to Pascal (4)
Math 233 Structured COBOL Programming (4)
Math 240 Intro to JCL and File Handling (2)
Math 250 Fundamentals of Computer Science (4)
Physics 332 Computer Organization (5)
Math 340 Data Structures (4) OR
*Math 370 Systems Analysis (4.5)
Math 351 Introduction to Assembly Language Analysis (4) OR
Math 370 Systems Analysis (4.5)
Math 491 Practicum in Computer Science (8)

REQUIRED MATHEMATICS COURSES
(18 Q.H.)
Math 218 Introduction to Discrete & Linear Mathematics (4)
Math 225, 226 Calculus I, II, (10)
Math 308 Statistics (4) OR
Math 308 Probability (4)

ELECTIVES (12-13.5 Q.H.)
The three elective courses are to be selected in the following manner: at least two from Group I and one or more from Group II or Group III.

Group I
Math 341 Data Structures II (4)
Math 376 Systems Programming (4)

Group II
Math 342 Data Structures II (4)
Math 376 Systems Programming (4)

Group III
Math 342 Data Structures II (4)
Math 376 Systems Programming (4)
Math 415 Higher-level Languages (4)

**Group II**

Math 312 Introduction to Microcomputers (4)
Math 425, 426 Numerical Analysis I, II, (8)
Math 430 Computer Graphics (4)
*C.S.* 440 Simulation and Modeling (4.5)
Math 450 Compilers (4)
Math 465 Computing Theory (2)
Math 466 General Computing Applications (2)

**Group III**

*C.S.* 350 COBOL Programming II (3)
Math 385 Applied Database Management Systems (4)
*C.S.* 460 Management Information Systems (4.5)
Math 467 Information Systems Applications (2)
Math 485 Database System Design (4)
(*C.S. are computer science courses that are taught at S. Mary's College. Fractional credits are due to converting semester hours to quarter hours.)

**B.S. MINOR COMPUTER SCIENCE 31–33 Q.H.)**

The B.S. Computer Science Minor may be taken by either teaching or non-teaching degree candidates. Not a certified minor for teaching.

**REQUIRED COURSES (29 Q.H.)**

Math 218 Introduction to Discrete & Linear Mathematics (4)
Math 231 Introduction to FORTRAN (4) OR
Math 232 Introduction to Pascal (4) OR
BusAdm 312 Business Computer Applications and Programming I (4)
Math 250 Fundamentals of Computer Science (4)
Math 233 Structured COBOL (4) OR
BusAdm 313 Business Computer Applications and Programming II (4)
Math 340 Data Structures I (4)
Math 351 Introduction to Assembly Language (4)
Physics 332 Computer Organization (5)

**ELECTIVES (2-4 Q.H.)**

Any computer science courses with course numbers greater than 250.

**COURSE LISTINGS**

Any course not required or elected for a major or minor may be taken on a pass/no credit basis, except 491/492 which is pass/no credit only.

All courses offered on a quarterly basis unless otherwise noted.

**COMPUTER SCIENCE COURSES**

130 Intro to BASIC Programming – 4 Q.H.
An introductory course in computer programming utilizing the BASIC language. Intended for students in the life and social sciences, business, psychology and other disciplines. Students will use the MECC time sharing computer system and microcomputers (home computers). (Not open to computer science majors or minors.)

210 Computers in Society – 4 Q.H.
An introductory non-technical survey of computer systems and a study of the social impact of computers. Course does not count for major or minor elective credit. Prerequisite: none.

229 BASIC Programming on Apple II – 4 Q.H.
An introduction to the AppleSoft BASIC. In addition to the usual BASIC commands, this course will cover high and low resolution graphics, color output, sound generation, and use of the game paddles. Offered yearly. P/NC Option. Prerequisite: none.

231 Introduction to FORTRAN – 4 Q.H.
An introduction to computer programming using the FORTRAN language with structured approach. Programming applications will be taken from scientific and non scientific areas. Prerequisite: none.

232 Introduction to Pascal – 4 Q.H.
A study of computer programming using the Pascal language with emphasis on data types, control mechanisms, data structures, and structured programming. Applications will be taken from both scientific and commercial problems. Prerequisite: none.

233 Structured COBOL Programming – 4 Q.H.
An indepth study of structured programming design utilizing the COBOL language. Topics include structured design techniques, modular program design, sequential file processing, and direct processing. Prerequisite: Math 231 or 232.

240 Job Control Language and File Handling – 2 Q.H.
Provides the student with a moderate level of proficiency in job control language in a multiprogramming and multiprocessor environment. Prerequisite: Math 250 or 233. Grade only. Offered yearly.

250 Fundamentals of Computer Science – 4 Q.H.
An introduction to basic concepts of computer science including computer organization, problem analysis and algorithmic design, structured programming concepts, elementary data structures, numeric and non-numerical algorithms, sorting and searching. Prerequisite: Math 231 or 232.

312 Introduction to Microcomputers – 4 Q.H.
This course will examine mini/micro computers; what they are and what they can and cannot do; what is available in terms of models, equipment and cost. It also provides instruction in organizing, programming and operating microcomputer. Prerequisites:

Math 250. Offered yearly.

340 Data Structures – 4 Q.H.
Basic concepts of data storage and memory utilization. Linear lists, stacks, queues, linked lists, trees and graphs. Prerequisite: Math 250 or consent of instructor. Grade only. Offered yearly.

341 Data Structures II – 4 Q.H.
Studies will include storage structures and organizations, symbol tables and searching techniques, Hash coding, organizations of large data files and data bases and data structures in programming languages. Prerequisite: Math 340.

351 Introduction to Assembly Language – 4 Q.H.
Components of a programming system. Introduction to assembler structure. Data forms: Assembly language; Macros; input/output; subroutine linkage. (Formerly Math 451). Prerequisite Math 250.

370 Systems Analysis – 4 Q.H.
A study of systems in relation to computer applications with emphasis on problem definition, problem analysis, data collection, fine design, output design and testing. Discussion will include physical characteristics of input/output devices and special processors and general performance characteristics of algorithms in relation to data design. Prerequisite: Math 233 and 250.

376 Systems Programming – 4 Q.H.
A study of the organization and logical structure of computer operating systems and software. Topics include assembly and loading, resource allocation, multiprogramming virtual memory, segmentation, paging, dynamic storage allocation, and an operating systems overview. Prerequisite: Math 340 and 351.

385 Applied Database Management Systems – 4 Q.H.
A study of basic Data Base Management Systems (DBMS) concepts. Topics include: DBMS models—Relational, Network and Hierarchical; existing DBMS's and "hands-on experience" with a DBMS. Prerequisite: Math 340.

415 Higher-level Languages – 4 Q.H.
A study of the logic and design principles underlying programming languages. Includes core concepts of language syntax and semantics as well as common features of programming languages such as FORTRAN, Pascal, LISP, SNOBOL, etc. Students will design and implement a mini-language as a course requirement. Prerequisite: Math 340 (Assembly Language is desirable). Grade only.

430 Computer Graphics – 4 Q.H.
A study of computer graphics techniques. Includes display devices, transformation, graphics package design and picture structure. Prerequisite: Math 340. Grade only. Offered alternate years.

450 Compilers – 4 Q.H.
A study of basic concepts of compiler design. Topics include lexical analysis, expression and syntactical analysis, mixed expressions, and assignment, optimisation and fault monitoring. Prerequisite: Math 376 and 415 or consent of instructor.

465 Topics: Computing Theory – 2 Q.H.
Topics will be selected from automata
theory, the Turing Machine, combinatorics, etc. An indepth view of a specific concept of computers will be given and the student will do a project. Prerequisite: Junior standing and consent of instructor.

486 Topics: General Computing Applications - 2 Q.H.
Topics will be selected from general computing application areas. An indepth view of a specific problem or technique will be given and the student will prepare a project. Topics may include statistical problems, the Simplex model, 0/1 knapsack, Divide and Conquer, etc. Prerequisite: Junior standing and consent of instructor.

467 Topics: Information Systems Applications - 2 Q.H.
Topics will be selected from specific information systems applications and are oriented towards the user. Topics will include linear programming, statistical packages, inventory systems, decision support systems, the transportation problem, project scheduling, queueing models, forecasting, and discrete simulation. Prerequisite: Junior standing and consent of instructor.

480G Computer Workshop - 3 Q.H.
An introduction to computer timesharing utilizing the MECC time-sharing system. Offered on demand. (Same as Physics 480.)

481G BASIC Applications - 4 Q.H.
A study of the BASIC programming language and its use in education. Prerequisite: Math 480 or equivalent. Offered on demand. Grade only. (Same as Physics 481.)

485 Database System Design - 4 Q.H.
Study of database concepts in design and development of database systems. Application of concepts in joint course project. Survey of design principles used in current commercial database systems. Prerequisite: Math 385.

491 Practicum in Computer Science - 8 Q.H.
Provides the student with practical experience and training. Students work a minimum of 200 hours on the job in a computer installation. Students planning to take this course must register with the department at least one year prior to the quarter in which they intend to start the practicum. Prerequisite: 25 credits in the computer science program and consent of the instructor. Pass/No credit Only.

MATHEMATICS COURSES

110 Mathematics for Elementary Teachers - 4 Q.H.
Study of concepts and properties of operations essential to mathematics in the elementary grades. Open only to elementary majors.

113 Introduction to Algebra for College Students - 4 Q.H.
A study of basic algebra for the student who has not successfully completed two years of high school algebra.

201 Geometry for Elementary Teachers - 4 Q.H.
Informal geometry encountered in elementary mathematics. Prerequisite: Math 110 or consent of instructor. Offered on demand.

215 College Algebra - 4 Q.H.
Topics in algebra including equations and inequalities, functions and their graphs, polynomials, and systems of equations. Prerequisite: 2 years of high school algebra, or Math 113, or consent of instructor.

216 Trigonometry - 4 Q.H.
Topics include trigonometric functions, inverse trigonometric functions, identities and equations. Prerequisite: Math 215 or consent of instructor.

218 Introduction to Discrete and Linear Mathematics - 4 Q.H.
Introduction to linear algebra including vectors, matrices, systems of linear equations. Introduction to discrete mathematics including sets, relations, symbolic logic, combinatorics, graphs. Applications to business and computer science.

220 College Algebra and Trigonometry - 5 Q.H.
An accelerated study of college algebra and trigonometry. A strong high school mathematics background is essential.

221 Introductory Mathematics with Application - 4 Q.H.
A lucid exposition of topics in mathematics for students who plan to pursue studies in business, economics, psychology, the life and social sciences, and other disciplines that bring them into contact with mathematics. Prerequisite: Math 113.

222 Calculus for Non-Mathematics Majors - 4 Q.H.
An intuitive approach to calculus for the non-mathematics major. Emphasis is on applied problems in the managerial, natural and social sciences. Prerequisite: 215 or 221.

225, 226, 227 Calculus I, II, III - Each 5 Q.H.
Analytic Geometry, Differential and Integral Calculus of a single variable. Three quarters in sequence. Prerequisite: Math 215, 216, or 220. (or special permission for strong students with 4 years of high school Mathematics.)

316 Introduction to Modern Mathematics - 4 Q.H.
Logic, methods of proof, and applications. Prerequisite: Math 220 or equivalent. Offered Fall Quarter.

317 Abstract Algebra - 4 Q.H.
Axiomatic development of groups, rings and fields. Prerequisite: Math 316 or consent of instructor. Offered Winter Quarter.

320 Teaching of Mathematics in the Secondary Schools - 4 Q.H.
Aims, organization and methods of teaching mathematics in junior and senior high school. Required for the B.S. major, does not count toward the B.A. degree. Offered Winter Quarter alternate years.

322 Modern Geometry - 4 Q.H.
Designed to prepare the prospective teacher of high school geometry in the way the subject matter will be covered in a modern course. Prerequisite: Math 227 or 316. Offered Spring Quarter alternate years.

329 Calculus of Functions of Several Variables - 5 Q.H.
A continuation of Math 227. Partial differentiation and multiple integration are studied. Prerequisite: Math 227. Offered yearly.

330 Differential Equations - 4 Q.H.
Emphasis on solving differential equations. Prerequisite: Math 329. Offered Spring.

357 Number Theory - 4 Q.H.
Study of the properties of the natural numbers. Prerequisite: Math 316 or consent of instructor. Offered every two years.

408G History of Mathematics - 4 Q.H.
General view of the historical development of the elementary branches of mathematics. Prerequisite: Math 227 or consent of instructor. Offered on demand.

417G Linear Algebra - 4 Q.H.
A study of the theory of vector spaces and linear transformations. Prerequisite: Math 316 or consent of instructor. Offered Spring Quarter.

425G, 426G Numerical Analysis I, II - Each 4 Q.H.
Numerical solution of equations, systems of linear equations, interpolation, numerical differentiation and integration. Prerequisite: Math 231 or 322 and 329. Offered every two years.

432G Theory of Functions of a Complex Variable - 4 Q.H.
Basic concepts of analysis; analytic functions of a complex variable. Prerequisite: Math 227. Offered on demand.

440G Linear Programming - 4 Q.H.
An introduction to linear programming. Prerequisite: Math 231 or 232 and 227 or consent of instructor. Offered on demand.

445G Introduction to Metric Spaces and Topological Notions - 3 Q.H.
Indexed families of sets, mappings, diagrams, continuity, neighborhoods, limit points, open and closed sets. Prerequisite: Math 317 or consent of instructor. Offered on demand.

A systematic approach to differentiation and integral calculus of functions, and transformations in several variables. Offered alternate years. Offered 1982-83. Prerequisite: Math 316, 329.

470G Intermediate Analysis - 4 Q.H.
Concepts and techniques of analysis for functions of a single variable. Prerequisite: Math 227. Alternates Fall Quarter with Math 460.

489G Special Topics - 1-4 Q.H.
Experiences in mathematics, and mathematics education for teachers of grades K-12. Prerequisite: consent of instructor. Offered on demand.

490 Independent Problems in Mathematics - 1-6 Q.H.
An opportunity to continued study of selected topics. Consent of instructor is required. Offered on demand.

STATISTICS COURSES

124 Basic Statistics - 1 Q.H.
Basic ideas of elementary statistics.

208 Fundamentals of Statistics - 4 Q.H.
Introductory statistics with emphasis on applications. It is recommended that the Basic Skills requirement in mathematics (See General Education Requirements - Basic Skills) be met before enrollment in Math 208.

208 Majors in mathematics, statistics, or computer science should take Math 308 rather than 208.
308 Statistics - 4 Q.H.
First course in statistics for students with a strong mathematics background. Prerequisites: Math 218, Math 222 or 226, or consent of instructor.

318 Probability - 4 Q.H.
Basic laws and fundamental ideas of probability in a finite sample space. Introduction to continuous distributions. Prerequisite: Math 218, and Math 222 or 226, and Math 231 or 232.

410 Applied Statistics: Analysis of Variance - 4 Q.H.
Analysis of variance and introduction to experimental design. Prerequisite: Math 308, and Math 218 or 221, or consent of instructor. Offered winter of odd-numbered year.

411 Applied Statistics: Multiple Regression - 4 Q.H.
Multiple regression with emphasis on sample size. Prerequisite: Math 308, and Math 218 or 221, or consent of instructor. Offered spring of odd-numbered year.

418G, 419G Introduction to Mathematical Statistics I, II - Each 4 Q.H.
A mathematical approach to statistics. Prerequisite: Math 227 and 318, and Math 231 or 232. Offered winter and spring of even-numbered years.

492 Practicum in Statistics - 4-8 Q.H.
Provides the student with experience and training in statistical techniques. The student will work a minimum of 100 hours (4 credits) or a minimum of 200 hours (8 credits) on a job utilizing statistics. Prerequisites: Math 411 or 419 and consent of instructor. Pass/No Credit Only. Offered on demand.

COURSES FOR GRADUATE STUDENTS ONLY
(Offered only during Summer Sessions)

500 Problems in Math - 1-6 Q.H.
Designed to allow post-baccalaureate students opportunity to study mathematical topics in depth under the supervision of a faculty member. May be repeated to a total of 6 Q.H.

501, 502 Modern Mathematics for Elementary Teachers, I, II - Each 3 Q.H.
A modern approach to elementary school mathematics for teachers and supervisors. Offered on demand.

510, 511 Modern Elementary Analysis I, II - Each 4 Q.H.
A modern treatment of the fundamentals of analysis. Prerequisite: one year of college calculus. Offered on demand.

520 Contemporary Teaching of Secondary School Mathematics - 3 Q.H.
Examination of recent curriculum developments in secondary school mathematics. Offered on demand.

521 Probability I - 3 Q.H.
An introduction to the mathematical theory of probability. Offered on demand.

529 BASIC Programming on the Apple II with Applications - 4 Q.H.
An introduction to Applesoft BASIC. In addition to the usual BASIC commands, this course will also cover high and low resolution graphics, color output, sound generation, and use of the game paddles. Offered summer session.

531, 532 Modern Algebra I, II - Each 3 Q.H.
Study of groups, rings, fields, homomorphisms, isomorphisms, modules and vector spaces. Offered on demand.

540 Introduction to Number Theory - 3 Q.H.
Congruences, quadratic, residues, Euclidian algorithm, number theoretic functions, Diophantine equations. Offered on demand.

Medical Technology

Pasteur Hall, Room 215 / 457-5272
Anderson, Director of Allied Medical Science. Adjunct faculty from Metropolitan Medical Center; United Hospitals, Miller Division; St. Francis Hospital; Abbott Northwestern Hospital, Inc. and Community Memorial Hospital. See adjacent faculty listing in this catalog.

The Medical Technology Program is a four-year course of instruction leading to the degree of Bachelor of Science in Medical Technology. Freshmen Medical Technology majors must consult with Dr. Dwight Anderson soon after arrival on campus. The first three years consist of intensive course work in the basic sciences - the fourth year is a one-year clinical internship at an approved School of Medical Technology. In order to be qualified for the clinical internship, the student will have completed the course of study as outlined in the Winona State University catalog and will have earned at least 96 quarter hours credit in residence. The student must have earned a minimum cumulative grade point average of 2.9 by the time application is made for an internship. Students accepting an invitation for clinical training in Medical Technology from an approved institution will attend and complete at that institution the training required for graduation. Tuition will be assessed on a quarterly basis by Winona State University and students will be evaluated each quarter.

IT SHOULD BE NOTED THAT ACCEPTANCE INTO THE FOURTH YEAR OF TRAINING IS NOT AUTOMATIC UPON COMPLETION OF THE JUNIOR YEAR AT WINONA STATE UNIVERSITY. Students are selected by affiliated institutions on the basis of academic achievement and potential as a Medical Technologist. The latter is determined through a personal interview with appropriate officials at approved Schools of Medical Technology. Following the successful completion of the fourth year, the student is graduated with the degree of Bachelor of Science with a major in Medical Technology.

Upon graduation, the student is eligible to write the examination conducted by the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists. Qualifications in this examination lead to the title Medical Technologists Certified by the American Society of Clinical Pathologists (MT, ASCP).

General Education requirements in Natural Science are waived for Medical Technology majors.

B.S. MAJOR
136 Q.H.
Minor Not Required

REQUIRED BIOLOGY COURSES (42 Q.H.)
201 Anatomy (5)
205 Bacteriology (4)
207 Botany (5)
210 Zoology (5)
308 Cell Biology (5)
310 Genetics (4)
323 General Physiology I (5)
324 General Physiology II (5)
444 Immunology (4)
(Completion of 460 Parasitology is strongly recommended)

REQUIRED CHEMISTRY COURSES (29 Q.H.)
212, 213 and 214 or 426 (15)
340 Organic Chemistry Survey (4) (must be taken during Sophomore year)
400 Biochemistry (5)
425 Analytical Chemistry (5)

REQUIRED MATHEMATICS COURSES (5 Q.H.)
220 College Algebra & Trigonometry (5)
(Should be taken during Freshman year)

REQUIRED PHYSICS COURSES (12 Q.H.)
201, 202, 203 General Physics (12)

REQUIRED CLINICAL TRAINING (48 Q.H.)
Clinical training to be completed at an approved School of Medical Technology over a standard 12 month period. Minimum (48).
Military Science

Maxwell Library, Room 129 / 457-5155

Purpose: The department's purposes are to motivate and prepare selected students to serve as commissioned officers in the Regular Army, United States Army Reserve, or in the Army National Guard; to provide an understanding of the fundamental concepts and principles of military art and science and to develop leadership and managerial potential; a basic understanding of associated professional knowledge, a strong sense of personal integrity, honor, and individual responsibility, and an appreciation of the requirement for national security.

PROGRAMS AVAILABLE

Four-year. A four-year program is available for entering freshmen and other students attending WSU. The first two years (six quarters of course work) constitutes the Basic Course (Military Science I and Military Science II) which does not incur a military obligation. Beginning with the third year (Military Science III), the cadet enters into a contractual agreement and becomes eligible for a monthly monetary allowance. The summer between the third and fourth years, cadets attend a six-week ROTC Advanced Camp at a selected military installation. At the conclusion of the fourth year (Military Science IV), cadets successfully completing the program and receiving a baccalaureate degree, will be commissioned as second lieutenants, U.S. Army. Cadets completing the ROTC Program but requiring additional university course work to obtain their degree will be commissioned and serve in units of the U.S. Army, United States Army Reserve, or in the U.S. Army. Cadets completing the ROTC Program but requiring additional university course work to obtain their baccalaureate degree may elect early commissioning and serve in units of the U.S. Army Reserve or Army National Guard.

Two-year. A two-year program is available for students who did not have the opportunity to participate in the four-year ROTC program during the freshman and sophomore years. Students entering this program must apply not later than the last quarter of their sophomore year and successfully complete the six-week Basic ROTC Summer Camp at Fort Knox, Kentucky. Veterans and Junior ROTC participants may enter the Advanced Course (Military Science III), if otherwise qualified, without taking the Basic Course or the Basic ROTC Summer Camp.

ELIGIBILITY:

a. Eligibility for enrollment in the Basic Course is identical to that for any other university course — to be officially admitted to the university. Enrollment is accomplished by officially registering for the desired courses.

b. Eligibility for enrollment in the Advanced Course and for commissioning is based upon the following criteria: be a full-time university student; be a citizen of the United States; be of good moral character; pass a physical examination and an Officer's Qualification Test; be an academic junior or have two years remaining until graduation; meet the age requirements at time of commissioning; be interviewed and selected by the Professor of Military Science.

COURSE LISTINGS

Pass/No Credit option on all 100 and 200 level courses, except for scholarship students.

101 Introduction to ROTC — 1 Q.H.
Survey course of the Army ROTC program and the U.S. Army. A brief introduction to the organization, mission and national commitments; current events affecting the Army and society and a detailed view of the Army with its involvement in U.S. government and society. Offered twice yearly. P/NC Option.

102 Adventure Training I — 1 Q.H.
Introduction to selected military skills including first aid, survival, cross-country skiing and snowshoeing. Emphasis is placed on maximum individual involvement. Offered yearly. P/NC Option.

103 Adventure Training II — 1 Q.H.
Introduction to a variety of individual military skills including self-defense, marksmanship, mountaineering, rappelling and rock climbing. Emphasis is placed on maximum individual involvement. Offered yearly. P/NC Option.

210 Introduction to the Study of Leadership — 2 Q.H.
Focuses on the leader by covering the similarities and differences between command, management and leadership. Progresses to cover the traits and principles of leadership, professionalism, ethics and discipline. Prerequisite: 100 level courses or consent of instructor. Offered yearly. P/NC Option.

211 Basic Tactics and Operations — 2 Q.H.
Covers military organizations and functions from squad through brigade level, troop leading procedures, basic tactical formations, combined arms teams and types of military operations. Prerequisite: 100 level courses or consent of instructor. Offered yearly. P/NC Option.

212 History of the U.S. Army — 2 Q.H.
A study of American military history emphasizing selected actions, battles, campaigns and military personalities of the U.S. Army. Prerequisite: 100 level courses or consent of instructor. Offered yearly. P/NC Option.

301 Military Management — 3 Q.H.
A study of the techniques and factors affecting leadership in the military environment. The functional role of the platoon leader will serve as the basis for discussion. Prerequisites: 100 and 200 level courses or consent of instructor. Offered yearly. Grade Only.

302 Combined Arms and Communication Techniques — 2 Q.H.
Introduction to communication techniques including methods of instruction and written operations orders; use of supporting branches during tactical operations; organization of infantry units and special tactical operations. Prerequisites: 301 or consent of instructor. Offered yearly. Grade Only.

303 Small Unit Tactics — 2 Q.H.
A detailed course in small unit infantry organization and tactical capabilities, fundamentals of offense and defense, operations orders, and patrolling as a means of preparing the students for Advanced Camp. Prerequisite: 302 or consent of instructor. Offered yearly. Grade Only.

304 Military Skills Laboratory — 1 Q.H.
Advanced military skills emphasizing hands-on training and individual performance. Instruction is oriented toward cadet preparation for Advanced Camp. Prerequisite: 302 or consent of instructor. Offered yearly. Grade Only.

401 Staff Organization and Functions — 2 Q.H.
Purpose and mission of military staffs and methods used to accomplish goals. Includes staff work, coordination, decision papers, military correspondence. Prerequisite: 303 or consent of instructor. Offered yearly. Grade Only.

402 Staff Administration — 2 Q.H.
Administrative functions of Army units. Emphasis on company administration, efficiency reports, unit supply system, maintenance management, Equipment Records System. Prerequisite: 401. Offered yearly. Grade Only.

403 Military Law — 2 Q.H.
Fundamental concepts of military justice in the armed forces; the requirement for a separate body of law in the military; concepts of the Uniform Code of Military Justice; investigatory procedures; rules of evidence; rights of the accused; preparation of charges and conduct of court members during a trial. Prerequisite: 402. Offered yearly. Grade Only.

404 Advanced Leadership Development Laboratory — 1 Q.H.
Development of leadership skills through practical work. Cadets function as assistants for military science courses. With supervision they plan field training exercises. Prerequisite: 402. Offered yearly. Grade Only.
Music

Performing Arts Center/Room 146/457-5250
McCluer (Chairperson), Anderson, Hinds, Hungerford, King, Mendyk, Olson, Sovinec

The department offers courses of study leading to a B.S. or a B.A. degree in music. The program aims to turn out graduates who are musically literate and technically competent.

For students majoring in other fields there is a program leading to a minor as well as a variety of courses and activities for the general student. Several active musical organizations are open to all students.

Private study of instruments and voice for credit with members of the music faculty is available.

Winona State University is a full member of the National Association of Schools of Music.

B.A. MAJOR

OPTION A
65 Q.H.

The Bachelor of Arts Music Major Option A is designed for the study of music within a Liberal Arts Curriculum.

REQUIRED COURSES (59 Q.H.)
201 Music Theory I (4)
202 Music Theory II (4)
203 Music Theory III (4)
204 Music Theory IV (4)
205 Music Theory V (4)
206 Music Theory VI (4)
241, 242, 243 Band, Orchestra, Choir (6)
250 Sight Singing (2)
301 Orchestration (3)
351 Music of the Middle Ages and Renaissance (3)
352 Music of the Baroque and Classic Periods (3)
353 Music of the Romantic and Modern Periods (3)
491 Independent Study (3)
Private Lessons (12)

ELECTIVES (6 Q.H.)

OPTION B
(PERFORMANCE EMPHASIS)
124 Q.H.

Students seeking acceptance into the program are required to demonstrate competence prior to formal admission. During the student's sophomore year, the student will be evaluated in performance excellence and scholastic achievement. Enrollment in studio instruction and ensemble participation is required throughout the entire program. For performance majors in voice, the study and use of foreign languages are considered essential.

REQUIRED COURSES (107 Q.H.)
201 Music Theory I (4)
202 Music Theory II (4)
203 Music Theory III (4)
204 Music Theory IV (4)
205 Music Theory V (4)
206 Music Theory VI (4)
250 Sight Singing (2)
301 Orchestration (3)
306 Conducting (3)
311 Woodwind Methods (2)
312 String Methods (2)
313 Percussion Methods (2)
314 Brass Methods (2)
322 Public School Music (4)
323 Public School Music (4)
351 Music of the Middle Ages and Renaissance (3)
352 Music of the Baroque and Classic Periods (3)
353 Music of the Romantic and Modern Era (3)

Private Instruction in Minor Applied Field (6)
Private Instruction in Major Instrument or Voice (16)

Piano requirements for all majors:
1. Ability to sight read songs of the type found in a song book.
2. Ability to harmonize at sight, improvising a simple piano accompaniment for songs requiring I, IV, V chords.
3. Ability to sight read fairly fluently simple accompaniments, vocal and instrumental, and simple piano compositions of the type used for school rhythmic activities.

B.A. MINOR
30 Q.H.

Some proficiency in piano is expected of music minors. For students who can demonstrate this proficiency, the piano requirement will be waived and other offerings of the Music Department may be elected.

REQUIRED COURSES (24 Q.H.)
201 Music Theory I (4)
202 Music Theory II (4)
203 Music Theory III (4)
241, 242, 243 Band, Orchestra, Choir (6)
261 Piano (private lessons) (6)

ELECTIVES (6 Q.H.)

Electives in Music must total 6 credits.

B.S. MAJOR
88 Q.H. TEACHING

(Minor not required)

NOTE: The courses denoted by Private Instruction in these requirements may be repeated at various levels of instruction. Majors are required three years' participation in the large ensemble of their performing/teaching specialization.

REQUIRED COURSES (88 Q.H.)
201 Music Theory I (4)
202 Music Theory II (4)
203 Music Theory III (4)
204 Music Theory IV (4)
205 Music Theory V (4)
206 Music Theory VI (4)
236 Voice Class (2)
241, 242, 243 Band, Orchestra, Choir (9)
(8 substitution of up to 3 credits of 361 permitted)
301 Orchestration & Instrumentation (3)
306 Conducting (3)
311 Woodwind Methods (2)
312 String Methods (2)
313 Percussion Methods (2)
314 Brass Methods (2)
322 Public School Music (4)
323 Public School Music (4)
351 Music of the Middle Ages & Renaissance (3)
352 Music of the Baroque and Classic Periods (3)
353 Music of the Romantic & Modern Era (3)

Private Instruction in Minor Applied Field (6)
Private Instruction in Major Instrument or Voice (16)

Piano requirements for all majors:
1. Ability to sight read songs of the type found in a song book.
2. Ability to harmonize at sight, improving a simple piano accompaniment for songs requiring I, IV, V chords.

B.S. MINOR
37 Q.H.

Some proficiency in piano is expected of music minors. For students who can demonstrate this proficiency the piano requirement will be waived and other offerings of the Music Department may be elected.

REQUIRED COURSES (34 Q.H.)
201 Music Theory I (4)
202 Music Theory II (4)
203 Music Theory III (4)
241, 242, 243 Band, Orchestra, Choir (9)
(8 substitution of up to 3 credits of 361 permitted)
301 Orchestration & Instrumentation (3)
306 Conducting (3)
322 Public School Music (4)
323 Public School Music (4)

ELECTIVES (3 Q.H.)

Electives in Music must total 3 credits.

COURSE LISTINGS

Any course may be taken on a pass/no credit basis with the consent of the department except 321 and 324.

INDIVIDUAL INSTRUCTION

Private lessons meeting once a week, may be repeated for credit and offered quarterly. The 260 series is a half-hour lesson and open to all students. The 270 and 460
series are one-hour lessons open to majors.

261 Piano - 2 Q.H.
262 Voice - 2 Q.H.
263 Strings - 2 Q.H.
264 Woodwinds - 2 Q.H.
265 Brass - 2 Q.H.
266 Percussion - 2 Q.H.
267 Organ - 2 Q.H.
268 Harpsichord - 2 Q.H.

APPLIED MUSIC CLASSES

234 Piano Class - 2 Q.H.
Note reading and fundamentals of piano playing. Offered quarterly. P/NC Option.

235 Piano Class - 2 Q.H.
Continuation of 234. Further development of keyboard skills. Short piano pieces. Offered upon demand. P/NC Option.

236 Voice Class - 2 Q.H.
Classification of voice, English diction, fundamentals of vocal techniques. Offered yearly. P/NC Option.

361 Accompanying - 1-2 Q.H.
Survey of accompanying techniques and styles. Assignment to specific accompanying duties. May be repeated up to a total of 6 credits. Prerequisite: consent of department. Offered quarterly. P/NC Option.

ENSEMBLES

Open to all students by audition. Repertoire selected to acquaint the student with representative literature throughout all periods. Varsity Band provides an opportunity for all to participate without audition. Students enrolled in ensembles designated 2 Q.H. per year become eligible for first credit in second quarter of participation. May be repeated for credit. Offered quarterly.

241 Concert Band Per Quarter: 1 Q.H.
242 Orchestra Per Quarter: 1 Q.H.
243 Concert Choir Per Quarter: 1 Q.H.
244 Jazz Ensemble Per Year: 2 Q.H.
245 String Ensemble Per Year: 2 Q.H.
246 Brass Ensemble Per Year: 2 Q.H.
247 Woodwind Ensemble Per Year: 2 Q.H.
248 Varsity Band Per Year: 2 Q.H.

HISTORY AND LITERATURE

109 Introduction to Music - 4 Q.H.

110 History of American Jazz - 3 Q.H.
A history of jazz in America; its African influences; its emergence as recognizable style in the 19th century; and its present-day varieties. Prerequisite: 109 or equivalent. Offered yearly. P/NC Option.

114 Non-Western Music - 3 Q.H.
Intended to be a survey of music of the East. Particular emphasis is placed on the music of India, Java and Bali, China and Japan. Prerequisite: 109 or consent of instructor. Offered alternate years. P/NC Option.

251 Music of the Middle Ages and Renaissance - 3 Q.H.
Analytic study of the development of music in the Medieval and Renaissance Periods. Prerequisite: 109 or 202 or equivalent. Offered yearly. P/NC Option.

252 Music of the Baroque and Classic Periods - 3 Q.H.
Analytic study of the development of music in the Baroque and Classic Periods. Prerequisite: 109 or 202 or equivalent. Offered yearly. P/NC Option.

253 Music of the Romantic and Modern Eras - 3 Q.H.
Analytic study of the development of music in the Romantic and Modern Periods. Prerequisite: 109 or 202 or equivalent. Offered yearly. P/NC Option.

254 American Music - 4 Q.H.
Music in America from the time of the Puritans to the present day. Historical, biographical material and record listening, for the general student as well as for music majors and minors. Prerequisite: 109 or equivalent. Offered summer only.

255 American Music - 4 Q.H.
Keyboard music of the Baroque and Classic periods. Offered alternate years. P/NC Option.

256 Opera Production - 1-4 Q.H.
Study of representative operas and musical plays. Production problems. Performance of scenes and/or complete works. It may be repeated up to a total of 8 credits. P/NC Option.

257 Opera Production - 1-4 Q.H.

258 Opera Literature Seminar - 2 Q.H.

260 Music for Elementary Teachers - 4 Q.H.
Introduction of fundamental of music and techniques of teaching music in the kindergarten and elementary grades. Students with an adequate background in music should consider Music 322 as an alternative to this course. Not for music majors. Not applicable toward B.A. degree. Offered quarterly. P/NC Option.

471G Survey of Vocal Literature I (Italian) - 2 Q.H.
Arias of the 17th and 18th centuries. Offered alternate years.

472G Survey of Vocal Literature II (German) - 2 Q.H.
Lieder and Schubert, Schumann, Franz, Mendelssohn, Brahms, Strauss, and Hugo Wolf. Offered alternate years.

473G Survey of Vocal Literature III (French) - 2 Q.H.
Representative French songs and Faure, Duparc, Chausson, Debussy and Poulenc. Offered alternate years.

477 Piano Literature I - 2 Q.H.
Keyboard music of the Baroque and Classic periods. Offered alternate years. P/NC Option.

478 Piano Literature II - 2 Q.H.
Keyboard music of the Romantic and Modern periods. Offered alternate years. P/NC Option.

480 Recital - 1-3 Q.H.
Half recital (1 Q.H.) or full recital (3 Q.H.) of representative literature. May be repeated for credit. Prerequisite: department consent. Offered quarterly. P/NC Option.

485G Psychology of Music - 4 Q.H.
A survey of theories and studies concerned with man's behavioral patterns as manifested in musical expression and perception. Offered alternate years.

491 Independent Studies in Music - 1-8 Q.H.
Course designed to offer the advanced student opportunity to work in a Music area of special interest to him. May be taken for or repeated up to 8 credits. Consent of department. Offered quarterly. P/NC Option.

METHODS AND EDUCATION

311 Woodwind Methods - 2 Q.H.
Class instruction in flute, oboe, clarinet, saxophone and bassoon. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

312 String Methods - 2 Q.H.
Class instruction in violin, viola, cello, and bass. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

313 Percussion Methods - 2 Q.H.
Class instruction in percussion instruments. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

314 Brass Methods - 2 Q.H.
Class instruction in cornet, trumpet, horn, trombone and tuba. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

315 Guitar Methods - 2 Q.H.
Class instruction in guitar and other fretted instruments. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

320 Music for Elementary Teachers - 4 Q.H.
Class instruction in the guitar and other fretted instruments. History, literature and teaching methods for the music major or minor. Offered alternate years. P/NC Option.

99
321 Music in Special Education — 3 O.H.
An overview of materials and methods used in teaching children handicapped with learning disabilities and the educable and mentally retarded. Prerequisite: 320 or equivalent. Offered yearly. Grade only.

322 Public School Music — 4 O.H.
Study of material and methods for music instruction in the elementary grades. Prerequisite: 202. Not applicable toward the B.A. degree. Offered yearly. P/NC Option.

323 Public School Music — 4 O.H.

324 Recreational Music — 3 O.H.
Introduction to music techniques and fundamentals necessary for recreation programs. No prerequisites. Offered yearly.

410G Music Supervision and Administration — 4 O.H.
Problems of supervision and administration in public school music programs. Prerequisite: 202. Not applicable toward the B.A. degree. Offered every three years.

411G Allied Arts in School and Society — 3 O.H.
Designed to give the student both a philosophical overview of related arts programs and practical experience in preparation of teaching units, collection of source materials, and study of teaching methods. Offered yearly.

415 Vocal Pedagogy — 2 O.H.
Techniques and problems of voice instruction for individuals and vocal groups. Offered alternate years.

416 Piano Pedagogy — 2 O.H.
Survey of teaching methods and materials for piano. Offered alternate years. P/NC Option.

422G Music Seminar on Choral Techniques and Materials — 4 O.H.
Criteria for selection of vocal music, examination of representative music suitable for groups at various levels of development, principles of programming, rehearsal techniques and organizations. Offered on demand.

423 High School Solo Vocal Literature — 2 O.H.
Course designed to help the high school teacher choose vocal solo literature for all types of voices. Offered alternate years. P/NC Option.

424G High School Orchestra Methods — 4 O.H.
Arranging and editing materials for high school orchestras. Organizational and rehearsal procedures. Offered every three years.

425 Band Administration and Techniques — 2 O.H.
The organization and administration of elementary and secondary instrumental music programs, performance practice, rehearsal and marching band techniques. Consent of instructor. Offered alternate years. P/NC Option.

435G Wind Instrument Repair — 2 O.H.
Care, maintenance, and repair of woodwind and brass instruments. Offered every third year.

486G Education Through Music I — 3 O.H.
Learning through musical games, with emphasis on personal and social development of the child through musical experiences. Offered summers.

487G Education Through Music II — 3 O.H.
Observation and participation in classroom experiences with young children. Further emphasis upon experience games. Offered summers.

490G Music for Today's Schools: New Ideas in Music Education — 1-3 O.H.
The objectives of this workshop are to offer new ideas or theories, elaborate on new trends, and offer guidelines for improvement of public school programs. Course content changes each year. May be repeated for credit. Offered summer only.

THEORY

120 Introduction to Music Theory — 3 O.H.
An introduction to the structure and notation of music found in past and present composition. Offered yearly. P/NC Option.

201 Theory I — 4 O.H.
Scales, intervals, melodic construction, two part writing triads. Offered yearly. P/NC Option

202 Theory II — 4 O.H.
Two, three, and four-part writing, inversions, dominant sevenths, decorative pitches. Prerequisite: 201. Offered yearly.

203 Theory III — 4 O.H.
Continuation of four-part writing secondary dominants, modulation, binary and ternary forms. Prerequisite: 202. Offered yearly. P/NC Option.

204 Theory IV — 4 O.H.
Diatonic and diminished sevenths. Neapolitan chords, rondo and variation forms. Prerequisite: 203. Offered yearly. P/NC Option.

205 Theory V — 4 O.H.
Augmented sixth, ninth, eleventh, and thirteenth chords. Fugue and sonata-allegro form. Prerequisite: 204. Offered yearly. P/NC Option.

206 Theory VI — 4 O.H.
Impression, non-tertian harmony, twentieth-century practices. Prerequisite: 205. Offered yearly. P/NC Option.

207 Composition — 2 O.H.
A study of the creative process. Original student compositions. Prerequisite: 204 or equivalent. Offered yearly. P/NC Option.

250 Sight Singing — 2 O.H.
Study in aural perception of interval and rhythmic relationships. Prerequisites: knowledge of musical notation. Offered yearly. P/NC Option.

301 Orchestration and Instrumentation — 3 O.H.
Study of techniques, ranges, and timbre of instruments. Fundamentals of scoring for band and orchestra. Prerequisite: 204. Offered yearly. P/NC Option.

302 Jazz Instrumentation and Orchestration — 4 O.H.
Scoring for stage band groups and small combinations of various instruments in the jazz idiom. Prerequisite: 202 or equivalent. Offered upon demand. P/NC Option.

303 Electronic Music — 2 O.H.
Survey of literature and styles of electronic music. Introduction to the synthesizer and electronic tape composition. Prerequisites: 202 or consent of instructor. Offered alternate years.

306 Conducting — 3 O.H.
Techniques of conducting choral and instrumental groups. Offered yearly. P/NC Option.

400G Twentieth Century Harmony — 4 O.H.
A study of the harmonic materials commonly used by twentieth century composers. Topics include: scale materials, chords by thirds, chords by fourths, added-note chords, chords by seconds, polychords, compound and minor harmony, chord progression and connection, tonality and polytonality and atonality. Offered on demand.

401 Computer Uses in Music — 4 O.H.
An opportunity to survey computer applications in the music field including composition and analysis. Introduction to data processing techniques and computer programming using SNOBOL4. Offered every two years. P/NC Option.

402G Form and Analysis — 4 O.H.
Analysis of compositions as to form, melodic and harmonic structure. Students write original compositions modeled after works analyzed. Offered every two years.

403G Counterpoint — 4 O.H.
Strict counterpoint in 16th Century style, study of species. Prerequisite: 203. Offered alternate years.

406G Conducting II — 3 O.H.
Advanced techniques of conducting choral and instrumental groups. Offered alternate years.
Nursing

Phipps Hall /457-5120 or 457-5121 (Winona Campus) (607) 285-7349 (Rochester Campus)

Langston, Dean of Nursing, Blankenfeld, Bracegirdle, Darby, Davis, Dixon, Horton, Justic, Kern, Kopper, Olsen, Rehn, Runquist Schiller, Smith, Stejskal, Thompson, Tripp, Wilke.

The nursing major offers a liberal education with a concentration of study in nursing. The curriculum is built on a broad base of general education. Upper division liberal arts courses are offered concurrently with courses in nursing. The program provides courses of increasing complexity as the student progresses. The nursing courses combine theory and practice of nursing, providing opportunity for the student, with guidance from the faculty, to give nursing care to persons of all ages in various settings and presenting a variety of nursing needs. Various community facilities are utilized for laboratory experiences in the nursing courses. Students are expected to provide their own transportation for these experiences. The student must assume incidental costs including professional liability insurance, uniforms, lab coat, cap (optional), name pin, faculty approved stethoscope, throat cultures and treatment if necessary. The hospitals used for clinical experience require a yearly Mantoux test or chest x-ray and proof of rubella immunity by blood titer. Any cost involved with these tests is also the student's expense.

The program is accredited by the National League for Nursing and by the Minnesota Board of Nursing. Graduates are eligible to write the professional nurse licensure examination and to apply for Public Health Nursing Certification. The student may be eligible to apply for school nursing certification by taking specified electives required by the State Department of Education. Graduates are capable of giving professional nursing care in first level positions in nursing and have a base for graduate study.

The nursing major is offered on both the Winona and Rochester campuses. Students are assigned to one of these locations for the junior and senior years.

There are two options for taking the upper division nursing program: the Generic Option, two years of sequenced courses or the RN Option, an accelerated flexible program for registered nurse students. Application for admission to the Major in Nursing, for either option, is a separate process in accordance to the procedures for becoming a student at Winona State University. The completed application for admission to the Nursing Major must be submitted by the last Friday before the beginning of Christmas vacation. The number of students admitted to the Nursing Major is limited. Criteria for selection are made available from the Nursing Department upon request.

Prerequisite courses to be completed before application to the major are:

- Chemistry 212, 213
- Biology 201, 322
- Psychology 210
- Sociology 150

These courses must be completed with a minimum grade of "C". Before beginning junior nursing courses, admitted students must complete the following prerequisite courses with a minimum grade of "C":

*English 115 Biology 205, 206, 324 Psychology 250 Sociology 212 Math 208 CPR Certification or its equivalent; to be kept current throughout the nursing program.

Students who are baccalaureate graduates of an accredited college or university may have English 115 waived.

A college grade point average of at least 2.5 is required to make application to the major. All previous college credit will be considered in the cumulative grade point average. After admission to the Nursing major, you are required to maintain a grade point average of at least "C" in each course required for the major.

In courses with a clinical laboratory component, you must achieve at least a "C" in theory and a "C" in clinical to meet course requirements.

Additional requirements to be completed before graduation:

1. HPER 214 or First Aid competency to be demonstrated by certification in an approved course.
2. Psychology 420
3. Upper division (300-400 level) electives, 8 credits.

Majors in nursing may also obtain a major or minor in another area if requirements are met for the major or minor. The student must meet the requirements of the department in which the major or minor is being sought. The student should seek advisement from the appropriate department.

The student may receive credit by examination and/or demonstration of competence for courses or parts of courses in the Nursing major, provided faculty permission is granted.

RN's - Thirty-two credits of the nursing major (Nursing 302, 304, 306, 308) will be granted to RN's who have completed an Associate Degree in Nursing from an NLN accredited program. Challenge examinations are available for RN graduates of vocational-technical schools and graduates of non-accredited associate degree programs. If all examinations are successfully completed, the thirty-two credits will be granted.

RN's seeking admission to the nursing major must seek advisement from the Department of Nursing RN advisors. RN's seeking admission to the nursing major/RN Option must currently hold an active license to practice nursing in Minnesota.

B.S. MAJOR

GENERIC OPTION

REQUIRED CORE COURSES (76 Q.H.)

- 310 Communication in Nursing (6)
- 321 Nursing and Social Systems (4)
- 330 Health & Health Problems I (5)
- 340 Health & Health Problems II (6)
- 360 Nursing Process (8)
- 380 Junior Seminar in Nursing (2)
- 390 Nursing & Health Attainment (9)
- 425 Contemporary Issues and Strategies for Change (4)
- 440 Nursing & Health Restoration (9)
- 450 Nursing & Health Maintenance (9)
- 470 Nursing Management (9)
- 475 Research in Nursing (3)
- 490 Senior Seminar in Nursing (2)

RN OPTION

REQUIRED COURSES (76 Q.H.)

- 302 Fundamentals of Nursing (8)
- 304 Nursing Care of Common Health Problems I (10)
- 306 Nursing Care of Common Health Problems II (10)
- 308 Basic Nursing Skills (4)
- 325 Basic Concepts for Professional Nursing (2)
- 365 Accountability in Nursing Practice (4)
- 375 Man and His Holistic Nature (2)
- 385 Life Processes (8)
- 435 Nursing and Health Care Delivery (4)
- 445 Practicum in Assessment (2)
- 455 Patient Care Strategies (8)
- 465 Professional Practice Issues (3)
- 475 Research in Nursing (3)
- 485 Community Health Nursing (8)

NURSING ELEETIVES

- 260 Women's Health Issues: Making a Decision (4)
- 392 Cardiac Risk Prevention (3)
- 410 Nursing Care of The Aged (3)
- 480 Holistic Approaches to Healing (3)
- 495 Seminar (1-3)

COURSE LISTINGS

280 Women's Health Issues: Making a Decision - 4 Q.H. A study of contemporary issues in women's health with a cursory look at the historical aspects of each issue. Offered yearly or on demand, P/NC Option.

302 Fundamentals of Nursing - 8 Q.H. Questions in the examination are based upon the areas of nursing practice, nursing process, communications, and nursing care to meet the patient's basic needs. Examination open only to RN's who have been admitted to the nursing program. (See RN statement above.)
304 Nursing Care of Common Health Problems I – 10 Q.H.
Questions in the examination are based upon common health problems and nursing care as they relate to clinical situations in the hospitalized patient, child and adult. Examination open only to RNs who have been admitted to the nursing program. (See RN statement above.)

306 Nursing Care of Common Health Problems II – 10 Q.H.
Questions in the examination are based upon common health problems (both physiological and behavioral disorders) and nursing care as they relate to families in selected clinical nursing situations. Examination open only to RNs who have been admitted to the nursing program. (See RN statement above.)

308 Basic Nursing Skills – 4 Q.H.
The examination is based upon the principles, and nursing actions necessary to safely execute psychomotor skills. Examination open only to RNs who have been admitted to the nursing program. (See RN statement above.)

310 Communication in Nursing – 6 Q.H. (3 class hours, 6 lab hours)
Course designed to increase the communication skills of the student. Emphasis is on communication as a part of effective relationships between persons or groups and as an essential component of the nursing process. Prerequisite: admission to nursing major or consent of instructor.

321 Nursing and Social Systems – 4 Q.H.
Course designed to increase understanding of the influence of various groups on man and his health, and to increase effective participation in group process in nursing situations. Prerequisite: admission to nursing major or consent of instructor.

325 Basic Concepts for Professional Nursing – 2 Q.H.
Course introduces the WSU Nursing Curriculum and Conceptual Framework to RN students to bridge the gap from the initial nursing program to the baccalaureate nursing major. Offered yearly or on demand. Prerequisites: admission to RN Option of the nursing major.

330 Health and Health Problems I – 5 Q.H.
Study of health and health problems as evidenced by various characteristics and influenced by various bio-psycho-social processes. Basis of treatment modalities included. Prerequisite: admission to nursing major or consent of instructor.

340 Health and Health Problems II – 6 Q.H.
A continuation of N330. Prerequisite: N310, 321, 320 or consent of the instructor.

350 Nursing Process – 8 Q.H. (3 class hours, 10 Lab hours)
Course designed to assist the student to utilize the nursing process. Focuses on interpersonal, observational and problem-solving skills needed to assess, diagnose, intervene and evaluate in nursing situations. Prerequisite: N310, 321, 330.

365 Accountability in Nursing Practice – 4 Q.H.
Course allows the student to apply critical thinking and decision-making skills used in the nursing process and teaching-learning process to document accountability in professional nursing practice. Prerequisite: admission to RN Option, N325 pre- or co-requisite.

375 Man and His Holistic Nature – 2 Q.H.
Study of relationship of variables that contribute to wholeness of man; i.e., biological factors, coping patterns and social systems, to increase students ability to respond to clients with a holistic approach. Prerequisite: admission to RN Option, N325, pre- or co-requisite.

380 Junior Seminar – 2 Q.H.
A study of the relationship of the variables that contribute to the wholeness of man, man’s coping behaviors, his health and his social systems. Prerequisite: N340, 360.

385 Life Processes – 8 Q.H. (3 class hours, 10 lab hours)
Introduces the major concepts utilized in assessing man throughout the life cycle. Students will utilize these concepts in a variety of settings to evaluate their own effectiveness in nursing-client relationships. Prerequisite: admission to RN Option, N325 or pre- or co-requisite; N365 pre- or co-requisite.

390 Nursing and Health Attainment – 9 Q.H. (3 class hours, 12 lab hours)
Assists the student to utilize the nursing process to promote a higher state of health in persons of all age groups. Laboratory experiences assist the student in assessing, diagnosing, intervening and evaluating nursing problems related to health attainment. Prerequisites: N340, 360.

392 Cardiac Risk Prevention – 3 Q.H.
Lecture course 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 will also be discussed. P/NC Option.

410 Nursing Care of the Aged – 3 Q.H.
The focus of this course is on the psycho-social and holistic care of the elderly, utilizing a team concept and operating within a nursing process framework. There is special emphasis placed on pathophysiology and nursing care practice which will enable the optimum potential of the elderly person with his health problems. One credit clinical component two credits theory.

425 Contemporary Issues and Strategies for Change in Nursing – 4 Q.H.
Study of current concerns in the field of nursing. Stresses the influence of the individual practitioner. Assists the student in developing those skills required for participation in the decision-making process. Prerequisites: N360, 380, 390.

435 Nursing and Health Care Delivery – 4 Q.H.
Course examines the management and leadership roles of the professional nurse, analyzing current nursing practices as well as applying the change process to a nursing situation. Prerequisite: admission to RN Option, N325 pre- or co-requisite.

440 Nursing and Health Restoration – 9 Q.H. (3 class hours, 12 lab hours)
Various systems assist students in analyzing nursing process in restoring health to persons of all ages. Laboratory experience increases student understanding of the nursing process used in restoring health. Prerequisite: N360, 380, 390.

445 Practicum in Assessment – 2 Q.H. (4 lab hours)
The basic techniques of taking and recording a health history and performing a physical examination are presented to distinguish normal from abnormal health conditions. Prerequisite: admission to RN Option, N325 pre- or co-requisite.

450 Nursing and Health Maintenance – 9 Q.H. (3 class hours, 12 lab hours)
In various settings, assists the students to utilize the nursing process in maintaining a state of health in persons of all age groups. Laboratory experiences increase the student's ability to use the nursing process in maintaining health. Prerequisite: N440.

455 Patient Care Strategies – 8 Q.H. (3 class hours, 10 lab hours)
Advanced application of the nursing process to the hospitalized client, focusing on patient teaching, preparation for discharge. Laboratory experience will provide opportunities for developing and evaluating various patient care strategies. Prerequisite: admission to RN Option, N325 and 365; N435 pre- or co-requisite.

465 Professional Practice Issues – 3 Q.H.
Students will analyze issues in current professional practice and synthesize the concepts of coping, man, health, social systems and nursing. Prerequisite: admission to RN Option, N325, completion of at least 25 credits of RN Option courses.

470 Nursing Management – 9 Q.H. (3 class hours, 12 lab hours)
Focuses on management and leadership roles of the professional nurse. In clinical settings students will analyze, synthesize and evaluate current practices and theories, initiate appropriate change, make decisions based on predictable and unpredictable results. Prerequisites: N450, 475.

475 Research in Nursing – 3 Q.H.
Basic concepts of research are introduced to assist the student to read, interpret, and evaluate nursing research. The significance of research findings to nursing practice is emphasized. Prerequisite: Generic Option: N330, 360 or admission to RN Option, N325.

480G Holistic Approaches to Healing – 3 Q.H. (3 class hours)
Designed to explore ancient, cultural and alternative healing systems. To investigate the validity of preventive practices, cultural traditions, lifestyle modifications and energy balance skills. To develop holistic and humanistic interdisciplinary approaches to healing. P/NC, for undergraduates.

485 Community Health Nursing – 8 Q.H. (3 class hours, 10 lab hours)
This course focuses on the roles and functions of a public health nurse in a variety of
settings. It emphasizes community assessment as well as assisting individual families in the community with health needs. Prerequisite: admission to RN Option, N325, N326.

490 Senior Seminar in Nursing — 2 Q.H. (2 class hours)
The student will plan and present a collo-

dragal group a situation that demonstrates an ability to utilize a synthesized base of knowledge and skill in nursing. Emphasis is on self-evaluation as a means of personal and professional growth. Prerequisite: N450.

495G Seminar — 1-3 Q.H.
Subject matter of current interest arranged by the department. Course may be repeated when offered with different content and title. Grading will be P/NC unless otherwise specified at time of registration.

Paralegal
Minne Hall, Room 212 / 457-5400
Henry, Program Coordinator

The purpose of the Paralegal Program is to enable the student to develop professional skill as a paraprofessional in the field of legal services. The Program is designed to meet the needs of students who wish to enter into an occupational service for people and institutions involved with local, state and federal laws.

The Program is an interdisciplinary Program and includes general education, specialized legal courses, business administration, sociology, history, and political science.

There are four phases to the Program: Phase I Prerequisites, Phase II Interdisciplinary Foundations, Phase III Foundations of Law and Phase IV Professional Specialization.

A high school diploma and admission to Winona State University are required for admission to the Program. It will be recommended that the candidate for admission in the upper half of his class or have a score of at least twenty (20) on the ACT test. Students wishing to enter the Program must apply for admission and seek advising from the Coordinator of the Program.

Winona State University paralegal program is approved by the American Bar Association.

B.S. MAJOR
PARALEGAL
192 Q.H.
(Minor not required)

PHASE I: GENERAL EDUCATION

Prerequisite requirements of the Paralegal Program can partially fulfill the General Education requirements of Winona State University. Consult the Program Coordinator for detailed information on the Paralegal prerequisites and the University's General Education Requirements.

110 English — Freshman Composition I (4)
115 English — Freshman Composition II (4)
191 Speech — Introduction to Speech Communication (4)
230 History — American History I (4)
231 History — American History II (4)
117 Biology — Human Biology (4)
AND
118 Biology — General Biology (4) OR

201 Biology — Anatomy (5)
150 Sociology — Human Society (4)
220 Pol Sci — American National Government (4)
210 Psychology — General Psychology (4)
For Business & Multi-Legal Options
201 Bus Ad — Principles of Accounting I (4)
202 Bus Ad — Principles of Accounting II (4)
For Sociology Option
201 Bus Ad — Principles of Accounting I (4)
201 Econ — Principles of Economics I (4)

PHASE II:
INTERDISCIPLINARY FOUNDATIONS

At the beginning of Phase II the student may elect an area of concentration to pursue — business administration, sociology, or multi-legal services.

REQUISITE COURSES (40 Q.H.)
232 History — American History III (4)
365 History — American Judicial System (4)
486 History — Social and Intellectual History (4)
488 History — American Constitutional History (4)
320 Pol Sci — Constitutional Law (4)
346 Pol Sci — International Law (4)
420 Pol Sci — Administrative Law (4)
210 English — Advanced Composition I (4)
OR
439 English — Technical Writing (4)
104 Biology — Conservation (4)
261 Speech — Public Speaking (4)
OR
289 Speech — Persuasive Communication

PHASE III:
FOUNDATIONS OF LAW

REQUISITE COURSES (21 Q.H.)
History 370, Legal Research, must be taken as the first course of the Legal specialties, the other Legal Specialty courses may be offered other than in the sequence listed. Students will be advised by the Program Coordinator as to the proper sequence.

370 History — Legal Research (3)
371 History — Legal Proof, Introduction (3)
372 History — Legal Proof, Exclusionary Rules of Evidence (3)
373 History — Adversary System — Civil (3)
374 History — Adversary System — Criminal (3)
375 History — Legal Writing I (3)
376 History — Legal Writing II (3)

PHASE IV:
PROFESSIONAL SPECIALIZATION,
BUSINESS ADMINISTRATION,
SOCIOLOGY, OR MULTI-LEGAL SERVICES

BUSINESS ADMINISTRATION
OPTION (61 Q.H.)

Each individual student’s program will be dependent upon the area of specialization chosen — taxes, insurance, banking corporations, labor relations, etc.

REQUISITE CLASSES
203 Bus Ad — Managerial Accounting III (4)
310 Bus Ad — Business Law I (4)
311 Bus Ad — Business Law II (4)
407 Bus Ad — Introduction to Taxation (4)
420 Bus Ad — Insurance (4)
Internship (16)

Elective hours as approved by advisor (25)

SOCIOLOGY OPTION (61 Q.H.)

Each student’s program will depend upon the area of specialization chosen — criminal and family law services, police work, welfare, corrections and court services.

REQUISITE CLASSES
205 Sociology — Social Interaction (4)
216 Sociology — Social Problems (4)
375 Sociology — Intro to Social Work (4)
376 Sociology — Intro to Social Research (4)
460 Sociology/Social Work — Field Instruction (16)

Elective hours as approved by advisor (29)
MULTI-LEGAL SERVICES
OPTION (61 Q.H.)

Student choosing the multi-legal option are required to take all of the following courses in Business Administration, Sociology, Physics and History.

REQUIRED CLASSES

203 Bus Ad — Managerial Accounting (4)
310 Bus Ad — Business Law I (4)
216 Sociology — Social Problems (4)
316 Sociology — Intro to Social Research (4)
310 Physics — Science & Technology

Elective hours as approved by advisor (21)

377 History — Practical Legal Investigation Techniques (4)
380 History — Paralegal Internship (16)

335 Biomedical Ethics — 4 Q.H.

A philosophical consideration of moral and conceptual issues in bio-medicine. Topics may include: professional responsibility and codes of ethics, decision-making, fetal research, genetic engineering, heroic measures, death, abortion, and euthanasia. Offered as appropriate. P/NC Option.

350 Buddhism — 4 Q.H.

Major philosophies of Buddhism. Prerequisite: 103 or 110. Offered alternate springs. P/NC Option.

360 Chinese Philosophy — 4 Q.H.

Philosophers studied may include: Confucius, Mencius, Hsun-tzu, Laotzu, Chuang-tzu, Motzu, T'ien-t'ai, Fa-tsong, Ch'an. Prerequisite: 103 or 100 or 161. Offered alternate springs. P/NC Option.

401 Independent Readings in Philosophy — 1-4 Q.H.

An individually planned program of readings. May be repeated to a maximum of 12 quarter hours. Prerequisites: two Philosophy courses and consent of instructor. Offered by arrangement.

435 Topics in Social and Political Philosophy — 1-4 Q.H.

Variable content. A consideration of problems in social and political philosophy. Topics may include: business and morality, equality and preferential treatment, animal rights, sexuality. May be repeated as topics change. Offered alternate years. P/NC Option.

499G Great Philosophers — 4 Q.H.

An intensive study of a single philosopher. May be repeated for different philosophers. Prerequisite: Consent of instructor. Offered as appropriate.

FOR GRADUATE

STUDENT ONLY

531 Independent Readings in Philosophy — 1-4 Q.H.

An individually planned program of readings. May be repeated to a maximum of eight credit hours. Prerequisite: consent of instructor. Offered by arrangement.

Photography

See Mass Communications. Text and course listings at end of Mass Communications.
Physical Therapy

Pastor Hall, Room 215 / 457-5272
Anderson, Director of Allied Medical Sciences.

Physical Therapy is essentially a five-year program completed in two phases. Phase I is the pre-physical therapy segment and requires 24-36 months.

Freshmen Physical Therapy majors must consult with Dr. Dwight Anderson soon after arrival on campus.

The Pre-Physical Therapy phase is designed to provide competence in biology, chemistry, physics, and mathematics. It will also provide students with a broad background in the humanities and social sciences.

During the fall quarter of the junior year, students should make application for admission to the clinical school of your choice. The application is made with the assistance of the program director. Acceptance by a clinical institution is not automatic upon completion of the junior year. Acceptance is entirely on a competitive basis and success depends largely upon academic achievement during Phase I of the program.

Upon successful completion of the clinical affiliation, the degree of Bachelor of Science in Physical Therapy is conferred by Winona State University. The student is then eligible to write the qualifying examination as specified by the Registry of Physical Therapists. Qualification in the examination leads to the title Registered Physical Therapist (R.P.T.). The therapist is then qualified to practice in any hospital or clinic in the United States provided that additional requirements of the particular state are satisfied.

General Education requirements in Natural Science are waived for Physical Therapy majors.

B.S. MAJOR

81 Q.H.

(Minor Not Required)

GENERAL EDUCATION REQUIREMENTS

156 Q.H. Consult advisor.

REQUIRED BIOLOGY COURSES (34 Q.H.)

201 Anatomy (5)
205 Bacteriology (4)
207 Botany (5)
210 Zoology (5)
308 Cell Biology (5)

REQUIRED PHYSICS COURSES (12 Q.H.)

220 College Physics I (5)
221 College Physics II (5)
223 College Physics III (5)

Electives in Physics (5-8 Q.H.)

Physics 200, 204, 300, 301, 401 and 402 are not acceptable electives in this program.

ELECTIVES IN CHEMISTRY OR PHYSICS (13 Q.H.)

Chemistry 215 or 400, 351, 360, 361, 465, 412, 425, 450.

Physics 225, 305, 326, 328, 330, 332, 333, 340, 345, 350, 370, 420, 425, 430

REQUIRED MATHEMATICS COURSES (5 - 13 Q.H.)

Note: College Algebra and Trigonometry 220 may be substituted for 215, 216, or these courses may be omitted if the student has otherwise met the prerequisite for 225.

215 College Algebra (4)
216 Trigonometry (4)
225 Calculus I (5)

REQUIRED PHYSICAL SCIENCE COURSE (4 Q.H.)

311 Teaching Science in Secondary School (4)

ADDITIONAL REQUIREMENTS (MAY BE COUNTED IN GENERAL EDUCATION) (23 Q.H.)

Biology

207 Botany I (5)
208 Botany II (4) OR
210 Zoology I (5)
211 Zoology II (4)

Geology

116 Physical Geology (5)
125 Historical Geology (5)

Philosophy of Science (4) (Biology 442 or Philosophy 273)

WISCONSIN CERTIFICATION REQUIREMENTS FOR PHYSICS CONCENTRATION (33 Q.H.)

(Select credits under "Required Courses" and "Electives" to give a concentration of 33 Q.H. of Physics).

Other requirements for Wisconsin Certification

Biology 104 or 204 (4 Q.H.)
Geology (4 more Q.H.)
Biological Science (4 more Q.H.)

B.S. MAJOR

OPTION I - PHYSICS

85 Q.H.

REQUIRED COURSES (34 Q.H.)

221, 222, 223 College Physics I, II, III (15)

323 General Physiology I (5)
324 General Physiology II (5)

REQUIRED CHEMISTRY COURSES (19 Q.H.)

212, 213, 340 and 400 (19)

REQUIRED MATHEMATICS COURSES (5 Q.H.)

220 (215 and 216 may be substituted for 220)

REQUIRED PHYSICS COURSES (12 Q.H.)

201, 202, 203

REQUIRED HPER COURSES (6 Q.H.)

204 and 314

ELECTIVES (5 Q.H.) ELECTIVES MUST BE APPROVED BY PROGRAM DIRECTOR

REQUIRED CLINICAL TRAINING.

Clinic Affiliation (Didactic and Clinical Ed.) (Must be taken at an approved institution over an 18-24 month period.) Total credits offered for candidacy for B.S. in Physical Therapy - 192 Q.H.)
B.S. MAJOR
OPTION II - APPLIED NUCLEAR SCIENCE 85 Q.H.

REQUIRED COURSES (37 Q.H.)
221, 222, 223 College Physics I, II, III (15)
330 Electronics (5)
345 Thermodynamics (4)
399 Internship (8)
404 Nuclear Radiation Physics (5)

ELECTIVES (28 Q.H.)
400 Seminars (may be repeated for credit)
(1) Fluid Dynamics (4)
(2) Heat Transfer (4)
(3) Nuclear Instrumentation and Control (4)
(4) Strength of Materials (4)
(5) Reactor Theory I (3)
(6) Reactor Theory II (3)
(7) Reactor Theory III (3)
440 Math Methods in Physics I (4)
441 Math Methods in Physics II (4)

ADDITIONAL REQUIREMENTS (20 Q.H.)
220 College Algebra and Trigonometry (5)*
221, 222, 223 College Physics I, II, III (15)
329 Calculus of Functions of Several Variables (5)
330 Differential Equations (4)

*Note: Math 215 and 216 may be substituted for Math 220.

B. S. MINOR
OPTION A
50 Q.H.

REQUIRED COURSES (15 Q.H.)
221, 222, 223 College Physics (15)

ELECTIVES (20 Q.H.)
Electives in Physics must total 20 credits. Physics 200, 204, 300, 301, 380, 401, 402, and 410 are not acceptable electives in this program.

ADDITIONAL REQUIREMENTS (15 Q.H.)
NOTE: Math 215 and 216 may be substituted for Math 220.
220 College Algebra and Trigonometry (5)
225, 226 Analytic Geometry and Calculus I, II (10)

B. S. MINOR
OPTION B
37 Q.H.

REQUIRED COURSES (16 Q.H.)
201, 202, 203 General Physics I, II, III (12)
326 Electronics with Biomedical Applications (4)

ELECTIVES (16 Q.H.)
Electives in Physics must total 16 credits and be approved by department. Physics 200, 204, 300, 301, 380, 401, 402 and 410 are not acceptable electives in this program.

ADDITIONAL REQUIREMENTS (5 Q.H.)
NOTE: Math 215 and 216 may be substituted for Math 220.
220 College Algebra and Trigonometry (5)

B. S. MINOR
OPTION C - AVIATION
37 Q.H.

REQUIRED COURSES (27-29 Q.H.)
201, 202, 203 General Physics I, II, III (12)*
204**, 301, 402 (5)
OR
200, 204**, 401 (17)

ELECTIVES (8-10 Q.H.)
Electives in Physics-Aviation must be approved by the department from the following courses: 300, 380, 401 and 410.

*Prerequisite Math 220 or Math 215 & 216 or high school equivalent.
**Prerequisite FAA Private Pilot Written Examination must be passed.

B.S. MINOR
OPTION D - ELECTRONICS
50 Q. H.

REQUIRED COURSES (26-29 Q.H.)
201, 202, 203 General Physics I, II, III (12)
OR
221, 222, 223 College Physics I, II, III (15)
330 Electronics (5)
322 Computer Organization (5)
333 Microprocessor Electronics (4)

ELECTIVES (6-8 Q.H.)
Electives must be chosen from the following courses: Physics 326, 328, 420, 425, 430, 460, 461, 490.

ADDITIONAL REQUIREMENTS (15 Q.H.)
Math 225, 226, 227 Calculus I, II, III (15)

COURSE LISTINGS

Any course not required for a major or minor may be taken on a pass/no credit basis.

115 Physical Concepts of Man's Environment - 4 Q.H.
A non-mathematical study of selected physical concepts used in describing man's environment. Lecture. No prerequisite. Offered quarterly. Not open to students with credits in higher numbered non-aviation physics courses.

184 Energy: Principles, Our Life Style and Alternatives - 4 Q.H.
The course addresses itself to the general concepts, problems and policy related to energy and explores some technical questions which arise from the use of present and alternative sources of energy. Methods, needs and policy in conservation are explored. The course is designed to serve all students. Lecture and discussion. No prerequisite. Offered quarterly.

201 General Physics I - 4 Q.H.
Principles of mechanics for those contemplating the study of biology, medicine, etc. or seeking a general cultural course in the physical sciences. Lecture and laboratory. Prerequisite: Mathematics 220 (or 215, 216). Offered yearly.

202 General Physics II - 4 Q.H.
A continuation of course 201. The elementary principles of electricity. Lecture and laboratory. Prerequisite: Mathematics 220 (or 215, 216). Offered yearly.

203 General Physics III - 4 Q.H.

221 College Physics I - 5 Q.H.
Similar in content to course 201, but aims to meet the specific requirements of students who expect to major in physics, mathematics, chemistry, and engineering. Lecture and laboratory. Prerequisite: Mathematics 225. Offered yearly.

222 College Physics II - 5 Q.H.
A continuation of course 221, covering thermodynamics, sound, and electromagnetic theory. Lecture and laboratory. Pre-
and microcomputer interfacing. Offered yearly.

223 College Physics III - 5 O.H.
A continuation of course 222, covering optics and special topics in modern physics. Prerequisite: College Physics 222. Offered yearly.

225 Statics - 4 O.H.

305 Solar Energy - 4 O.H.
A lecture-laboratory course that covers the applications and theory of solar energy. The emphasis of the course will be in solar home heating. Topics to be covered are solar radiation data, solar collectors, energy storage, sizing of solar system, solar hot water heating, and solar air conditioning. Prerequisite: Math 215. Offered yearly.

310 Science and Technology in Litigation - 5 O.H.
Designed to provide a working knowledge of investigative procedures; basic sciences, especially dynamics, sound, and radiation; and recent technological advances employed in litigation in the areas of automobile collisions, accidents, product liabilities, and major calamities. Grade Only. Offered yearly. Prerequisite: History 365, 370 and 377, or permission of instructor.

326 Electronics with Biomedical Applications - 4 O.H.
A lecture-laboratory course that provides a basic background in the use of diodes, transistors, power supplies, transducers and amplifiers. Applications will be in the biomedical field and include such items as the electrocardiograph, cardiotachometer, and blood-pressure recorder. Prerequisite: consent of instructor. Offered on demand.

328 Electrical Measurements and Circuits - 5 O.H.

330 Electronics - 5 O.H.
A lecture-laboratory course in solid state electronics. Circuit theory, diodes, transistors, power supplies, amplifiers, waveform generator and integrated circuits. Prerequisite: 222 or 202 or consent of instructor. Offered every two years.

332 Computer Organization - 5 O.H.
A lecture-laboratory course in fundamentals of digital computers and digital electronics; Boolean algebra, logic circuits, counters, registers, arithmetic-logic units, memory units and control units. Offered yearly.

333 Microprocessor Electronics - 4 O.H.
A lecture-laboratory course on the programming and interfacing of microprocessors. Analog and digital conversion, input/output devices, data transmission and data manipulation will be covered. Examples will be programmable interface chips, UART, and microcomputer interfacing. Offered yearly. Grade only.

340 Modern Physics - 5 O.H.
A lecture-laboratory course in modern physics. Special relativity, Bohr atom, quantum mechanics and solid state physics. Prerequisites: 203 or 223 and Mathematics 227. Offered yearly.

345 Thermodynamics - 4 O.H.

350 Mechanics I - 4 O.H.
Fundamental laws of mechanics of particles and rigid bodies including vibrations. Prerequisite: 221. Offered yearly.

370 Optics - 4 O.H.

400G Seminars in Environmental and Human Services - 2-4 O.H.
This course consists of one or more seminars offered from time to time on topics relevant to environmental and human services. Each seminar offers 2-4 hours of credit. The first series of seminars consists of the following four, (a) Environmental Radioactivity, (b) Accident Analysis, (c) Computer Information Systems, and (d) Noise Pollution. Offered yearly.

404G Nuclear Radiation Physics - 5 O.H.
A first course in health physics, includes atomic and nuclear structure, radioactivity, interaction of radiation with matter, radiation dosimetry, health physics instrumentation, external and internal radiation protection. Prerequisite: 203 or consent of instructor. Lecture-laboratory course. Offered every two years.

405G Mechanics II - 4 O.H.
A continuation of 350 including central force fields, scattering and Lagrangian and Hamiltonian mechanics. Prerequisite: 350. Offered every four years.

420 Electronic Instrumentation and Control - 4 O.H.
An introduction to the design, analysis and behavior of electronic control systems including study of the input and output characteristics and interactions of the functional blocks which comprise the system. Laboratory included. Prerequisite: 333. Offered every two years.

425 The Physics of Semiconductor - 4 O.H.
A study of the physics of semiconductors, pn junctions and transistors; of the fabrication of semiconductor devices including integrated circuits; and of the electrical characteristics and behavior of these devices. Prerequisite: 340. Offered every two years.

430G Electromagnetic Theory I - 4 O.H.
Electrostatics including Gauss's Law and Laplaces' Equation, Magnetostatics. Introduction to Maxwell's Equations. Offered every two years. Prerequisites: Physics 223 or 203 and Math 330.

431G Electromagnetic Theory II - 4 O.H.
A continuation of 430 with applications of Maxwell's equations to waveguides, optics, and special relativity. Prerequisite: 430. Offered every two years.

435G Statistical Physics - 4 O.H.
Introduction to the concepts and laws of kinetic theory, thermodynamics, and classical and quantum statistical mechanics. Prerequisites: 223 and Mathematics 330. Offered every four years.

441G Mathematical Methods in Physics I - 4 O.H.

440G Mathematical Methods in Physics II - 4 O.H.

446G Advanced Laboratory I - 2 O.H.
A study of the experimental techniques used in modern physics. Experiments are drawn from such fields as mechanics, statistical physics, optics, solid state physics and atomic and nuclear physics with special emphasis on the quantum character of matter. Prerequisites: 21 quarter hours in Physics. Offered on demand.

464G Advanced Laboratory II - 2 O.H.
A continuation of Physics 460. Offered on demand.

480G Microcomputer Workshop - 3 O.H.
An introduction to microcomputer programming and a survey of software available for the science classroom. Applications will include data analysis, graphing, and computer modeling. Prerequisite: strong science background. Offered yearly.

481G Microcomputer Interfacing - 4 O.H.
An introduction to interfacing microcomputer. Topics covered will be Address decoding, Device select pulse, input/output ports, Flags and interrupts, Digital to Analog converters, Analog to Digital converters and data transmission. Apple and TRS-80 microcomputers will be used as examples. Prerequisite: experience with BASIC computer language. Offered yearly.

490G Individual Problems in Physics - 1-5 O.H.
An opportunity for the qualified advanced undergraduate to work independently. Topics may include research, development of special skills, selected readings, etc. Time arranged. Prerequisite: consent of the physics advisor. May be repeated to a total of 5 credits. Offered yearly.
AVIATION COURSES

200 Fundamentals of Aviation - 6 Q.H.
Fundamentals of aviation necessary for completion of the F.A.A. Private Pilot written examination as well as an overview of aviation in general. Grade or P/NC.

204 Private Flight Laboratory - 5 Q.H.
This course will cover airplane operational examinations and the use of radio for voice communications; emphasis on basic piloting techniques such as stall landings, short and soft field operation; and cross-country flight procedures. Grade or P/NC. Student must enroll in the course in order to earn credit.

300 Fundamentals of Instrument Flight - 6 Q.H.
Provides the student with aeronautical knowledge necessary for successful completion of the FAA Instrument written examination. Additional subjects covered in depth are Advanced Meteorology, Integrated and Inertial Instrument Flight and Ground Systems, National and International Air Space, and sophisticated radio communications and navigation. Grade or P/NC. Offered yearly.

301 Instrument Flight Laboratory - 5 Q.H.
This course will cover oral and airplane operational examinations for instrument flight at an advanced level; instrument piloting techniques such as aircraft maneuvers, IFR, departure, en route, and approach procedures and ADF, ILS, and VOR approach techniques and proficiencies. Grade or P/NC. Student must enroll in the course to earn credit. Offered yearly.

380 Seminars in Aviation Organization/Administration - 14 Q.H.
Seminars on topics relevant to the 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.

401 Advanced Fundamentals of Aviation - 6 Q.H.
Provides the student with aeronautical knowledge that is necessary for successful completion of the FAA Commercial Pilot written 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 deck and maintenance crews. Grade or P/NC. Offered yearly.

402 Commercial Flight Laboratory - 5 Q.H.
This course will cover all airplane operational examinations for commercial flight. Emphasis on advanced piloting techniques for commercial operation such as aircraft maneuvers, takeoffs and landings, passenger comfort, cross-country flight, voice and radio navigation, night operation, primary instrument flight and safety. Grade or P/NC. Student must enroll in this course in order to earn credit. Offered quarterly.

Political Science

Minne Hall, Room 212 / 457-5400
Bromeland, Chairperson, Eddy, ElAfandi, DuFrene, Morello.

Political Science deals with the theory and practice of politics, government, and administration. As an academic discipline it includes political theory, public law, politics and public policy, public administration and international relations, foreign policy and comparative governments of modern and developing nations.

The primary objective of the Political Science curriculum is to prepare you for graduate study and/or a career in government, business or education. It can also be used as a preparation for law school. In addition, Political Science courses contribute to liberal education by offering the opportunity to acquire a knowledge of your governmental system and the way in which it operates so that you will be better equipped to exercise the responsibilities of citizenship.

B.A. MAJOR
POLITICAL SCIENCE
60 Q.H.

REQUIRED COURSES (14 Q.H.)
220 American National Government (4)
410 Political Analysis (4)

ELECTIVES (52 Q.H.)
Fifty-two (52) credit hours with at least four quarter hours in each of the following areas: American Field; Comparative Field; Theory; International Field. Students may select from the following list:

American Field - minimum of 4 Q.H.
221 State and Local Government (4)
228 Intro to Public Administration (4)
315 American Political Thought (4)
320 Constitutional Law (4)
322 Political Parties and Interest Groups (4)
323 Minnesota Politics and Processes (4)
324 Urban Planning (4)
329 Municipal Administration (4)
340 Politics of Ecology (4)
420 Administrative Law (4)
421 American Presidency (4)
426 Public Budgeting (4)

Comparative Field - minimum of 4 Q.H.
222 Contemporary Issues in the Middle East (4)
330 Political Systems of Britain and France (4)
331 Political Systems of Germany and the Soviet Union (4)
333 Political Systems of Africa (4)
334 Political Systems of the Middle East (4)
335 Political Systems of Latin American Countries (4)

410 Turbojet-Prop. Transport Seminar - 14 Q.H.
This course fulfills the Federal Aviation Administration's ground requirements for pilots of heavy, sophisticated aircraft. Basic aircraft systems theory, design, function, operation and procedures are covered in depth. Prerequisites: Physics 300 and 401 or equivalent. Offered yearly. May be repeated.

COURSES FOR GRADUATE STUDENTS ONLY

550 Individual Problems in Physics - 1-6 Q.H.
An opportunity for qualified student to work independently. Topics may include research, development of special skills, selected readings, etc. Time arranged. Prerequisite: consent of the physics advisor. May be repeated to a total of six credits.
B.A. MAJOR
SOCIAL SCIENCE
60 Q.H.

REQUIRED COURSES (24 Q.H.)
150 Soc - Human Society (4)
201 Econ - Principles of Economics I (4)
211 Geo - Economic Geography (4)
220 American National Government (4)
231 Hist - American History 1828-1960 (4)
232 Hist - American History 1900-Present (4)

ELECTIVES (36 Q.H.)
At least 4 Q.H. in each of the following fields of Political Science: American, Comparative, International and Theory; with the remainder being any course in Political Science up to a minimum of 36 Q.H. Students may select from the following list:

American Field - minimum of 4 Q.H.
221 State and Local Government (4)
228 Intro to Public Administration (4)
315 American Political Thought (4)
320 Constitutional Law (4)
322 Political Parties and Interest Groups (4)
323 Minnesota Politics and Processes (4)
324 Urban Planning (4)
325 Municipal Administration (4)
340 Politics of Ecology (4)
342 Administrative Law (4)
343 American Presidency (4)
346 Public Budgeting (4)

Comparative Field - minimum of 4 Q.H.
222 Contemporary Issues in the Middle East (4)
330 Political Systems of Britain and France (4)
331 Political Systems of Germany and the Soviet Union (4)
332 Political Systems of Africa (4)
334 Political Systems of the Middle East (4)
335 Political Systems of Latin American Countries (4)
337 Political Systems of the Far East (4)
338 Political Systems of Southeast Asia (4)
450 Politics of Revolution and Modernization (4)

International Field - minimum of 4 Q.H.
243 International Politics (4)
246 International Law (4)
247 International Organization (4)
242 American Foreign Policy (4)
343 The Foreign Policy of the Soviet Union (4)
444 Foreign Policy of the People's Republic of China (4)

Theory Field - minimum of 4 Q.H.
260 Development of Political Thought (4)
315 American Political Thought (4)
316 Medieval Political Theory (4)
325 Modern Political Theory (4)
410 Political Analysis (4)
415 Political Psychology (4)
450 Politics of Revolution and Modernization (4)

B.S. MAJOR
SOCIAL SCIENCE
95 Q.H. TEACHING

(See Social Science Major)
Effective July 1, 1979, the B.S. Social Science Major (Composite Concentration in the 1976-77 catalog) is the only Social Science Major that will meet graduation and/or teacher certification requirements in Minnesota. All previous B.S. Social Science Majors become invalid as of July 1, 1979.

B.S. MAJOR
PUBLIC ADMINISTRATION
99 Q.H.

(Interdisciplinary Major, no Minor required)

CORE REQUIREMENTS (47-59 Q.H.)
201 BAd - Principles of Accounting I (4)
201 Econ - Principles of Economics I (4)
202 Econ - Principles of Economics II (4)
220 American National Government (4)
221 State and Local Government (4)
228 Public Administration (4)
320 Constitutional Law (4)
410 Political Analysis (4)
416 Internship (4 - 16)
420 Administrative Law (4)
425 Psy - Organizational Psychology (3)
426 Public Budgeting (4)

In addition to core requirements, students will choose one of the following options:

OPTION A - GENERAL PUBLIC ADMINISTRATION (52 Q.H.)

Credits are to be selected from the following courses with a minimum of 8 hours from each of the following four disciplines.

POLITICAL SCIENCE
315 American Political Thought (4)
322 Political Parties and Processes (4)
324 Urban Planning (4)
329 Municipal Administration (4)
340 Politics of Ecology (4)
342 Administrative Law (4)
343 American Presidency (4)
499 Seminar in Political Science when applicable (1 - 4)

The student must consult with the major advisor for other courses that might apply.

SOCIOLGY
Soc 205 Social Interaction (4)
Soc 320 Community Studies (4)
Soc 350 Population Analysis (4)
Soc 421 Urban Sociology (4)
Soc 425 Collective Behavior and Social Movements (4)
Soc 428 Small Towns & Regions (4)
Soc 430 Political Sociology (4)
Soc 437 Sociology of Large Organizations (4)
Soc 481 Community Action (4)

BUSINESS ADMINISTRATION
BAd 203 Managerial Accounting (4)
BAd 310 Business Law I (4)
BAd 312 Business Computer Applications and Programming I (4)
BAd 313 Business Computer Applications and Programming II (4)
BAd 315 Principles of Marketing (4)
BAd 345 Governmental Accounting (4)
BAd 350 Accounting Systems (4)
BAd 360 Fundamentals of Business Finance (4)
BAd 375 Management of Human Resources (4)
BAd 380 International Labor Relations (4)
BAd 456 Labor Law and Legislation (4)
BAd 465 Collective Bargaining (4)

ECONOMICS
Econ 302 Intermediate Microeconomic Analysis (4)
Econ 303 Intermediate Macroeconomic Analysis (4)
Econ 400 Public Finance (4)
Econ 415 Economic Development (4)
Econ 420 Labor Economics (4)
Econ 425 Managerial Economics (4)

OTHER ELECTIVES (OPTIONAL FOR COMPLETING THE REQUIREMENTS IN TOTAL NUMBER OF HOURS)
CTA 271 Discussion and Small Group Dynamics (4)
CTA 287 Interpersonal Speech Communication (4)
Geog 349 Maps and Air Photos (4)
Geog 380 Urban Geography (4)
Geog 450 Cartography (4)
Hist 492 American Urban History (4)

OPTION B - BUSINESS ADMINISTRATION (52 Q.H.)

REQUIRED COURSES (20 Q.H.)
202 BAd Financial Accounting II (4)
310 BAd Business Law I (4)
320 Econ Business-Government Relations (4)
420 Econ Labor Economics (4)
425 Econ Managerial Economics (4)

ELECTIVES (16 Q.H.)
302 Econ Intermediate Microeconomic Analysis (4)
303 Econ Intermediate Macroeconomic Analysis (4)
311 BAd Business Law II (4)
312 BAd Business Computer Applications and Programming I (4)
313 BAd Business Computer Applications and Programming II (4)
315 BAd Principles of Marketing (4)
345 BAd Governmental Accounting (4)
360 BAd Fundamentals of Business Finance (4)
375 BAd Management of Human Resources (4)
410 Econ Regional Economics (4)
415 Econ Economic Development (4)
419 BAd Management Systems (4)
456 BAd Labor Law and Legislation (4)
461 BAd Personnel Compensation (4)
OTHER ELECTIVE REQUIREMENTS (16 Q.H.)

Electives in Political Science — minimum of 8 Q.H.
Electives in Sociology — minimum of 8 Q.H.

For courses that will apply — see course listing under Option A.

OPTION C — HEALTH EDUCATION (52 Q.H.)

REQUIRED COURSES (11 Q.H.)
127 HPER Current Problems in Health Education (4)
214 HPER Standard First Aid (3)
429 HPER Public Health (4)

ELECTIVE (12 Q.H.)
(Any 12 credits from the following list:)
125 HPER Personal & Community Health for Majors and Minors (5)
225 HPER Curriculum and Methods of Health Education (4)
325 HPER Organization and Administration of Health Education (3)
428 HPER Health Science Laboratory Techniques (3)
432 HPER Health Education Seminar (1)

OTHER ELECTIVE REQUIREMENTS (29 Q.H.)
A minimum of eight quarter hours in Political Science, four quarter hours in Business Administration, or four quarter hours in Economics and four quarter hours in Sociology.

For courses that will apply, see course listing under Option A.

OPTION D — RECREATION ADMINISTRATION (52 Q.H.)

REQUIRED COURSES (14 Q.H.)
206 Bus Ed-Park and Recreation Office Management (4)
229 HPER Intro to Principles and Philosophy of Recreation and Leisure (3)
326 HPER Organization and Administration of Recreation and Leisure (3)
426 HPER Planning and Maintenance of Park and Recreational Facilities (4)

ELECTIVES (12 Q.H.)
Any 12 credits from the following list:
214 HPER Standard First Aid (3)
350 HPER Legal and Financial Aspects of Recreation (3)
414 HPER Recreational Leadership (3)
465 HPER Therapeutic Recreation and Services (3)

B.A. MINOR

POLITICAL SCIENCE
28 Q.H.

REQUIRED COURSES
220 American National Government (4)

ELECTIVES (24 Q.H.)
Twenty-four (24) quarter hours with at least four quarter hours in three of the four areas: American Field, Comparative Field; Theory; International Field.

Students may select from the following list:
American Field — minimum of 4 Q.H.
221 State and Local Government (4)
228 Public Administration (4)
315 American Political Thought (4)
320 Constitutional Law (4)
322 Political Parties and Interest Group (4)
323 Minnesota Politics and Processes (4)
324 Urban Planning (4)
329 Municipal Administration (4)
340 Politics of Ecology (4)
420 Administrative Law (4)
421 American Presidency (4)
426 Public Budgeting (4)

Comparative Field — minimum of 4 Q.H.
222 Contemporary Issues in the Middle East (4)
330 Political Systems of Britain and France (4)
331 Political Systems of Germany and the Soviet Union (4)
333 Political Systems of Africa (4)
334 Political Systems of the Middle East (4)
335 Political Systems of Latin American Countries (4)
337 Political Systems of the Far East (4)
338 Political Systems of Southeast Asia (4)
450 Politics of Revolution and Modernization (4)

International Field — minimum of 4 Q.H.
243 International Politics (4)
346 International Law (4)
347 International Organization (4)
422 American Foreign Policy (4)
433 The Foreign Policy of the Soviet Union (4)
444 Foreign Policy of the People's Republic of China (4)

Theory Field — minimum 4 Q.H.
260 Development of Political Thought (4)
315 American Political Thought (4)
316 Medieval Political Theory (4)
325 Modern Political Theory (4)
410 Political Analysis (4)
415 Political Psychology (4)

B.S. MINOR

PUBLIC ADMINISTRATION
43-57 Q.H.

POLITICAL SCIENCE (16 Q.H.)
(16 Q.H. to include 220 and 228)
PS 220 American National Government (4)

PS 221 State and Local Government (4)
PS 228 Intro to Public Administration (4)
PS 320 Constitutional Law (4)
PS 324 Urban Planning (4)
PS 329 Municipal Administration (4)
PS 340 Politics of Ecology (4)
PS 410 Political Analysis (4)
PS 430 Administrative Law (4)
PS 499 Seminar (when applicable) (1-4)

INTERNSHIP (4-16 Q.H.)
PS 416 Internship in Political Science (4-16)

Psychology (3 Q.H.)
PSY 425 Organizational Psychology (3)

SOCIOLOGY (8 Q.H.)
B.O.H. to be chosen from:
SOC 205 Social Interaction (4)
SOC 320 Community Studies (4)
SOC 350 Population Analysis (4)
SOC 421 Urban Sociology (4)
SOC 425 Collective Behav. & Soc. Mov. (4)
SOC 428 Small Towns & Regions (4)
SOC 430 Political Sociology (4)
SOC 437 Sociology of Large Organizations (4)
SOC 481 Community Action (4)

BUSINESS ADMINISTRATION AND ECONOMICS (12-14 Q.H.)
The student may choose Option I or Option II:

OPTION I — BUSINESS ADMINISTRATION (12 Q.H.)
(12 Q.H. to include 240 and 365 or 465)
BAd 240 Accounting (4)
BAd 310 Business Law I (4)
BAd 312 Bus. Comp. Appl. & Program I (4)
BAd 313 Bus. Comp. Appl. & Program II (4)
BAd 456 Labor Law and Legislation (4)
BAd 350 Accounting System (4)
BAd 465 Collective Bargaining (4)
BAd 242 Managerial Accounting (4)

OPTION II — ECONOMICS (14 Q.H.)
Fourteen (14) quarter hours to include Economics 201 and 202, and Business Administration 365 or 465
201 Econ Principles of Economics I (4)
202 Econ Principles of Economics II (4)
303 Econ Intermediate Macroeconomic Analysis (4)
320 Econ Business-Government Relations (4)
400 Econ Public Finance (4)
420 Econ Labor Economics (4)
425 Econ Managerial Economics (4)
456 BAd Labor Law and Legislation (4)
465 BAd Collective Bargaining (4)

COURSE LISTINGS
All courses may be taken on a pass/no credit basis except for majors and minors. Courses are categorized according to
areas of Political Science including interna­tional, American, Comparative, Public Law and Theory. Each course will be followed by a letter I, A, C, L or T symbolizing its proper category.

103 Introduction to Political Science - 4 O.H.
An analytical and historical consideration of the problems common to all political systems in all centuries and various attempts to solve them. Offered quarterly. P/NC Option.

123 Politics and Society in Middle East - 4 O.H.
A study of the impact of factors such as religion, wealth, natural resources, modern ideologies, nationalism, etc., on the lives of individuals and nations and on the politics of the Middle East. Offered quarterly. P/NC Option.

124 Politics and Society in Latin America - 4 O.H.
A study of the impact of factors such as religion, wealth, natural resources, modern ideologies, nationalism, etc., on the lives of individuals, groups and nations and on the politics of Latin America. Offered yearly. P/NC Option.

125 Politics and Society in the Far East - 4 O.H.
A study of the impact of factors such as religion, wealth, natural resources, modern ideologies, nationalism, etc., on the lives of individuals and nations in Asia. Offered quarterly. P/NC Option.

126 Politics and Society in Black Africa - 4 O.H.
A study of the political cultures of African nations south of the Sahara. A study of the impact of factors such as religion, wealth, natural resources, modern ideologies, nationalism etc., on the lives of individuals and nations and on the politics of Africa south of the Sahara. Offered yearly. P/NC Option.

199 Freshman Seminar - 1-4 O.H.
An open discussion of some political topics of current interest. Discussion will center around causes and possible remedies of some of the maladies of modern society. The different alternatives will be discussed with an eye on acquiring a better understanding of the problems. Discussion may be taken for up to 4 O.H. Offered on demand.

220 American National Government - 4 O.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. Prerequisite to all other political science courses. Offered quarterly.

221 State and Local Government (A) - 4 O.H.
An examination of the organization, functions and problems and policies of the state, municipal, and county governments in the United States. Prerequisite: 220. Offered yearly.

222 Contemporary Issues in the Middle East (C) - 4 O.H.
Discussion of cultural and historical factors affecting policies adopted by Middle Eastern countries regarding issues such as Arab-Israeli conflict, oil policy, North-South negotiations, women's status, the status of religious and ethnic minorities etc. May be used once for "different culture" general education. Offered yearly. P/NC Option.

228 Public Administration (A) - 4 O.H.
The theory and practice of public administration. Planning, organization, and the political processes as they affect the area of administration. Prerequisite: 220. Offered yearly.

243 International Politics I - 4 O.H.
An examination of the nation-state system, power politics, the processes affecting international relations, the sources of tensions in international politics and the possibilities of their peaceful solution. Offered yearly.

260 Development of Political Thought (T) - 4 O.H.
Political ideas from ancient Greece and from the Judaeo-Christian tradition. Issues to be dealt with concern the role of the individual and the state, punishment and authority, economic organization, and the role of violence in political interaction. Offered every two years.

310 Criminal Justice System (L) - 4 O.H.
An introductory study of the administration of criminal justice. This course will examine society's efforts to limit the conduct of its members through the definition of forbidden acts. The steps of the process from apprehension to post-conviction remedies will be studied as parts of an interrelated system for establishing guilt or innocence. Prerequisite: Pol. Sci. 220. Offered yearly.

315 American Political Thought (A) or (T) - 4 O.H.
Political ideas and major political movements in the U.S. from 17th Century Puritanism to the present. Puritanism, Revolutionary thought, Constitutionalism, Utopian Communities, Populism, Pragmatism, the New Deal, Socialism, Conservatism, and the Black Revolution. Prerequisite: Political Science 220 offered every two years.

316 Medieval Political Theory (T) - 4 O.H.
Political ideas from Augustine to Machiavelli. Emphasis on religious ideas and movements as they bear on political thought includes Augustine, Aquinas, John of Salisbury, Marsili of Padwa, Luther, Calvin, and various communal and their thought. Offered on demand.

320 Constitutional Law (A)(L) - 4 O.H.
Judicial function in constitutional cases; division of powers between the nation and the states, and with the national government; powers of the President, limitations on the powers of government; separation of powers; protection of individual rights. Prerequisite: 220. Offered yearly.

322 Political Parties and Interest Groups (A) - 4 O.H.
Development, characteristics, organization and policies 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: 220. Offered every two years.

324 Urban Planning (A) - 4 O.H.
Emphasis on special topics in the politics and technical problems of urban planning. Comprehensive land use planning, social and economic planning, transportation, urban renewal, zoning and other means of regulation and execution of plans. Prerequisites: 220 and 221. Offered every two years.

325 Modern Political Theory (T) - 4 O.H.
Political ideas from Machiavelli to the present. The problems of the development of the modern nation state are analyzed through the writings of the following thinkers: Machiavelli, Hobbes, Locke, Rousseau, J. S. Mill, Marx, Burke, and Marcuse. Offered every two years.

329 Municipal Administration (A) - 4 O.H.
Management, planning, and implementation of decisions of municipal administrations and organizations; administration relationships with Executive, Judicial and Legislative bodies, financial and personnel administration; problem solving for Municipal Government; Economic and Social Maladies of the Municipality; public policy and popular participation. Prerequisites: 220, 221, 228. Offered every two years.

330 Political Systems of Britain and France (C) - 4 O.H.
A comparative study of the principles, structures and operation of the contemporary political systems of Britain and France. Offered every two years.

331 Political Systems of Germany and the Soviet Union (C) - 4 O.H.
A comparative study of the principles, structure and operation of the contemporary political systems of Germany and the Soviet Union. Offered every two years.

333 Political Systems of Africa (C) - 4 O.H.
An analysis of governmental and political institutions and ideologies which have resulted from social and economic transition in the emerging nations of Africa. Offered every two years.

334 Political Systems of the Middle East (C) - 4 O.H.
An analysis of the traditional and contemporary political systems of the Middle East and the Arab-Israeli conflict. Offered every two years.

335 Political Systems of Latin American Countries (C) - 4 O.H.
A comparative study of the structure and dynamics of Latin American politics and governments. Offered every two years.

337 Political Systems of the Far East (C) - 4 O.H.
A comparative study of the principles, structure and operative of contemporary Far Eastern political systems. Emphasis on the systems of India, Pakistan, China and Japan. Offered every two years.

338 Political Systems of Southeast Asia (C) - 4 O.H.
A comparative study of the political systems of Indo-China, Malaysia, Thailand, Burma, the Philippines, and Indonesia; contemporary problems of this region in relation to world politics. Offered on demand.

340 Politics of Ecology (A) - 4 O.H.
An analysis of the politics of ecology. Special emphasis upon the institutional and decision-making problems of the American political system in meeting the challenges of
pressure groups in formulating a solution to the ecological problems. Prerequisite: 220. Offered every two years.

346 International Law (I) (L) — 4 Q.H.
The nature and sources of international law; jurisdiction of states over persons and territory; recognition of states and governments; law of the sea; governmental immunities; principle of state responsibility; law of treaties; transitional legal problems. Prerequisite: 220. Offered every two years.

347 International Organization (I) (L) — 4 Q.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. Offered every two years.

401 Independent Readings in Political Science — 1-4 Q.H.
Readings in an area of political science of particular interest to the student. Credit arranged. Offered on demand.

410G Political Analysis (T) — 4 Q.H.
The various research approaches utilized in the study of the political process. Emphasis is placed upon methods available for the collection and analysis of data. Prerequisite: 103 or 220 and junior standing. Offered every two years.

415G Political Psychology (T) — 4 Q.H.
A study of psychological concepts as they have been applied in the analysis of political behavior including motivation, perception, attitude formation and change, and political personality. Offered on demand.

416G Internship Program (Al — 1-6 Q.H.
To provide practical experience in Local, State, and National Government and in Public Administration (limited enrollment). Credit arranged. (May not apply towards a graduate degree.) Offered quarterly.

420G Administration Law (Al or (L) — 4 Q.H.
An exploration of the law of the Administrative Process: Legislative, Executive, and Judicial control of administrative action; administrative discretion; and the applicability of res judicata and stare decisis to administrative proceedings, with due consideration to The Federal Administrative Procedure Act. Prerequisite: 220. Offered biennially.

421G American Presidency (Al — 4 Q.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 of the presidency. Prerequisite: 220. Offered biennially.

422G American Foreign Policy (Al — 4 Q.H.
A consideration of major foreign policies, objectives and commitments of the United States and their political, economic and military implications, as well as policy decisions currently confronting the United States. Prerequisite: 220. Offered on demand.

426G Public Budgeting (AI) — 4 Q.H.
An examination of the politics of budgeting at federal, state and local levels. Budgeting is viewed as a mechanism for setting goals and objectives of governmental agencies and of distributing benefits and costs of governmental decisions. Consideration will be given to program planning, program analysis, intergovernmental relations, the government and the economy, and recent reforms in budgetary systems. Prerequisite: 220 and 228. Offered biennially.

433G The Foreign Policy of the Soviet Union (I) — 4 Q.H.
A study of the historical development of Soviet foreign policy and its influence on international politics. Emphasis on its ideological basis and evolution from the early revolutionary stage to alliances, the Cold War, and peaceful coexistence. Offered every two years.

444G Foreign Policy of the People's Republic of China (I) — 4 Q.H.
A study designed to equip the student with an in depth understanding of the decision-making process of foreign policy and the application of political power in the international political system by the People's Republic of China. Offered every three years.

450G Politics of Revolution and Modernization (T) or (C) — 4 Q.H.
A description of major problems of developing nations in regard to their internal affairs and international relations. Interplay between economic levels and patterns of politics and the processes leading to social, political, economic and cultural revolutions. Offered every two years.

499G Seminar — 1-4 Q.H.
The subject matter of which is to be arranged by the instructor prior to the course being offered. The student may repeat the course without limitation on the number of credits as long as the subject matter is different. Offered yearly.

COURSES FOR GRADUATE STUDENTS ONLY

501 Readings in Political Science — 4 Q.H.
The nature and scope of this course consists of independent readings in any area of political science. Credit arranged. May be repeated up to 12 hours.

502 Formation of Public Policy — 4 Q.H.
An integrated study of the policy making process, the relationship of persons, groups, and governmental and non-governmental institutions in the initiation, formulation and implementation of policy in the United States. Prerequisite: 220. Offered by arrangement only.

503 Community Decision Making — 4 Q.H.
Discussion and critique of the power structure literature: emphasis on methods of studying community elites. Prerequisite: 220. Offered by arrangement only.

Psychology

Minne Hall, Room 314 / 457-5435
Lewis (Chairperson), Ruttle, Sefkow, Soriano.

The general function of the department is to foster a scientific approach to the understanding and modification of behavior with emphasis on human behavior. The department offers two majors and a minor for students enrolled in the B.A. program, and a B.S. minor.

All courses offered are graded.

B.A. MAJOR

OPTION A

44 Q.H.

REQUIRED COURSES (24 Q.H.)

210 General Psychology (4)
231 Statistics I (4)
420 Abnormal Psychology (4)
308 Experimental Psychology (4)

Electives from Psychology to a total of 20 credits.

350 Psychological Testing and Measurement (4)
434 History and Systems of Psychology (4)

ELECTIVES (20 Q.H.)

Electives from Psychology to a total of 20 credits.
B.A. MAJOR
ALTERNATE OPTION B
72 Q.H.

(No minor required)

REQUIRED COURSES (24 Q.H.)
210 General Psychology (4)
231 Statistics I (4)
308 Experimental Psychology (4)
350 Psychological Testing and Measurement (4)
420 Abnormal Psychology (4)
434 History and Systems of Psychology (4)

REQUIRED COURSES IN OTHER DEPARTMENTS (14 Q.H.)

Biology
201 Anatomy (5) OR
210 Zoology I (5)
202 Human Physiology (5)

Mathematics
An approved computer language course (4 Q.H.) (e.g. Fortran, Cobol, Basic, Pascal)

ELECTIVES (23 Q.H.)
Electives in Psychology to a total of 23 credits.

ADDITIONAL REQUIREMENTS
Each student must complete additional requirements from the Department of Psychology or from the following listed courses from other departments to accumulate the minimum requirement of 72 quarter hours credit.

Mathematics
216 Trigonometry (4) OR
220 College Algebra and Trigonometry (5)
226, 227 Calculus I, II, III (15)
318 Introduction to Probability and Statistics (4)
351 Intro to Assembly Language (4)
418, 419 Introduction to Mathematics Statistics I, II (8)

An approved computer usage course (4)

Sociology
150 Human Society (4)
205 Social Interaction (4)
421 Urban Sociology (4)
431 Social Class and Power (4)

Physics
326 Scientific Instrumentation (4)

B.A. MINOR
28 Q.H.

REQUIRED COURSES (4 Q.H.)
210 General Psychology (4)

ELECTIVES (24 Q.H.)
Electives from Psychology to a total of 24 credits.

COURSE LISTINGS

No courses may be taken on a pass/no credit basis.

210 General Psychology - 4 Q.H.
Introduction to psychology as a social, human, and empirical science. Required before taking more advanced courses in psychology. Offered quarterly.

231 Statistics I - 4 Q.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, special correlational procedures, linear regression, parametric and non-parametric tests of significance. Prerequisite: 210. Offered yearly.

250 Developmental Psychology - 4 Q.H.
Development and decline of emotional, social, intellectual, and physical characteristics from conception to death. Prerequisite: 210. Offered quarterly.

275 Introduction to the Psychology of Women - 4 Q.H.
A survey of scientific research into female behavior and its implications for modern living. Included are psychological issues related to gender differences, sex roles, personality development, problems of adjustment, health issues, sexuality, biological influences and violence against women. Prerequisite: 210. Offered yearly.

301 Principles of Learning: Classical and Operant Conditioning - 4 Q.H.
Theory and application of basic conditioning procedures. Topics include reinforcement, punishment, extinction, generalization, discrimination, observational learning and motivation. Prerequisite: 210. Offered yearly.

308 Experimental Psychology - 4 Q.H.
Introduction to the scientific methods and research techniques in psychology. Laboratory experiences are included. Prerequisites: 210, 231 (may be taken concurrently) or permission of instructor. Offered yearly.

340 Differential Psychology - 4 Q.H.
A survey of the phenomena of individual and group differences. Topics include human differences in ability, motivational direction, personality, cognitive style, educational achievement and creativity. Sex, age, ethnic, social class and cultural differences are also explored with emphasis on the effects of these on behavior. Prerequisites: 210, 231. Offered yearly.

350 Psychological Testing & Measurement - 4 Q.H.
Problems, issues and techniques in psychological testing and measurement with emphasis on the development of skills in the administration and interpretation of psychological tests. This includes intelligence, achievement, vocational interests, aptitude psychomotor ability, and personality testing. Prerequisites: 201, 231. Offered once or twice yearly.

360 Psychology in Business and Industry - 4 Q.H.
Personnel selection techniques, performance rating procedures, training, work group dynamics, supervisory leadership, employee motivation, human factors engineering, fatigue, safety, and physical working conditions. Prerequisite: 210. Offered yearly.

369 Introduction to Cognitive Psychology - 3 Q.H.
Contemporary information processing approach to human cognitive processes; pattern recognition, attention, memory, language, imagery, reasoning, problem-solving, and concept formation. Prerequisite: 210. Offered yearly.

400G Independent Study - 1-4 Q.H.
Independent study or research for credit under the guidance of a staff member with prior consent. May be repeated. Prerequisite: 210. Offered quarterly.

399 Internship - 1-16 Q.H.
Practical application of theory and methodology within an agency or an organization. Arranged to include on-site supervision along with the experience. Restricted to junior or senior standing. P/NC Only.

401 Field Experience in Psychology - 3 Q.H.
Actual experience in settings and situations where principles of psychology are applied in dealing with human problems. Prerequisite: Advanced standing in psychology. Offered quarterly. P/NC Only.

403 Independent Research in Psychology - 3 Q.H.
Conducting an actual investigation using appropriate experimental or other research methodologies. May be repeated. Prerequisite: Advanced standing in psychology. Offered quarterly, by arrangement.

410 Sensation and Perception - 4 Q.H.
Emphasis on vision and audition. Topics include psychophysics, the structure of the sense organs, sensory coding, adaptation, attention, perception of form, space, and depth, illusions, perceptual development and contributions of the observer. Prerequisite: 210. Offered yearly.

414G Psychology of Mental Retardation - 4 Q.H.
Causes, diagnosis, problems, and treatment of mental retardation. Personal, social, and educational adjustment of retarded persons. Prerequisite: 210. Offered yearly.

415 Social Psychology - 4 Q.H.
Problems, issues and theories in social behavior including: social perception, attitude formation and change, prejudice, interpersonal attraction, social influence, prosocial behavior, aggression, social exchange, proxemics, sexuality and the applications of social psychology. Prerequisite: 210. Offered yearly.

416G Personality and Adjustment - 4 Q.H.
Concept of psychological adjustment and related elements such as stress, frustration, aggression, conflict, defense mechanisms, and mental health. Elements of major personality theories will be included. Prerequisite: 210. Offered two or three times per year.

418G The Psychology of Drug or Chemical Dependency - 4 Q.H.
Psychological, sociological, and physiological factors related to drug dependency. Therapeutic interventions and education will be discussed. Decision-making processes and alternatives to drug use are explored. This course does not meet teacher certification, but is designed for non-education majors. Prerequisite: 210. Offered yearly.

PSYCHOLOGY / 113
Abnormal Psychology — 4 Q.H.
Abnormal behavior is studied according to its origins, development, and treatment. Topics include: past models of abnormal behavior, neurosis, psychosis, disorders unique to stages of the life span, prevention, psychological aspects of illness. Prerequisite: 210. Offered quarterly.

Behavior Modification — 4 Q.H.
Current methods, principles and therapeutic interventions of behavior modification are discussed as applied to the behavior of individuals and groups in school, hospital, community, and interpersonal situations. Prerequisites: 210, 301, or permission of instructor. Offered yearly.

Organizational Psychology — 4 Q.H.
Organizational socialization, organizational decision-making, organization — individual interaction, dynamics of motivation in organization, formal versus informal structures, leadership and the utilization of power and authority, communication, organizational change, and the evaluation of organizational effectiveness. Prerequisite: 210. Offered yearly.

Introduction to Counseling and Clinical Psychology — 4 Q.H.
Current psychological methodologies used in attempts to produce changes in human behavior, including the theoretical framework underlying the methodologies. An additional topic is the interview strategies used in counseling procedures. Prerequisites: 210, 420 and consent of instructor. Offered yearly.

History and Systems of Psychology — 4 Q.H.
An historical overview of psychology and its antecedents are considered to provide an understanding of psychology as an evolving, conceptual system. Prerequisite: At least 16 Q.H. in psychology or permission of instructor. Offered yearly.

Psychology of Adulthood and Aging — 4 Q.H.
Current theory and research dealing with psychological development from early adulthood to old age. Prerequisites: 210, 250 or permission of instructor. Offered yearly.

Seminar in Psychology — 4 Q.H.
Topics will be specified for each separate course offering. The intent is to provide in-depth study of one specialized subject area. Prerequisite: 210 and consent of the instructor. Offered yearly.

Social Science

Minne Hall, Room 212 / 457-5420
The following listings are the composite concentrations, majors and minor, bachelor of arts and bachelor of science, offered in Social Science.

B.A. MAJOR

COMPOSITE CONCENTRATION
61 Q.H.

REQUIRED HISTORY COURSES (12 Q.H.)
230, 231, 232 American History I, II, III (12)

REQUIRED POLITICAL SCIENCE COURSES (4 Q.H.)
220 American National Government (4)

REQUIRED GEOGRAPHY COURSES (8 Q.H.)
211 Economic Geography (4)
213 Cultural Geography (4)

REQUIRED ECONOMICS COURSES (12 Q.H.)
201, 202, 203 Principles of Economics I, II, III (12)

REQUIRED SOCIOLOGY COURSES (12 Q.H.)
150 Human Society (4)
376 Intro to Sociological Research (4)

REQUIRED PSYCHOLOGY COURSES (8 Q.H.)
103 Introduction to Political Science (4)
220 American National Government (4)

REQUIRED GEOGRAPHY COURSES (8 Q.H.)
211 Economic Geography (4)
320 Geography of the United States (4)

REQUIRED ECONOMICS COURSES (12 Q.H.)
201, 202, 203 Principles of Economics I, II, III (12)

REQUIRED PSYCHOLOGY COURSES (8 Q.H.)
210 General Psychology (4)
416 Personal Adjustment (4)

REQUIRED EDUCATION COURSES (4 Q.H.)
331 Teaching of Social Studies in Secondary Schools (4)

ELECTIVES (39 Q.H.)
In-depth in an area or electives from Social Science (includes 12 credits in General Education). (39)

Social Science Major that will meet graduation and/or teacher certification requirements. All other B.S. Social Majors become invalid as of July 1, 1979.

REQUIRED HISTORY COURSES (8 Q.H.)
SELECT ANY TWO:
230 American History: To 1828 (4)
231 American History: 1828-1900 (4)
232 American History: 1900-present (4)

REQUIRED SOCIOLOGY COURSES (8 Q.H.)
150 Human Society (4)
376 Intro to Sociological Research (4)

REQUIRED POLITICAL SCIENCE COURSES (8 Q.H.)
103 Introduction to Political Science (4)
220 American National Government (4)

REQUIRED GEOGRAPHY COURSES (8 Q.H.)
211 Economic Geography (4)
320 Geography of the United States (4)

REQUIRED ECONOMICS COURSES (12 Q.H.)
201, 202, 203 Principles of Economics I, II, III (12)

REQUIRED PSYCHOLOGY COURSES (8 Q.H.)
210 General Psychology (4)
416 Personal Adjustment (4)

REQUIRED EDUCATION COURSES (4 Q.H.)
331 Teaching of Social Studies in Secondary Schools (4)

ELECTIVES (39 Q.H.)
In-depth in an area or electives from Social Science (includes 12 credits in General Education). (39)

Effective July 1, 1979, this is the only requirement.

Political Science Option

(28 Q.H.)
At least four quarter hours in three areas: American Field; Comparative Field; Theory; International Field.

Wisconsin Certification Requirements in Broad Field Social Studies

Broad Field Social Science Concentration (33 Q.H.)
(Select credits under "Required Courses" and "Electives" to give a concentration of 33 Q.H. in one (1) field.)

Minimum of 3 Additional Concentrations (48 Q.H.)
(Select credits under "Required Courses" and "Electives" to give a minimum of three (3) additional concentrations — minimum of 12 Q.H. concentration).

Required Courses (8 Q.H.)
Biology 104 OR 204 (4)
Economics 102 (4) OR Economics 201 (4)

B.A. Minor

Composite Concentration
36 Q.H.

Required History Courses (12 Q.H.)
230, 231, 232 American History I, II, III (12)

Required Political Science Courses (4 Q.H.)
220 American National Government (4)

Required Geography Courses (4 Q.H.)
211 Economic Geography (4)
SOCIAL SCIENCE / SOCIOLOGY AND SOCIAL WORK / 115

REQUIRED SOCIOLOGY COURSE (4 Q.H.)
150 Human Society (4)

ELECTIVES (12 Q.H.)
One course in Sociology or Geography and two courses in Political Science.

SOCIAL STUDIES
MINOR—MINOR OPTION FOR ELEMENTARY TEACHERS
40 Q.H.
Econ 102 Introduction to Economics (4)

Sociology and Social Work

Minne Hall, Room 228/467-5420
Reynolds, Chairperson; Aldrich, Andrews, Bublitz, Ellenbecker, Hopkins, Perry, Schwartz, Stevens.

The departmental programs are designed to provide you with an understanding of basic principles of social behavior and knowledge of strategies for working with people. A student who has majored in this area is prepared for employment in social welfare, casework, correctional work, law enforcement, community organization, industrial relations, public relations, research, government, personnel and business, or for graduate study.

B. A. MAJOR
SOCIOLOGY—SOCIOLOGY CONCENTRATION
59 Q.H.

REQUIRED COURSES (40 Q.H.)
Soc 150 Human Society (4)
Econ 201 Principles of Economics I (4)
Soc 205 Social Interaction (4)
Geog 211 Economic Geography (4)
Soc 212 The Family (4)
Soc 216 Social Problems (4)
PolSci 220 American National Government (4)
Hist 231, 232 American History (8)
Soc 350 Population Analysis (4)

ELECTIVES (20 Q.H.)
Must take at least five courses in Sociology 300 or above.

B.A. MAJOR
SOCIOLOGY
56 Q.H.

REQUIRED FOUNDATION COURSES (20 Q.H.)
Soc 150 Human Society (4)
Math 208 Fundamentals of Statistics (4)

Geog 110 World Regional Geography (4)
Geog 213 Cultural Geography (4)
Soc. 150 Human Society (4)
Psy. 210 General Psychology (4)

SELECT ANY TWO:
Hist 120 Western Civilization to 1500 (4)
Hist 121 Western Civilization 1500-1815 (4)
Hist 122 Western Civilization 1815-Present (4)
Hist 230 American History: to 1828 (4)
Hist 231 American History: 1828 to 1900 (4)
Hist 232 American History 1900 to Present (4)

SELECT ONE:
Pol Sci 103 Intro to Political Science (4)
Pol Sci 220 American National Government (4)
Pol Sci 221 State & Local Government (4)

ELECTIVES (8 Q.H.)
Choose from Economics, Geography, History, Political Science, Sociology, Psychology.

ELECTIVES (12 Q.H.)
Must take at least five courses in Sociology 300 or above.

**SOCIOLOGY: CRIMINAL JUSTICE* 80 Q.H.

REQUIRED FOUNDATION COURSES (12 Q.H.)
Soc 150 Human Society (4)
PolSci 220 American National Government (4)
PolSci 221 State and Local Government (4)

REQUIRED COURSES (56 Q.H.)
Math 208 Fundamentals of Statistics (4)
PolSci 310 Criminal Justice System (4)
Soc 376 Introduction to Social Research (4)
Soc 406 Models of Intervention (4)
Soc 414 Juvenile Delinquency (4)
Soc 415 Criminology (4)
Soc 416 Corrections (4)
Soc 417 Operations and Procedures in Law Enforcement (4)
Soc 418 Criminal Law & Procedure (4)
**Soc/SW 460 Field Instruction (within criminal justice agency) (16)
Soc 478 Seminar in Criminal Justice (4)

B.S. MAJOR
SOCIOLOGY: CRIMINAL JUSTICE* 80 Q.H.

Note: Students who wish to major in sociology: social work must make application for admission into the program; specific eligibility requirements and application procedures are available from the Department of Sociology/Social Work.

SOCIOLOGY: SOCIAL WORK
80 Q.H.

REQUIRED FOUNDATION COURSES (20 Q.H.)
* Biol 117 Human Biology (4)
* Psych 210 General Psychology (4)
* Psych 250 Developmental Psychology (4)
* Soc 150 Human Society (4)
* Soc 206 Social Interaction (4)

REQUIRED COURSES (56 Q.H.)
Math 208 Fundamentals of Statistics (4)
Soc 375 Introduction to Social Research (4)
SocWk 375 Introduction to Social Work (4)
SocWk 390 Social Work Methods I (4)
B.S. MAJOR
SOCIOLOGY: URBAN
B.A. MINOR
ELECTIVES (12 Q.H.)
- Soc 150 Human Society (4)
- Soc 401 Social Work Methods I (4)
- Soc 402 Social Welfare Policy Analysis (4)
- Soc 404 Human Behavior in the Social Environment (4)
- Soc/ SW 460 Field Instruction (within social service agency) (16)
- Soc 479 Seminar in Social Work (4)

ELECTIVES (4 Q.H.)
- Elective hours to be approved by advisor from 300 level or above within Sociology and Social Work.
- Courses to be completed prior to application into the Sociology: Social Work program.

**Soc/SW 460 Field Instruction: extended application of practical experience within a social service agency. Restricted to junior and senior sociology, social work, social science and paralegal majors. Arranged. Students majoring in both Sociology: Criminal Justice and Sociology: Social Work will be required to take 32 quarter hours of internship.

B.S. MAJOR
PARALEGAL—SOCIOLOGY OPTION
(Minor not required)
(See Paralegal Major)

B.A. MINOR
SOCIOLOGY: GENERAL OPTION
24 Q.H.

REQUIRED COURSES (12 Q.H.)
- Soc 150 Human Society (4)
- Soc 205 Social Interaction (4)
- Soc 216 Social Problems (4)

ELECTIVES (12 Q.H.)
- Electives within the department must total 12 credits.

B.A. MINOR
SOCIOLOGY: URBAN & COMMUNITY STUDIES OPTION
28 Q.H.

REQUIRED COURSES (28 Q.H.)
- Soc 150 Human Society (4)
- Soc 320 Community Studies (4)
- Soc 350 Population Analysis (4)
- Soc 421 Urban Sociology (4)
- Soc 426 Small Towns and Non-Metro Regions (4)
- Soc 430 Political Sociology (4)
- Soc 481 Community Development (4)

COURSE LISTINGS
SOCIOLOGY
- All courses taken for grade only.

150 Human Society - 4 Q.H.
An introduction to sociology as a social science concerned with the systematic study of human society; consideration of individuals, groups, and relationships. Offered quarterly.

201 Scandinavian Culture I: Norway & Denmark - 4 Q.H.
One of two sociology courses dealing with the culture and society of the Nordic countries. This course focuses on the culture and social institutions of Norway and Denmark. Sociology 201 and 202 may be taken in any order. Offered yearly.

202 Scandinavian Culture II: Sweden & Finland - 4 Q.H.
One of two sociology courses dealing with the culture and society of the Nordic countries. This course focuses on the culture and social institutions of Sweden and Finland. Sociology 201 and 202 may be taken in any order. Offered yearly.

205 Social Interaction - 4 Q.H.
A study of human interaction, symbolic interaction and socialization. Recommended Prerequisite: 150. Offered quarterly.

212 The Family - 4 Q.H.
Analysis of the family as a group, historical, cultural, and institutional aspects including the analysis of group processes. Recommended Prerequisite: 150. Offered quarterly.

216 Social Problems - 4 Q.H.
The nature and meaning of social problems. Incidence and characteristics of selected social problems; analysis of proposed solutions. Recommended Prerequisite: 150. Offered quarterly.

320 Community Studies - 4 Q.H.
Analysis and evaluation of communities as social systems; qualitative and quantitative approaches. Prerequisite: 150. Offered yearly.

324 Sociology of Education - 4 Q.H.
Analysis of the American educational system, with emphasis on the interaction of the system with other social institutions, and consequent social change. Prerequisite: 150. Offered every two years.

340 Social-Cultural Anthropology - 4 Q.H.
The varieties and range of human behavior examined through comparative study of cultures in all parts of the world. Prerequisite: 150. Offered every two years.

350 Population Analysis - 4 Q.H.
Ways in which sociological and demographic factors explain variations in population events (births, deaths, migration). Examination of causes and consequences of current population problems at the regional, national and international levels. Prerequisite: 150. Offered yearly.

376 Introduction to Social Research - 4 Q.H.
An introductory course for consumers of social research findings. Basic knowledge and skills are developed that will enable a person to critically evaluate all phases of the social research process. Prerequisite: 150.

Limited to 30 students. Offered quarterly.

400G Life Styles of American Cultural and Minority Groups - 2 Q.H.
The study of intergroup relations, American minorities, discrimination and prejudice. For teacher certification. Offered quarterly.

405G Models of Intervention - 4 Q.H.
An in-depth study of therapeutic methodologies used in the human service professions. Special emphasis is on social systems and directive models to assist individual clients with behavioral requirements. Consent of instructor. Limited to 20 students. Offered yearly.

411G Sociology of Religion - 4 Q.H.
An analysis of religious beliefs, institutions and symbols and their role in society. Prerequisite: 150. Offered every two years.

412G Sexuality in American Society - 4 Q.H.
An extensive review of recent research in the area with specific emphasis on behavioral and cultural aspects of sexuality. Prerequisite: 150. Offered twice yearly.

414G Juvenile Delinquency - 4 Q.H.
In-depth analysis of juvenile delinquency, its development, control, treatment, and prevention. Prerequisite: 150. Offered yearly.

415G Criminology - 4 Q.H.
The criminal, the machinery of justice and its treatment of the criminal and society's reaction to the criminal. Prerequisite: 150. Offered yearly.

416G Corrections - 4 Q.H.
Analysis of the juvenile and adult correctional institutions, their functions and philosophies. Prerequisite: 150. Offered yearly.

417 Operations and Procedures in Law Enforcement - 4 Q.H.
Operational and procedural requirements in law enforcement including: community relations, communications, testifying and criminal investigation. Prerequisite: 150. Offered yearly.

418G Criminal Law and Procedure - 4 Q.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. Limited to 20 students. Prerequisite: Sociology 150, Political Science 220, 310. Offered yearly.

419G Social Philosophy - 4 Q.H.
Early ideas about the nature of society studied in relation to the historical and philosophical foundations of modern sociological theory. Prerequisite: 150. Offered every two years.

421G Urban Sociology - 4 Q.H.
Growth, structure, and function of cities, spatial patterning, neighborhoods and ethnic groups; social life of city dwellers and urban social change. Prerequisite: 150. Offered yearly.

423G Race Relations and Minority Groups - 4 Q.H.
The social and cultural context of ethnic groups, social processes in organization of race and ethnic relationships. Prerequisite: 150. Offered every two years.

425G Collective Behavior and Social Movements - 4 Q.H.
An examination of a wide range of relatively unstructured group phenomena (fads, ...
crises, rumors, panics, riots, social movement, revolutions, and public opinion). Prerequisite: 150. Offered every two years.

427G Social Change — 4 Q.H.
Theoretical and empirical models for analyzing social change; examination of interrelated social problems; emphasis on the causes of social change. Prerequisite: 150. Offered every two years.

428G Small Towns and Non-Metro Regions — 4 Q.H.
The study of the social organization of the non-metropolitan towns and regions in the U.S. and other countries. Prerequisite: 150. Offered every two years.

430G Political Sociology — 4 Q.H.
The organization of power into political structures and the social dynamics of this process. Prerequisite: 150. Offered every two years.

431G Social Class and Power — 4 Q.H.
Social class, its distribution, and their use of social, economic and political power. Prerequisite: 150. Offered every two years.

434G Medical Sociology — 4 Q.H.
Social factors associated with the incidence and treatment of illness and the social organization of medical institutions and distribution of medical services. Prerequisite: 150. Offered every two years.

435G Family Roles and Relationships — 4 Q.H.
Specific study of family roles, communication patterns, decision-making, and interpersonal relationships. Limited to 25 students. Prerequisites 150, 212. Offered yearly.

437G The Sociology of Large Scale Organization — 4 Q.H.
Examination of alternative models of organizations; comparison of economic, voluntary, cooperative and governmental types. Prerequisite: 150. Offered yearly.

450G Sociology of Aging — 4 Q.H.
Growth of the aged population, comparative view of the role of the aged; problems of the aged and proposed solutions. Prerequisite: 150. Offered every two years.

475G Sociological Theory and Methods — 4 Q.H.
Methods and techniques of research; major emphasis placed on the critical, qualitative and analytical study of social theories. Prerequisites: 150, 376 and Math 208. Limited to 25 students. Offered every two years.

476G Laboratory in Social Research — 4 Q.H.
The conduct of social research; research studies of the college and the community. Prerequisites: (B.A.) 150, 376, 475, Math 208, (B.S.) 150, 376, Math 208. Limited to 25 students. Offered yearly.

478G Seminar in Criminal Justice — 4 Q.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: 150, 414, 415, 416, and 418. Offered yearly.

481G Community Development — 4 Q.H.
The study of alternative approaches to the mobilization process of voluntary and governmental organizations in local communities. Prerequisite: 150. Offered yearly.

485 Independent Readings in Sociology — 1-4 Q.H.
Intended to aid the student who has a special area of interest that goes beyond formal course limits. By arrangement. Offered quarterly.

487 Special Projects in Sociology — 1-4 Q.H.
For the student interested in pursuing an independent research project in sociology. By arrangement. Offered quarterly.

488G Agency Administration — 4 Q.H.
Analysis of essential components of budget construction, agency administration and grant writing within public agencies. Prerequisite: Junior or senior standing and permission of instructor. Offered yearly.

SOCIAL WORK

All courses taken for grade only and should be taken in number sequence.

375 Introduction to Social Work — 4 Q.H.
An introductory course designed to acquaint the student with the historical, philosophical and developmental background of social work practice. Prerequisite: 150. Offered quarterly.

390 Social Work Methods I — 4 Q.H.
Basic theory, values and beginning skills development necessary in social work intervention at various systems levels. Combines classroom skills and laboratory experiences. Prerequisite: S.W. 375. Limited to 25 students. Offered fall quarter only.

395 Social Work Methods II — 4 Q.H.
Social work skill development in planning and intervention with various client systems in various social work settings. Combines classroom skills and laboratory experiences. Prerequisites: S.W. 375, Soc/S.W. 385, S.W. 390. Limited to 25 students. Offered winter quarter only.

401G Social Work Methods III — 4 Q.H.
Social work skill development in evaluation and termination with various client systems in various social work settings. Combines classroom skills and laboratory experiences. Prerequisites: S.W. 375, Soc/S.W. 385, S.W. 390, S.W. 395. Limited to 25 students. Offered spring quarter only.

402G Social Welfare Policy Analysis — 4 Q.H.
An intensive introduction to the understanding and appraisal of social welfare policies and programs, the historical and contemporary forces shaping their development, and the use of conceptual approaches for the analysis of social policy. Prerequisites: S.W. 375. Offered twice yearly.

403G Law and Social Work — 4 Q.H.
Basic principles of law which pertain to social work practice; organization of courts, legal aid societies; and other problems of a legal nature that affect social work practitioners. Prerequisite: S.W. 375 or consent of instructor. Limited to 25 students. Offered yearly.

404G Human Behavior in the Social Environment — 4 Q.H.
An introduction to systems theory in the understanding of human behavior. Provides the means for analyzing the person as system, personal key systems (the family, groups, organizations, etc.) in networks of personal settings and cultural systems. Prerequisites: S.W. 375, Soc/S.W. 385, S.W. 390, junior class standing minimum. Offered yearly.

455G Social Work Practice with the Aging — 4 Q.H.
This course deals with the knowledge, skills and values that are important in providing social work services to the elderly. Topics will include history of services, the practice continuum, the function of the social worker with the aged, and an analysis of existing services. Prerequisite: 150. Offered yearly.

479G Seminar in Social Work — 4 Q.H.
In depth discussion and examination of practice dilemma, issues, and policies in professional social work practice. Students should take 460, Field Instruction, before 479. Prerequisite: 460. Limited to 20 students. Offered yearly.

SOCIOLOGY/SOCIAL WORK

385 Field Experience — 4-8 Q.H.
An introductory experience designed to acquaint students with the structure, processes, and policies involved in professional human services agencies. May be repeated once. Arranged. Prerequisite: 150. Offered quarterly. P/NC Only.

460 Field Instruction — 1-16 Q.H.
An intensive, professionally supervised placement in a selected human service organization for the purpose of providing the student with a culminating experience that integrates knowledge, methodology, and skills in a practice setting. Prerequisite: (Sociology) Junior or Senior standing in sociology and at least 24 hours of completed coursework in sociology. Prerequisite: Sociology. Social Work — Senior standing and completion of all social work courses except S.W. 479. The Pre-Field Instruction requirement must be taken the quarter prior to Field Instruction for social work students. Arranged. Offered quarterly. P/NC Only.

480G Variable Topics in Sociology or Social Work — 1-4 Q.H.
A seminar course that analyzes selected topics and problems from the sociological or social work perspective (subject to be chosen by instructor and announced before registration.) Prerequisite: 16 hours of sociology or social work, offered on demand. Grade Only.

COURSES FOR GRADUATE STUDENTS ONLY

515 Current Social Problems — 1-4 Q.H.
An examination of the incidence, causes and treatment of major social problems. Prerequisite: permission of instructor. Offered on arranged basis.

GEOGRAPHY

The study of Geography affords the
Special Academic Programs
One-Year and Two-Year Programs

In addition to baccalaureate and graduate degree programs, Winona State University offers a variety of short-term programs including one-year nondegree programs, two-year associate degree programs and pre-professional sequences in agriculture, dental hygiene, dentistry, mortuary science, optometry, podiatry, general engineering, chemical engineering, fishery and wildlife management, forestry, law, medicine, pharmacy and veterinary medicine. The university also offers a postbaccalaureate (Fifth Year) program in teacher education which is designed for classroom teachers not planning to enter a Master's Degree program.

One-Year
BUSINESS EDUCATION & OFFICE ADMINISTRATION STENOGRAPHIC PROGRAM – 48 Q.H.

REQUIRED STENOGRAPHIC AND BUSINESS COURSES (32 Q.H.)

Students who have not completed beginning typewriting and shorthand courses should enroll in the beginning courses, not those listed below. It will be necessary for beginners to extend their program at least one quarter.

105 Secretarial Accounting (3)
203 Advanced Typewriting (3)
206 Administrative Office Procedures (3)
210 Business Machines (2)
224 Advanced Gregg Shorthand (4)
234 Gregg Shorthand Transcription (2)
235 Word Processing Transcription (3)
240 Word/Information Processing I: Concepts & Applications (3)
333 Business Correspondence (3)
335 Records Management & Micrographics (3)
360 Interpersonal Business Relations (3)

ELECTIVES (16 Q.H.)

Students may select courses totaling 16 Quarter Hours.

Two-Year

GENERAL ASSOCIATE IN ARTS CURRICULUM
96 Q.H.

All candidates for the General Associate in Arts must complete 8-16 Q.H. credits of basic requirements consisting of the following courses: 110, 115 English (8), Oral Communication (0-4), Mathematics (0-4).

In addition to these basic requirements, you are required to complete five study areas which consist of Humanities (12 Q.H.); Natural Sciences (12 Q.H.); Social Sciences (12 Q.H.); A Different Culture (8 Q.H.); and Contemporary Living (8 Q.H.). In addition to the General Education requirements select electives to complete the 96 credits required for the degree.

ASSOCIATE IN ARTS CRIMINAL JUSTICE
96 Q.H. (TWO-YEAR DEGREE)

Required Core Courses (28 Q.H.)

PAISci 310 – Criminal Justice System (4)
Soc 405 – Models of Intervention (4)
Soc 414 – Juvenile Delinquency (4)
Soc 415 – Criminology (4)
Soc 416 – Corrections (4)
Soc 417 – Operations and Procedures in Law Enforcement (4)
Soc 418 – Criminal Law & Procedure (4)

GENERAL EDUCATION REQUIREMENTS (68 Q.H.)

I. Basic Skills

A. Written Communication (8-12 Q.H.)
   English 108 (of low English admission score)
   English 110
   English 115

B. Oral Communications (0-4 Q.H.)
   CTA 118 or Exam

C. Mathematics (0-4 Q.H.)
   Math 113 or H.S. equivalence ("C" or better) or Exam

II. Humanities (12 Q.H.; 2 Departmental Electives (12 Q.H.)

III. Natural Sciences (12 Q.H.; 2 Departmental; one lab course) Elective (12 Q.H.)

III. Environmental Science (12 Q.H.; 2 Departmental; one lab course) Elective (12 Q.H.)
IV. Social Science (12 Q.H.; 2 Departments)
   Sociology 150 — Human Society (4)
   Political Science 220 — American National Government (4)
   Political Science 221 — State & Local Government (4, Recommended) or Elective (4)

V. Different Culture (8 Q.H.)
   Elective (8 Q.H.)

VI. Contemporary Living (8 Q.H.)
   A. Physical Education (24 credits)
      HPER 113 - Personal Fitness (1, Recommended)
      Electives (1-3)
   B. Contemporary Living (4-6 Q.H)
      HPER 214 — Standard First Aid and Personal Safety (3, Recommended)
      Electives (1-5)

NOTE: All students should consult with an advisor in the Department of Sociology/Social Work when selecting courses to fulfill General Education, or in the event that any other questions arise concerning their program of study.

ASSOCIATE IN ARTS CURRICULUM COOPERATIVE AGREEMENT

WITH THE MEDICAL INSTITUTE OF MINNESOTA

Winona State University and the Medical Institute of Minnesota (MIM), Minneapolis, Minnesota have entered into a cooperative agreement whereby students who have earned a graduate certificate in any of the three programs at MIM (Medical Technician, Medical Assistant and Veterinary Medical Technician) may be granted an Associate in Arts degree from WSU upon completion of the degree requirements at the university.

Under the cooperative program, a maximum of 44 Q.H. credit will be transferred from MIM. These credits will be entered on the official college transcript after the additional credit hours required for a degree have been earned at the university.

Students interested in the cooperative program must meet the entrance requirements of both WSU and MIM. Enrollment in the program at WSU is not automatic. Students must consult with Dr. Dwight Anderson, Director of Allied Medical Sciences, or Dr. Derrell White, Head of the Department of Biology, before they will be formally accepted into the cooperative program.

Recommended curriculum for WSU-MIM co-op students in the Medical Technician, Medical Assistant and Veterinary Medical Technician programs. Under this curriculum, Medical Technician graduates will qualify for CLA (ASCP) certification examination and Medical Assistant graduates will qualify for CMA certification examination:

- English 110, 115 (8)
- Oral Communication (0-4)
- Mathematics (0-4)

**General Education**

- Humanities (12)
- Social Sciences (12)
- Natural Sciences* (16)
- Different Culture (8)
- Contemporary Living (8)

Credits from MIM (44)
Total (100-108)

Recommended curriculum for WSU-MIM co-op students in the Medical Technician program who wish to qualify to write the MLT (ASCP) Board of Registry Examination: English 110, 115 (8)

- Oral Communications (0-4)
- Mathematics (0-4)

**General Education**

- Humanities (12)
- Social Sciences (12)
- Natural Sciences (44)
- Different Culture (8)
- Contemporary Living (8)
- Credits from MIM (44)
Total (111-119)

*Credits in the Natural Science area are waived by the nature of the credits earned at MIM.

- Humanities Courses (5)
- Social Science (other than Economics and to include at least one History course) (8)

**ADDITIONAL REQUIREMENTS**

- Additional courses to meet requirements of specific curriculum. (See Advisor)

**PRE-AGRICULTURAL EDUCATION**

96 Q.H.

Gildemeister Hall, Room 137 / 457-5352
Dr. Archie Beigley, Advisor

**REQUIRED COURSES (96 Q.H.)**

This two-year program has been planned especially for the student planning to enter the Agricultural Education program at the University of Minnesota. All students are encouraged to consult with the advisor in planning their program. Students who complete the courses listed below will satisfy the requirements for an Associate in Science degree, if the physical education courses are taken.

- English 110, 115 (8)
- Oral Communication (0-4)
- Mathematics (0-4)

**General Education**

- Humanities (12)
- Social Sciences (12)
- Natural Sciences (10)
- Different Culture (8)
- Contemporary Living (8)
- Credits from MIM (44)
Total (111-119)

- Credits in the Natural Science area are waived by the nature of the credits earned at MIM.
- Humanities Courses (5)
- Social Science (other than Economics and to include at least one History course) (8)

**ADDITIONAL REQUIREMENTS**

- Additional courses to meet requirements of specific curriculum. (See Advisor)

**PRE-AGRICULTURAL EDUCATION**

96 Q.H.

Gildemeister Hall, Room 137 / 457-5352
Dr. Archie Beigley, Advisor

**REQUIRED COURSES (96 Q.H.)**

- English 110, 115 (8)
- Oral Communication (0-4)
- Mathematics (0-4)

**General Education**

- Humanities (12)
- Social Sciences (12)
- Natural Sciences (44)
- Different Culture (8)
- Contemporary Living (8)
- Credits from MIM (44)
Total (111-119)

- Credits in the Natural Science area are waived by the nature of the credits earned at MIM.
- Humanities Courses (5)
- Social Science (other than Economics and to include at least one History course) (8)

**ADDITIONAL REQUIREMENTS**

- Additional courses to meet requirements of specific curriculum. (See Advisor)

**SPECIAL ACADEMIC PROGRAMS / 119**

**ASSOCIATE IN SCIENCE**

**BUSINESS EDUCATION & OFFICE ADMINISTRATION EXECUTIVE SECRETARIAL PROGRAM—96 Q.H.**

**REQUIRED GENERAL EDUCATION COURSES (33 Q.H.)**

- 102 Economics (4) OR
- 110 Intro to Business (4) OR
- 201 Principles of Economics I (4)
- 110 freshmen Composition I (4)
- 115 Freshmen Composition II (4)
- 191 CTA Introduction to Speech Communication (4)
- 204 HPER Personal & Community Health (3)
- Math OR Natural Science (4)
- Social Science (8)
- Physical Education Activity Courses (2)

**REQUIRED SECRETARIAL AND BUSINESS COURSES (47-48 Q.H.)**

Students who have not completed beginning typewriting or shorthand courses (or equivalent) should enroll in the beginning courses.

- 105 Secretarial Accounting (3) OR
- 201 Principles of Accounting I (4)
- 202 Intermediate Typewriting (3)
- 203 Advanced Typewriting (3)
- 206 Administrative Office Procedures (3)
- 210 Business Machines (2)
- 223 Intermediate Gregg Shorthand II (4)
- 224 Advanced Gregg Shorthand (4)
- 225 Gregg Shorthand Transcription (2)
- 235 Word Processing Transcription (3)
- 320 Business Data Processing (4)
- 333 Business Correspondence (3)
- 334 Business Organization & Office Management I (4)
- 335 Records Management & Micrographics (3)
- 340 Word/Information Processing II: Advanced Text Editing (3)
- 360 Interpersonal Business Relations (3)

**ELECTIVES (15-16 Q.H.)**

Students may select courses totaling 15-16 quarter hours.
Pre-Professional Sequences

Pre-professional programs are not degree programs (e.g. major or minor) at Winona State University. They are programs which are preparatory for a degree at another college or university.

PRE-AGRICULTURE
96 Q.H.

Pasteur Hall, Room 215 / 457-5278
Dr. James Opsahl, Advisor

REQUIRED COURSES (70-72 Q.H.)
110, 115 English (8)
220 CTA (4)
201, 202, 203 Economics (12)
212, 213 General Inorganic Chemistry (10)
215, 216 Math (or 220), 225 Math (8-10)
207, 210 and 208 or 211 Biology (14)

ADDITIONAL REQUIREMENTS
(24-26 Q.H.)
Additional courses to meet requirements of specific curriculum. (See Advisor).

PRE-DENTAL HYGIENE
135 Q.H.

Pasteur Hall, Room 215 / 457-5275
Dr. Ronald L. Zwonitzer, Advisor

Program designed to meet preliminary or basic sciences of the University of Minnesota, University of Minnesota-Duluth, Manhattan State University, and Normandale Community College. 1 year minimum.

PRE-DENTISTRY
135 Q.H.

Pasteur Hall, Room 215 / 457-5275
Dr. Ronald L. Zwonitzer, Advisor

REQUIRED COURSES
This 3-year program with a minimum of 135 credits has been planned especially for the student planning to enter the School of Dentistry at the University of Minnesota; however, it also meets the minimum requirements of at least 90% of the U.S. Dental Schools. Students planning to enter Dental Schools other than the U of M should consult those catalogs. All pre-dent students are encouraged to consult with the advisor to help plan their program.

109 Music (4)
109, 228 Art (8)
110, 115, 439 or E328 at St. Mary’s College English (12)
118 Speech (4)
201, 202, 203 Physics (12)
212, 213, 214 Chemistry (15)
215, 216 Math or 220 (5-8)
210, 211 Zoology (9)
207, 208 Botany (9)
290 Biology (5)
350, 351 Organic Chemistry (10)
210, 250 Psychology (8)

Elective Courses should be chosen to give the student as broad and liberal an education as possible within the limits of time available. Electives from the following ideas are suggested: Sculpturing, Genetics, Analytical Chemistry, Accounting, Anthropology, Business, Economics, History, Sociology, and Literature. 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. The profile of the 1981 Dental School freshman shows 54% have Biology majors, with an overall GPA of 3.19, a science GPA of 3.09, and DAT scores of 4.74 for academics and 5.06 for PAT.

PRE-ENGINEERING

GENERAL (ALL ENGINEERING EXCEPT CHEMICAL)
93-103 Q.H.

Pasteur Hall, Room 114 / 457-5261
Dr. Richard Shields, Advisor

Students without excellent facility in higher algebra are advised to enroll in Math 220 before Math 225. Students must enroll in the physics sequence in the Spring quarter of their freshman year.

RECOMMENDED COURSES (63 Q.H.)
110, 115 English (8)
225, 226, 227 Analytic Geometry and Calculus (15)
330 Differential Equations (4)
221, 222, 223 College Physics I, II, III (15)
225 Statics (4)
345 Thermodynamics (4)
350 Mechanics (4)
212 General Inorganic Chemistry (5)
231 Intro to FORTRAN (4)

TECHNICAL ELECTIVES (15-20 Q.H.)
Most fields of engineering recommend:
329 Calculus of Functions of Several Variables (5)
318 Probability and Statistics (4)
328 Electrical Circuits (5)
213 General Inorganic Chemistry (5)
Some fields of engineering recommend:
330 Electronics (5) OR
340 Modern Physics (5)
Consult advisor for specific recommendations.

LIBERAL EDUCATION ELECTIVES
(15-20 Q.H.)
Consult Advisor for specific recommendations.

PRE-CHEMICAL ENGINEERING

Pasteur Hall, Room 312G / 457-5297
Dr. Fred Foss, Advisor

Students should begin chemistry and mathematics sequences their first quarter; students without an excellent facility in higher algebra should start with Math 220 rather than 225.

RECOMMENDED COURSES (94 Q.H.)
110, 115 English (8)
212, 213, 214 Chemistry (15)
225, 226, 227 Calculus (15)
221, 222, 223 Physics (15)
425 Analytical Chemistry (5)
350, 351, 352 Organic Chemistry (15)
339 Calculus Functions of Several Variables (5)
330 Differential Equations (4)
104 OR 204 Conservation of the Environment (4)
201 Principles of Economics I (4)
232 Intro to PASCAL (4)

ELECTIVES
One course each from Art and Music.
For more information consult the pre-chemical engineering advisor.

PRE-FISHERY AND WILDLIFE
94-96 Q.H.

Pasteur Hall, Room 215 / 457-5273
Dr. Carol A. Jefferson, Advisor

This two-year program is designed to meet most requirements for junior year admission to majors in Fisheries and Wildlife at the University of Minnesota. Students planning to enter other schools should consult those catalogs and the pre-fisheries and wildlife advisor.

REQUIRED COURSES (95-97 Q.H.)
110, 115 English (8)
261 Communications and Theatre Arts (4)
215, 216 (or 220); 222 (or 225) Mathematics (10-12)
207, 208, 210, 211, 290, 312 Biology (27)
212, 213 Chemistry (10)
201, 202, 203 Physics (12)
201, 202 Economics (8)
220, 221 Political Science (8)
History course (except Philosophy or History) (4)

PRE-FORESTRY
93-99 Q.H.

Pasteur Hall, Room 215 / 457-5273
Dr. Carol A. Jefferson, Advisor

The first year of this two-year curriculum prepares students for transfer into a variety of forestry programs. However, second year coursework varies widely between programs and institutions. The sophomore year program below is designed specifically for students planning to enter the Forest Resource program at the University of Minnesota School of Forestry. Students who intend to enter other programs should
consult with the pre-forestry advisor and forestry school catalogs when planning their second year courses.

Freshman Year (all Pre-Forestry students)  
**REQUIRED COURSES (47-53 Q.H.)**  
201, 202, Economics (8)  
206, 231 or 232 Mathematics (8)  
211, 212, Communication and Theatre Arts (4)  
332 Industrial Education (2)  
Itasca Field Session (6) **  
History course (4)  
Electives in General Education (16)  
** Required 3/4 week summer field course at University of Minnesota's Lake Itasca Biological Station.

Sophomore Year (46 Q.H.)  
201, 202, Economics (8)  
206, 231 or 232 Mathematics (8)  
211, Communication and Theatre Arts (4)  
332 Industrial Education (2)  
Itasca Field Session (6) **  
History course (4)  
Electives in General Education (16)  
** Required 3/4 week summer field course at University of Minnesota's Lake Itasca Biological Station.

PRE-LAW  
Minne Hall, Room 212 / 457-5402  
Mr. Roderick Henry, Advisor  
University law schools require completion of a B.A. degree or its equivalent before entering law school. It is therefore suggested that interested students follow a program which will provide breadth of knowledge with in-depth study of areas of special interest to the student. It is also suggested that electives be taken in areas not too closely related to a major field of study. Many pre-Law students major in Economics, Business, English, History, or Political Science. 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, Law School Admission tests, Law School Data Assembly Services, and Law Schools in the United States.

PRE-MEDICINE  
135 Q.H.  
Pasteur Hall, Room 215 / 457-5275  
Dr. Ronald L. Zwonitzer, Advisor  
With few exceptions admission into a medical school requires a Bachelor's Degree. Each pre-med student should, therefore, choose an area of interest in which to major. In 1982 56% of the Premed students majored in the biological sciences. Below are the minimum requirements for admission to the University of Minnesota Medical School, Mayo School of Medicine, and the 2-year program at Duluth, Minnesota as well as the majority of medical schools in the U.S. Students should consult catalogs of the medical schools of their choice for more specific requirements. The Medical College Admissions Test (MCAT) should be taken no later than October prior to the planned entrance date into medical school.

**REQUIRED COURSES**  
English, Chemistry, and one Biology Sequence must be taken during the Freshman year.  
110, 115, 439 or E328 at St. Mary's College English (12)  
201, 202, 203 Physics (12)  
207, 208 Botany (9)  
210, 211 Zoology (9)  
212, 213, 214 Chemistry (15)  
350, 351, 352 Organic Chemistry (15)  
425G Analytical Chemistry (5)  
215, 216, (OR 220) 225, 226, Math (15-18)  

**OTHER COURSES TO COMPLETE REQUIRED CREDITS**  
Consult with your major advisor for those courses necessary for completion of the B.S. or B.A.

PRE-MORTUARY SCIENCE  
Pasteur Hall, Room 215E / 457-5275  
Dr. Ronald L. Zwonitzer, Advisor  
Course of study to be designed according to the graduate school chosen by the student. Two years minimum.

PRE-OPTOMETRY  
Pasteur Hall, Room 215E / 457-5275  
Dr. Ronald L. Zwonitzer, Advisor  
Course of study to be designed according to the graduate school chosen by the student. Three years minimum.

PRE-PHARMACY  
Pasteur Hall, Room 312E / 457-5295  
Dr. David J. Rislove, Advisor  
**REQUIRED COURSES (81-84 Q.H.)**  
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 210, 211 (9)  
Chemistry 212, 213, 214, 350, 351, 352 (30)  
English 110, 115 (8)  
Economics 102 or 201 or 202 (4)  
Mathematics 225, 226 (10)  
Physics 201, 202, 203 (12) OR 221, 222, 223 (15)  
Psychology 210 (4)  
Sociology 150 (4)  
Additional elective courses must be chosen from the social sciences and the humanities. See advisor for recommendations on additional courses in the natural sciences. Students not meeting the prerequisites for Mathematics 225 will have to take Math 215 and 216 or Math 220 (5-8 Q.H.). Students exempted from English 110 and 115 may elect higher level English courses or general electives. See advisor for PCAT and pharmacy career information. The PCAT must be taken no later than the February prior to the fall entrance into pharmacy schools.

PRE-PROFESSIONAL SEQUENCE / 121

PRE-PHARMACY  
Pasteur Hall, Room 215E / 457-5275  
Dr. Ronald L. Zwonitzer  
Course of study to be designed according to the graduate school chosen by the student. 2 years minimum.

PRE-PROFESSIONAL SEQUENCE / 121

PRE-VETERINARY MEDICINE  
114 Q.H.  
Pasteur Hall, Room 215 / 457-5273  
Dr. James Opsahl, Advisor  
Pre-Veterinary Medicine students are advised to complete at least three years of college work prior to their planned entry into the University of Minnesota College of Veterinary Medicine, as few applicants with less than this background are accepted. It is recommended that courses taken during this three-year period be ones that could be applied toward a bachelor's degree, preferably in biology or chemistry.

**REQUIRED COURSES (106-109 Q.H.)**  
110, 115 English (8)  
220 CTA (4)  
201 OR 202 Economics (4)  
201, 202, 203 Physics (12)  
210, 211, 205, 310 Biology (17)  
212, 213, 214, 350, 351, 400, 401, 425 Chemistry (40)  
215, 216 Math (OR 220) (5-8)  
Social Science or Philosophy (other than Economics) (4)  
Humanities (except Philosophy) (8)  
Electives (see advisor) (6-9)
Post-Baccalaureate Program

FIFTH YEAR PROGRAM

The Fifth Year Program in Teacher Education is basically to strengthen the preparation of classroom teachers who do not plan to qualify for a Master's degree. It emphasizes areas in which the individual is teaching and therefore areas in which he/she already has some competence. Persons who have less than an undergraduate minor may not choose that field for their fifth year major. The Fifth Year Program is available in nearly all teaching fields.

The Fifth Year Program is planned with the students to meet their needs and interests in regard to their major, minor, professional education and supporting fields.

ADMISSION

1. Students seeking admission to the Fifth Year Program must complete an application form and submit it to the Office of Graduate Studies. The application form may be obtained from that office in Somsen Hall, Room 228.
2. Students who plan to enter the Fifth Year Program must meet with the director prior to enrollment in the program.
3. Students must hold, or be eligible for, a teacher's certificate valid in Minnesota or in the state where they teach.
4. Students who hold a bachelor's degree in education from a college or university accredited by the appropriate regional or national accrediting agency, or by a college recognized by the state university of the state in which the college or university is located. Students who hold a bachelor's degree from an unaccredited institution will be admitted to the Fifth Year Program after completing at least 15 quarter hours of creditable work.
5. Students must submit two (2) transcripts of all collegiate work to the Graduate Office prior to their first enrollment in the program.
6. Students must have at least one year of teaching experience prior to their admission to the program.

PLANNING THE PROGRAM

1. When students are admitted to the Fifth Year Program, an advisor will be appointed by the Director of the Fifth Year Program from the student's intended area of concentration.
2. Students must, in conference with their advisor, outline the courses they plan to take to complete the Fifth Year Program requirements. This will be done prior to enrollment in the program. The student may obtain the necessary program forms from the Office of Graduate Studies. The program forms must be prepared in triplicate. After the advisor has endorsed each of the three copies the advisor will forward them to the Office of Graduate Studies for processing and distribution. Any subsequent changes in student programs must have the prior approval of the advisor and the Director of the Fifth Year Program.

REQUIREMENTS

1. A minimum of 45 quarter hours of credit is required for graduation.
2. The student's curriculum is designed to provide for: (1) the opportunity for the student to explore new fields; (2) the opportunity to place emphasis upon continued growth in the areas he/she is teaching and those related to them; and (3) the opportunity for continued study of the fundamental problems in professional education. In keeping with this design, the curriculum shall contain the following specific requirements;
   a. Students must earn a minimum of 15 quarter hours in courses related to the area or areas in which they are teaching. As used here, "area" is not necessarily synonymous with a collegiate major or minor, nor is it necessarily restricted to a subject closely related to the major or minor.
   b. The remaining 30 quarter hours are free electives. Students will select courses in keeping with each of the aspects of the overall design with approval of their advisor and/or in keeping with the approved program submitted to the Director of the Fifth Year Program.
   c. Only courses numbered 300 and above shall be applicable on the Fifth Year Program.
   d. Students will normally earn a minimum of 15 hours at the graduate level ("G" courses and 500 level courses).
3. A maximum of 15 credits earned at Winona State University can be accepted at the time of enrollment in the program provided that the work is applicable to the overall program. In no case, however, will the number of credits earned prior to the enrollment, including transfer credits and credits earned at Winona State University, exceed 15.
4. There are no required courses in the Fifth Year Program.
5. The student must earn a grade of "C" or more in a course if the credits of that course are to be counted toward the minimum of 45 quarter hours of credit.
6. A minimum honor point ratio of 2.5 ("C" = 2) is required for completion of the Fifth Year Program, including transferred credits.
7. All credits used in completing the Fifth Year Program must be earned within ten years of the beginning of the program.
8. A thesis or research paper is not required. A student may elect to write a paper for credit.

TRANSFER CREDIT

1. Credits transferable to the Fifth Year Program: A maximum of 15 quarter hours of work may be accepted in transfer from any one of a combination of the following sources: (a) credits earned at a college after the bachelor's degree has been granted by the college but prior to admission to the Fifth Year Program; (b) transfer credits from other accredited colleges or universities taken since the bachelor's degree has been granted.
2. Courses in which the student has earned a grade of less than "C" will not be accepted.
3. Credit earned in courses taken as part of the Master's Degree Program may be transferred to the Fifth Year Program provided that the work is applicable to the student's overall program.
4. Credits earned in courses taken as part of the Fifth Year Program may be transferred to a Master's Degree Program provided that they meet all graduate program requirements.

COMPLETION OF PROGRAM

Upon successful completion of a Fifth Year Program, the student will be issued a transcript reflecting the completion of the program. The student's completion of the Fifth Year Program will be duly recognized at regular graduation ceremonies.
Appendixes

One-Time Course Offerings 1981-1982 Academic Year

ART

242 Lithography - 4 O.H.
An intensive lithography workshop introducing all lithography techniques. The course will also involve the students with developing a personal statement and style in Lithography. Offered First Summer Session 1981.

350 Western European Art History Tour - 4 O.H.
A guided tour of museums and architecture that are historically significant to the study of Art History. The countries to be visited will include Spain, France, Netherlands, Germany and Scandinavia. Offered First Summer Session 1981.

351 Contemporary Western European Art Tour - 4 O.H.
A guided tour of Europe with daily visits to museums, galleries and artists' studios. The countries to be visited include Spain, France, Netherlands, Germany and Scandinavia. Offered First Summer Session 1981.

COMMUNICATION & THEATRE ARTS

303 Communication and Public Relations for the Law/Peace Officer and Citizen - 4 O.H.
This course will involve students, citizens, and Law Enforcement Officers in exercises and activities to increase awareness of their communication abilities and needs and involve them in interaction to enhance relations and communication. Students, citizens and Law Officers are encouraged to enroll. Offered Fall 1981.

ENGLISH

295 The English Theatre - 4 O.H.
An introduction based upon a visit to London which will include visits to theatres, guided visits to museums and libraries, and lectures. Offered First Summer Session 1981.

596 Great River Writing Project - 8 O.H.
Twenty-one experienced, practicing, S.E. Minnesota and western Wisconsin teachers from levels K-13 across the curriculum will study current research in the teaching of writing, do a series of writing and revising assignments, demonstrate their own successful techniques for teaching writing, and prepare in-service presentations for their own and neighboring districts. Offered First Summer Session 1981.

HEALTH, PHYSICAL EDUCATION & RECREATION

130 Introduction to Therapeutic Dance - 1 O.H.
Course will provide the student with an overview of the history, theory, and practical application of dance movement as a medium for expression and healing. Focus will be placed on the development of the student's own body awareness and the relationship of this awareness to methods of working with persons with physical and/or mental disabilities. Offered Winter 1982.

MATHMATICS & COMPUTER SCIENCE

530 "Organic" Mathematics in the Classroom - 1-2 O.H.
"Organic" mathematics is a seminar under the direction of Dr. T. C. O'Brien and Richard Tahta. Offered Summer 1981.

PHOTO, FILM & TV

100 Amateur Photography - 4 O.H.
This course is designed for students with a limited background or no prior experience in black and white photography. Camera, films, composition, film processing, printing, making, trimming and mounting are covered. Offered Fall 1981.

SOCIOLOGY

487G Sociology of Childhood - 4 O.H.

ONE-TIME COURSE OFFERINGS 1982-83 ACADEMIC YEAR (headline)

ART

229 Photo Screen Printing - 4 O.H.
Learn to construct screens, to print and color register, and then to make stencil screens from negatives, positives, found objects, photos, drawings, and experiments on acetate. Offered First Summer Session 1982.

356 Renaissance Art History - 4 O.H.
This course will trace the evolution of Italian Renaissance painting, sculpture and architecture from Giotto through Mannerism. Offered Spring 1983.

358 Art of the Nineteenth Century - 4 O.H.
A study of the major styles and movements in Europe and the United States in the Nineteenth Century including Neoclassicism, Romanticism, Realism, Impressionism, Post-Impressionism, Symbolism and Fin de Siecle. Offered Winter 1983.

359 Eastern Museum Trip - 2 O.H.
An escorted trip to major art museums in Washington, D.C. and New York City. Some of the museums will include the National Gallery of Art, the Hirshhorn Museum and the Phillips Collection in Washington, D.C. In New York the museums will include the Metropolitan Museum of Art, Guggenheim Museum, the Whitney Museum and the Museum of Modern Art. Offered Winter 1983.

360 Batik - 3 O.H.
Batik will be approached as a painting experience by using brushes to apply wax over subsequent layers of dyed cloth. Students will try a formal and an informal content series along with color studies. Offered Spring 1983.

361 Sculpture: Wood and Stone Carving - 4 O.H.
Carving in wood and stone is going to be stressed. Instruction will be given in various means of carving. Lectures with slides will be used to instruct the student in the history and development of carved sculpture. Offered Fall 1982.

362 Survey of American Art - 4 O.H.
A survey of the development of painting and sculpture from pre-Revolutionary times to the early twentieth century. Offered Winter 1983.

403G Visual Arts Learning Procedures for the Elementary Classroom - 3 O.H.
Learning procedures adapted to visual arts materials and processes as used in the elementary classroom; with emphasis on 1) motivational means, 2) relating art learning to other cultures, 3) extending students' perceptual awareness as new processes are introduced, 4) group effort toward innovative outcomes, 5) culminating experiences and over-all evaluation of outcomes. Offered Fall 1982.

CHEMISTRY

408 Chemical Separations - 4 O.H.
Addresses the problems encountered in separating chemical species on both the analytical and production scale. Students will be introduced to a variety of separation techniques, the theoretical principles upon which the separations are based, and practical information concerning separation processes. Offered Spring 1983.

COMMUNICATION & THEATRE ARTS

270 Workshop in the Communication of Confrontation, Negotiation and Arbitration - 2 O.H.
The course is an analysis of speech communi-
Standards for Student Citizenship

The university expects you to display honesty and integrity in all phases of your university life. Complete and accurate information is required on admission and personnel records.

Persons who violate university regulations may have disciplinary sanctions imposed by the university including suspension or expulsion under disciplinary policies and procedures of the university and/or may be liable to legal prosecution. Other members of the university community and guests or visitors to the university are subject to university rules and regulations. Violations may result in legal prosecution. Penalties assessed as a result of the violation of any of these regulations shall be imposed according to due process.

The following proscriptions, which were approved by the Student Affairs Committee in December, 1983, and reviewed yearly, are not intended in any way to discourage or restrict freedom of speech, freedom of criticism, expression of grievances, petition for redress of wrongs, real or fancied, so long as rights of freedom of speech and assembly are exercised in a lawful and peaceful manner.

1. Obstruction or disruption of teaching, research, administration, disciplinary procedures, or other university activities, including the university's public service functions or of other authorized activities on state owned or controlled property.

2. Obstruction of the free flow of traffic both pedestrian and vehicular on state owned or controlled property.

3. Physical abuse or detention of any person on state owned or controlled property or at any university sponsored or supervised functions, or conduct which endangers the health or safety of any person.

4. Theft of or damage to property of the state or of property of a member of the university community or of a visitor to the university.

5. Unauthorized entry to or use of university facilities, including buildings, grounds and equipment.

6. Violation of university established policies or regulations, including regulations in publications pertaining to student organizations, students, faculty administrative staff, non-academic employees and visitors' conduct, the use of university facilities, or procedures concerning reporting sources, professional journals, library resources and other research materials used in mass communications. Offered Fall 1982.

311 Mass Communication Field Study - 3 Q.H.

Field trip to New Paltz, New York, with a visit to New York City. Offered Second Summer Session 1982.

340 Advertising Campaigns and Strategies - 4 Q.H.

Functions and concepts in advertising with emphasis on techniques to bridge communication barriers. Offered Spring 1983.

418 Precision Journalism - 4 Q.H.

Advanced information-gathering tools used in journalism, public relations, advertising, including surveys, field experiments, records research, case studies; also reporter participation, docudrama, impressionistic writing. Offered Fall 1982.

431G Geochemistry of Sedimentary Environments - 5 Q.H.

This course is an introduction to the application of chemical principles in the solution of geologic problems involving aqueous environments. Topics to be covered include: introductions to principles of thermodynamics and solution chemistry; applications of these principles to the study of the formation of sedimentary minerals; oxidation-reduction in sedimentary environments; carbonates; sediments; clay minerals and aqueous chemistry; isotope geology and sediments; trace elements in sediments. Offered Winter/Spring 1983.

115 Information Skills for Mass Communication - 1 Q.H.

The course seeks to introduce students to

116 Tap Dance - 1 Q.H.

An introduction to the basic forms of tap dance in America from vaudeville to current cinema and television styles. Soft shoe, buck and wing, and jazz forms included. Offered Spring 1983.

131 Introduction to Therapeutic Dance II - 2 Q.H.

Review of HPER 130 which was taught last winter with a more in-depth study of dance movement as a medium for expression and healing. Focus will be placed on the development of the student's own body awareness and the relationship of this awareness to methods of working with persons with physical or mental disabilities. Offered Winter 1983.

154 Fencing II - 1 Q.H.

This course is an extension of Fencing I and will include the following exercises and drills: Footwork, Handwork, Drills, Discussion of Strategies, Bouts, Outside Work Assignments. Offered Winter 1983.

345 Advanced First Aid and Emergency Care - 2 Q.H.

This class is approved by the Police Officers Standards and Training Board and meets the pre-license requirements and includes: basic water safety, basic rescue, exposure to radiation, emergency childbirth, emergency rescue and transfer, extrication, the disturbed and unruly patient, dealing with children, diagnostic signs and their interpretation. Offered Spring 1983.
identification with intent to defraud.

13. Disorderly conduct, breach of the peace, and aiding, abetting, or procuring another to breach the peace on state owned or controlled property or at university sponsored or supervised functions.

14. Solicitation, including the distribution of advertisements and samples, on university premises without prior authorization by the appropriate university official(s).

15. No pets are allowed in academic buildings at any time, except with approval by the Vice President for Academic Affairs. Permission in non-academic buildings must come from the Vice President for Student Affairs.

The following regulations are in accord with the above proscriptions:

1. In accordance with Minnesota statutes and university rules, no person may possess or use alcoholic beverages on university property.

2. Minnesota statutes and university rules prohibit gambling and the selling of chances.

3. Students are expected to meet their financial obligations to the university promptly and fully. Failure to do so may result in the de­ferment of registration procedures until all financial obligations are satisfied.

4. The university disapproves of all forms of hazing.

5. Tampering with fire equipment or setting off a false alarm is a felony under state law and will result in disciplinary action.

The president of the university delegates the responsibility for student disciplinary counseling to the Office of Student Affairs and to the Student Judicial Committee. (The president of the Student Senate or his/her designee attends these meetings ex officio.)

When charged with a violation(s) of university regulations or state statutes, students will meet with a university official or request a hearing before the Student Judicial Committee.

It is the function of the Student Judicial Committee to recommend to the Vice President for Student Affairs disciplinary sanctions and the citizenship status of the student. Generally, the disciplinary sanctions may include one of the following procedures:

Acquittal (Administrative or Committee Recommendation) may find in favor of the student or feel that the conduct does not warrant further action.

Warning (Administrative or Committee Recommendation) consists of counseling. An interview will be conducted by a member of the Student Affairs Office staff. The student will remain in "good standing," but to disregard this warning could result in further action.

Probation (Administrative or Committee Recommendation) is a status imposed on a student because of sub-standard conduct on campus. While this status exists, the student is retained at the university subject to periodic re-evaluation. If the probationary status was imposed by an administrative officer of the university, the student has the right to appeal this decision to the Student Judicial Committee. A statement reading "see disciplinary record" may be attached to the student's permanent record. The attached notation will be removed at the time of graduation.

Suspension (Committee Recommendation) is an involuntary separation of the student from the university; a time limit is established and standard withdrawal procedures will be followed. All rights and privileges of student status are withdrawn. Temporary notation of suspension will appear on the student's record, subject to removal at the time of graduation.

Expulsion (Committee Recommendation) is an involuntary separation of the student from the university; separation is permanent. Standard withdrawal procedures will be followed. This action becomes a permanent part of the student's record.

NOTE: Students may appeal with or without counsel in any action affecting their status by filing a request in writing with the Student Judicial Committee within ten days. Any student suspended from Winona State University for improper conduct for a period longer than one year or expelled may appeal to the State University Board at the first regular meeting thereafter held subsequent to the time such student is suspended or expelled, by giving the president of the university ten days notice in writing of intention to appeal. Upon hearing the final appeal, suspension or expulsion may be confirmed or overruled by action of the State University Board.

STUDENT GRIEVANCE PROCEDURE

1. PURPOSE: The purpose of this administrative procedure is to describe the method of processing a student grievance. This procedure does not apply to disputes between students and does not substitute for procedural due process in student disciplinary cases nor the system-wide procedures as stated in the collective bargaining agreements between the State University System and the various exclusive bargaining agents representing employees of Winona State University. Authoritative reference is State University Board Internal Rule IR302.

2. DEFINITIONS:

a. Grievance — "Grievance" means a dispute or disagreement between a student and an employee of the university.

b. Academic Calendar — "Academic Calendar" delineates the academic schedule of the university as beginning on the first day of fall quarter and ending on the last day of the second summer session.

c. Academic Calendar Day — "Academic Calendar Day" is a day when the university is in session during the academic year as indicated on the academic calendar.

3. PROCEDURE:

STEP I

Whenever any student or group of students has a grievance, he/she or they shall first meet on an informal basis with the faculty or staff member directly involved in the dispute in an attempt to resolve the grievance.

STEP II

Whenever any student or group of students has a grievance which remains unresolved after consultation with the faculty or staff member directly involved, they shall file a written account of their grievance with the appropriate academic dean in cases where the dispute involves teaching faculty, or the appropriate supervisor in cases involving other university employees. The notification shall contain a concise statement indicating the intention of the party to proceed with the grievance, an outline of the grievance, and the relief requested. Within five (5) academic calendar days of receiving the written grievance, in cases of disputes with a teacher, there shall be a meeting of the student(s), the faculty member directly involved, the department chairperson, and the appropriate dean. In cases of disputes with other employees, the student, the staff member directly involved, and the supervisor shall meet.

STEP III

If the grievance is not resolved at the Step II meeting, the Investigative Committee shall be notified. Proceedings shall commence within ten (10) academic calendar days after the Step II meeting. The Investigative Committee shall consist of at least six (6) full-time students, none of whom are on academic or disciplinary probation. The Vice President for Student Affairs or his/her designee, the Vice President of Student Senate, and the appropriate University Vice President shall serve as ex officio, non-voting members.

STEP IV

The Investigative Committee shall make a recommendation in writing within seven (7) academic calendar days of the date of the hearing to the University President for his/her consideration and action. The University President will notify both parties of his/her decision within seven (7) academic calendar days of receipt of the recommendation. The President's decision shall be final.
Administration

Office of the President

Thomas F. Stark, President
James Spear, Executive Assistant to the President
Robert A. DuFresne, Distinguished Service Professor
Gary W. Janikowski, Director, Personnel Management

John Burros, Director, Facilities Management
Jerome Varner, College Management Officer
Lester Larson, Plant Operations Superintendent
Richard Schaber, Bookstore Manager

Office of Vice President for Academic Affairs

Helen Popovich, Vice President for Academic Affairs
Susan J. Day, Assistant Vice President for Academic Affairs
Ronald Butterfield, Registrar
David Forsythe, Director of Computer Services
Edward T. Jacobsen, Dean of Learning Resources
Rosemary Langston, Dean of Nursing
Jonathan Lawson, Dean of Liberal Arts
Dennis A. Tanner, Dean of Business & Industry
Dan L. Wilson, Dean of Natural & Applied Sciences/Graduate Studies

John Kane, Vice President for Student Affairs
Calvin Winbush, Administrative Assistant to the Vice-President for Student Affairs
Paula Scheevel, Sheehan Residence Hall Director/Security Coordinator
Charles Bentley, Director of Counseling Center
John Ferden, Director of Housing
Warren Haesly, M.D., Director of Student Health Services
Robert Listzau, Director of Student Financial Aid
Terri Markos, Director of International Student Program
James Mootz, Director of Admissions/Veterans Affairs
Scott Peak, Assistant Director of Housing/Prentiss-Lucas Residence Hall Director
Gavin Strand, Director of Student Placement
Christina L. Thomas, Special Services Program Coordinator
Charles Zane, Director of Student Union/Student Activities

Office of Vice President for Administrative Affairs

Norman Decker, Vice President for Administrative Affairs

Office of Development and University Relations

Wendell Jahnke, Vice President for University Relations
Richard Davis, Director of Publications
Gary MacDonald, Photojournalist
John Michalowski, Print Shop Manager
Janet Sill, Director of News and Information/Affirmative Action Officer

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Bernard Brommer, 175 Aurora Ave, St. Paul 55103
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**Administration/Faculty**

*Brian Aldrich, Associate Professor, Sociology; A.B., Lewis and Clark College; M.S., Ph.D., University of Wisconsin—Madison; 1976—*

*Carls M. Anderson, Assistant Professor, Music; B.F.A., University of South Dakota; M.M.E., University of Colorado; 1963—*

*Dwight L. Anderson, Professor, Biology; B.A., Peru State College; M.A., Ph.D., University of South Dakota; Adjunct Staff of Metropolitan Medical Center, United Hospitals, St. Francis Hospital, Northwestern Hospital, 1966—*

*Janice Andrews, Assistant Professor, Sociology; B.A., Augsburg College; M.S.W., Washington University; 1981—*

*Thomas N. Bayer, Professor, Geology; B.A., Macalester College; M.S., Ph.D., University of Minnesota; 1964—*

*Richard C. Behnke, Professor, Health, Physical Education and Recreation; B.S., Winona State University; M.A., Northern Michigan University; P.E.D., Indiana University; 1989—*

*Ardie F. Beigley, Professor, Education; B.S., University of Wisconsin-Platteville; M.S., University of Wisconsin—Madison; Ed.D., University of Idaho; 1967—*

*Sandra Bennett, Associate Professor, English; Mass Communications; B.A., Brigham—Young University; M.A., Ph.D., University of Utah; 1976—*

*Charles Bentley, Director, Counseling Center; B.A., Macalester College; M.S., Winona State University; March 1968—*

*J. Lawrence Bergin, Assistant Professor, Business Administration & Economics; B.S., M.B.A., Northeastern University; 1981—*

*Audrey Berndt, Assistant Professor, Reference Librarian; B.A., Taylor University; M.A., University of Minnesota; 1969—*

*Jean Billman, Associate Professor, Education; B.A., Wittenberg University; Ed. M., Ed.D, Temple University; 1976—*

*Joel W. Bjorke, Assistant Professor, Business Administration & Economics; B.S., St. Cloud State University; J. D., William Mitchell; 1981—*

Norma J. Blankenfeld, Assistant Professor Nursing; B.S.N., M.S.N., University of Minnesota; January, 1979—

*Danning Bloom, Associate Professor, Physics; B.A., Illinois Wesleyan University; Ph.D., University of Colorado—Boulder; 1976—*

*George Bolon, Associate Professor, Physics; B.S., M.S., Oregon State University; Ph.D., University of Utah; 1968—*

Michael J. Bozonie, Associate Professor, Mathematics & Computer Science; B.A., M.S., University of Minnesota; 1982—

Darlene Bracegirdle, Associate Professor, Nursing; B.S.N., Carroll College; M.S.N., Marquette University; 1978—

*David Brott, Associate Professor, Communication and Theatre Arts; B.A., Calvin College; M.A., University of Iowa; Ph.D., University of California—Santa Barbara; 1970—*

Adolph Bremer, Instructor, Mass Communications (part-time); B.A. University of Iowa; M.S. Winona State University; 1956—

*Brian Briggs, Assistant Professor, Business Administration and Economics; B.S., University of Connecticut; M.S., Northwestern University; March, 1979—*

James Bromeland, Assistant Professor, Political Science; B.A., M.S., Mankato State University; 1971—

*Raymond J. Brooks, Assistant Professor, Photography; B.S. Valley City State College, M.S., Moorhead State University; 1966—*

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Roberta Bumann, Instructor, Nursing; B.S.N., University of Iowa; 1982—

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*Seymour Byman, Professor, History; B.A., University of Illinois; M.A., Roosevelt University; Ph.D., Northwestern University; 1970—*

Glenn A. Carlson, Associate Professor, Education; B.S., M.Ed., University of Wisconsin—Superior; 1967—

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*George M. Christensen, Professor, Counseling Center Psychology; B.S., M.A., Ph.D., University of Minnesota; 1955—*

Pauline Christensen, Assistant Professor Regional Campus, B.S., Iowa State University; M.S., Winona State University; 1970—72; 1973—

*Bruce Kent Cowgill, Professor, English; B.S., Midland College; M.A., Ph.D., University of Nebraska; 1970—*

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*David Dapkus, Associate Professor, Biology; B.S., M.Ed., University of Minnesota; 1974—*

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*Graduate Faculty Member*
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Russell F. Dennison, Instructor, Library; B.A., Central College; M.A., University of Wisconsin—Madison; December, 1980—

Norma Dison, Assistant Professor, Nursing; B.A., Valparaiso University; M.A., M.S.N., University of Minnesota; December, 1975—

John F. Donovan, Professor, Geology; B.Sc., St. Francis Xavier University; M.S., University of Iowa; Ph.D., Cornell University; 1968—

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Glenn F. Dukes, Professor, Industrial Education; B.S., M.S., Ph.D., Iowa State University; 1969—

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*Wayne J. Kirk, Professor, Education; B.S., University of Wisconsin–La Crosse; M.Ed., University of Illinois; Ph.D., University of Minnesota; 1964–

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*Rosemary Langston, Dean, Nursing, B.S.N., University of Buffalo; M.S.N., Texas Woman's University; Ph.D., University of Minnesota; 1978–

Marjorie Larson, Assistant Director, Small Business Development Consortium; A.B., Buena Vista College; B.S., Winona State University; 1982–

*Jonathan Lawson, Dean of Liberal Arts; B.F.A., M.A., Ph.D., Texas Christian University; August, 1981–

Thomas Lee, Assistant Professor, Business Administration & Economics; B.S., M.B.A., Mankato State University; Certified Public Accountant; 1978–74; 1976–

*Sang-Ho Lee, Assistant Professor, Business Administration & Economics; B.A., Seoul National University, Korea; M.A., Ph.D., University of Cincinnati; 1982–

*John W. Lewis, Professor, Psychology; B.A., University of Iowa; M.S., University of Cincinnati; 1963–

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Lee Loerch, Assistant Director of Admissions/Veterans Counselor; B.S., Winona State University; M.S., University of Wisconsin–La Crosse; 1978–

Orval A. Lund, Jr., Assistant Professor, English; B.A., Moorhead State University; M.A., University of Arizona; 1969–

Eugene Lundak, Instructor, Mathematics & Computer Science; B.S., M.S., Winona State University; 1981–

*Maurice J. McCauley, Associate Professor, Physics; B.S., University of Wisconsin–La Crosse; M.S., Arizona State University; 1964–

*Richardson McCluer, Associate Professor, Music; B.A., Westminster College; M.F.A., Princeton University; 1959–

*Willard Graham McKenzie, Assistant Professor, Art; B.S., M.F.A., University of Wisconsin–Madison; 1980–

*Leland McKinnon, Professor, Education; B.S., M.S., Winona State University; Ed.D., University of South Dakota; 1968–

*Gary H. MacDonald, Assistant Professor, Mass Communications and Photo-Journalist; B.F.A., M.S., Wayne State University; 1978; 1978–

*Terry Lynn Markus, Director, International Students (part-time); B.A., University of Wisconsin–Madison; M.S., University of Wisconsin–La Crosse; 1971–

*Dwight H. Marston, Associate Professor, Health, Physical Education and Recreation Director of Men's Athletics; B.A., University of Northern Iowa; M.A., University of Iowa; P.E. Director, Indiana University; Ed.D., Ball State University; 1966–

*Denis Martin, Associate Registrar/Assistant Director, Institutional Research; B.A., Eureka College; M.S., Illinois State University; 1978–

*John L. Martin, Associate Professor, Health, Physical Education and Recreation; B.S., M.S., University of Wisconsin–La Crosse; Ph.D., University of Utah; 1963–

*Wesley J. Matson, Professor, Education; B.S., University of Minnesota; M.A., University of California–Berkeley; Ed.D., Columbia University; January 1972–

*Ronald M. Mazur, Associate Professor, Foreign Languages; B.A., University of Detroit; M.A., Ph.D., University of Michigan; 1978–

*Michael Meeker, Assistant Professor, English; B.A., M.A., Northern Illinois University; Ph.D., University of Wisconsin–Madison; 1977–

*Lee Mendyk, Associate Professor, Music; B.M.E., Kearney State College; M.A., Ph.D., University of Northern Colorado; 1977–

*James Meyers, Associate Professor, Geology; B.A. Ph.D., Indiana University; 1980–

*Randalp W. Miller, Professor, Health, Physical Education and Recreation; B.P.E., University of Manitoba, Canada; M.A., Ph.D., University of Minnesota; 1974–

*Capt. Ronald Miller, Instructor, Military Science; B.A., Greensboro College, North Carolina; 1981–

*John W. Mishark, Jr., Professor, History; B.A., Wayne State University; M.A., University of California; Ph.D., University of Michigan; 1967–

*James Mootz, Director of Admissions/Veterans Affairs; B.S., M.Ed., Ed.D., University of North Dakota; 1968–

*Marjorie Moravec, Assistant Professor, Health, Physical Education and Recreation; B.S., St. Scholastica; M.A., University of Iowa; 1957–

*Frank P. Morello, Professor, Political Science; B.S., Fordham University; M.A., Ph.D., St. John's University; 1970–

*Leo D. Morgan, Sr., Professor, Industrial Education; B.S., St. Cloud State University; M.A., University of Minnesota; Ed.D., University of Northern Colorado; 1968–

*Sue Ann Mullen, Assistant Professor, Health, Physical Education and Recreation; B.S., M.S., Winona State University; 1970–

*Howard Munson, Professor, Education; B.S., University of Minnesota–Duluth; M.Ed., M.A., University of Washington; 1955–

*Roy Nastrom, Professor, Educational Administration; B.A., M.A., Ph.D., University of California–Berkeley; 1976–

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WINONA STATE UNIVERSITY APPLICATION FOR UNDERGRADUATE ADMISSION

TYPE OR PRINT IN INK

TERM AND YEAR OF BEGINNING ENROLLMENT:

FALL _______ WINTER _______ SPRING _______ 1ST SUMMER SESSION _______ 2ND SUMMER SESSION _______ OF THE YEAR 19____

FULL LEGAL NAME:

LAST FIRST MIDDLE PREVIOUS SOCIAL SECURITY NUMBER

PERMANENT ADDRESS:

STREET CITY STATE ZIP COUNTY

HOW LONG HAVE YOU LIVED THERE? __________ (IF LESS THAN 1 YEAR, PLEASE EXPLAIN IN SEPARATE SHEET.)

PRESENT MAILING ADDRESS (IF DIFFERENT FROM ABOVE):

STREET CITY STATE ZIP

TELEPHONE: [ ] DATE OF BIRTH: ____________________

AREA CODE MONTH DAY YEAR

U.S. CITIZEN: YES ___ NO ___ IF NO, LIST HOME COUNTRY: ____________________

VETERAN: YES ___ NO ___ DATES OF ACTIVE DUTY: ____________________

(IF YES, SEND DD214) FROM MO./YR. TO MO./YR.

INDICATE MAJOR OR AREA OF INTEREST IN ORDER OF PREFERENCE.

IF UNSURE, WRITE "UNDECIDED".

1. ____________________ 2. ____________________ 3. ____________________ 4. ____________________

HAVE YOU EVER ATTENDED WINONA STATE UNIVERSITY BEFORE? YES ___ NO ___ DATES OF ATTENDANCE ____________________

HAVE YOU EVER ATTENDED ANY COLLEGE OR VOCATIONAL SCHOOL? YES ___ NO ___

*SEND AN OFFICIAL TRANSCRIPT FROM EACH POST-SECONDARY SCHOOL ATTENDED. FAILURE TO LIST ALL INSTITUTIONS
ATTENDED IS CONSIDERED FRAUD AND IS SUFFICIENT GROUNDS FOR CANCELLING ADMISSION.

EDUCATIONAL RECORD: NAMES OF HIGH SCHOOLS, COLLEGES, AND TECHNICAL SCHOOLS ATTENDED.

SCHOOL CITY STATE DEGREE DATES OF ATTENDANCE

________________________________________

________________________________________

________________________________________

WSU IS AN AFFIRMATIVE ACTION - EQUAL OPPORTUNITY EDUCATIONAL INSTITUTION

IF YOU DID NOT GRADUATE FROM HIGH SCHOOL, HAVE YOU EARNED A GED CERTIFICATE? YES ___ NO ___

(YOU MUST SUBMIT A COPY OF YOUR GED SCORE REPORT).

TO BE COMPLETED BY HIGH SCHOOL

STANDARD SCORES: VERBAL MATH

PSAT: _______ _______ CLASS RANK: (END OF JUNIOR YEAR IS ACCEPTABLE)

SAT: _______ _______ RANK _______

ACT: _______ _______ CLASS SIZE _______

ENGLISH MATH SOC SCI NAT SCI COMP

HIGH SCHOOL: PLEASE SEND OFFICIAL TRANSCRIPT (SHOWING RANK AND TEST SCORES).

________________________________________

SIGNATURE OF CERTIFYING OFFICIAL

________________________________________

TITLE