

Old Main 1908

University of Wisconsin-Stevens Point
1976-78 Catalog



Stevens Point Normal 1905 Basketball Team

The University of Wisconsin-Stevens Point is accredited by:

The National Council for Accreditation of Teacher Education
The North Central Association of Colleges and Secondary Schools
American Chemical Society
American Dietetics Association
American Home Economics Association
National Association of Schools of Music
Society of American Foresters (affiliate status)
American Society of Clinical Pathologists
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The University of Wisconsin-Stevens Point is a member of:

The American Council on Education
The Association of State Colleges and Universities
The American Association of University Women
The American Association of Colleges for Teacher Eduation

A record of academic offerings, university policies, faculty and administration as of March 1, 1976

Cover Design by Dennis Hill

1976-78 CATALOG
UW-STEVENS POINT
Undergraduate/Graduate



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Student's Responsibility

All colleges and universities establish certain requirements which must be met before a degree is granted. These requirements concern such things as courses, majors and minors, and residence. Advisers, directors, and deans will always help a student meet these requirements, but **the student himself is responsible for fulfilling them.** At the end of his course the faculty decides whether or not the student will receive a degree. If requirements have not been met, the degree will be refused until such time as they have been met. For this reason it is important for each student to acquaint himself with the requirements and continue to keep himself informed about them during his university career.

Also, it is necessary in the general administration of a university, to establish broad policies and to lay down certain regulations and procedures by which they may be carried out. It is important that a student understand the policies and know the regulations and procedures he is expected to follow.

The catalog is presented, therefore, not only to enable prospective students and others to learn about the University of Wisconsin-Stevens Point, but to state policies, requirements, regulations, and procedures in such forms as will be of help to the student as he goes through the university.

The University

The University of Wisconsin-Stevens Point is a unit of The University of Wisconsin System, governed by a Board of Regents which operates under the laws of The State of Wisconsin.

The University of Wisconsin System:

John C. Weaver, President.
Donald K. Smith, Senior Vice President for Academic Affairs.
Donald E. Percy, Senior Vice President for Administration.
Robert W. Winter, Vice President for Administration.
Reuban H. Lorenz, Vice President and Controller.

The University of Wisconsin-Stevens Point:

Lee Sherman Dreyfus, Chancellor.
John Blaise Ellery, Vice Chancellor for Academic Affairs.
David L. Coker, Assistant Chancellor for University Services.

The university opened in the fall of 1894 as Stevens Point Normal School. In the intervening years the Normal School became Central State Teachers College, Wisconsin State College, Wisconsin State University-Stevens Point, and in 1971 was designated as The University of Wisconsin-Stevens Point. About 8500 students are expected in the fall of 1976.

Stevens Point, a city of about 25,000 in a metropolitan area of approximately 40,000, is located in central Wisconsin 110 miles north of Madison at the intersection of US highways 10 and 51. It is served by Greyhound Bus Lines and is readily accessible by air via North Central and Air Wisconsin Airlines (through the Central Wisconsin Airport at Mosinee) and Mid-State Commuter Service.

The System Mission

The University of Wisconsin-Stevens Point shares in the mission of the University of Wisconsin system.

The mission of this system is to develop human resources, to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its campuses, and to serve and stimulate society by developing, in students, heightened intellectual, cultural, and humane sensitivities; scientific, professional, and technological expertise; and a sense of purpose. Inherent in this broad mission are methods of instruction, research, extended education, and public service designed to educate people and improve the human condition. Basic to every purpose of the system is the search for truth.

The Core Mission

As an institution in the "University Cluster" of the University of Wisconsin system, the University of Wisconsin-Stevens Point shares the following core mission with other universities of the cluster:

1. Providing baccalaureate degree level and selected graduate programs within the context of its approved select mission.
2. Meeting the educational and personal development needs of students through effective teaching, academic advising, and counseling, and through university-sponsored cultural, recreational, and extracurricular programs.
3. Providing a first priority emphasis on teaching excellence.
4. Providing a base of liberal studies needed as the foundation for university degrees in the arts, letters, and sciences, as well as for specialized professional and occupational degrees at the baccalaureate level.
5. Providing a program of pre-professional curricular offerings consistent with the University's mission to serve the needs of citizens in its geographical area.
6. Supporting a commitment to scholarly activity integral to and supportive of instructional progams and teaching excellence.
7. Meeting the off-campus instructional and continuing education needs of citizens in the campus service region and (as appropriate to unique program capability) in the state within the context of coordinated statewide planning of outreach programs.
8. Providing public service to the surrounding region both as a cultural center and a source of problem-solving expertise.
9. Participating in regional consortia and interinstitutional relationships in order to maximize educational opportunity for the people of the region effectively and efficiently through the sharing of resources.

10. Supporting a commitment to serving the special needs of minority, disadvantaged and non-traditional students.

The Select Mission

The select character and purpose of the University of Wisconsin-Stevens Point can be further delineated by the following statements of its particular goals and responsibilities:

1. The University should offer a broad base of fine arts and liberal studies and degrees both for the development of students and upon which education in the professional fields can be built.
2. The University should provide undergraduate programs in communicative disorders, teacher education, home economics, paper science, and natural resources with emphasis on the management of resources.
3. The University should offer basic graduate programs in teacher education, communicative disorders, natural resources, home economics, and select areas clearly associated with its undergraduate emphasis and strength.
4. The University should be dedicated to implementing quality undergraduate instruction through new and innovative methods including the Learning Resources Center and self-directed study programs.
5. The University should develop appropriate interinstitutional relationships within the region.

Goals

It is the objective of the university that each student, regardless of his curricular program, develop a concept of the signal value of knowledge to mankind and acquire competence in skills of rigorous thinking. He should also achieve an appreciation of the perspective, judgment, and wisdom of a liberally educated person, attain a higher level of creativity, and know the importance of physical fitness. Hence, the goals of the university are stated as characteristics of the individual student, the learner, as he becomes an educated person.

1. He communicates effectively by developing the skills of observing, listening, and reading critically, and of writing and speaking with clarity and force.
2. He has an understanding of the history of man and the forces and ideas that have affected human societies, including his own; he is aware of the problems and achievements of various civilizations; and he recognizes that all fields of knowledge are interrelated.
3. He shows concern for the ideals of democracy and social justice and for his responsibility to his fellow man.
4. He attains competence in a particular field of endeavor.
5. He appreciates and values the life of the mind as shown by: his ability to think clearly and rationally; the development of his intellectual curiosity; and his understanding of and participation in the arts, philosophy, and scientific disciplines.
6. He is able to think clearly about what he, a person, is, and about his life's purpose thus reflecting the beginnings of wisdom.
7. He develops an awareness that learning is a lifelong process and increasingly becomes self-directed in continuing his education.

To achieve the mission of the university, emphasis is given to liberal arts and general education studies, the foundation upon which well-conceived professional and pre-professional curricula are based.

The University of Wisconsin-Stevens Point offers a number of programs of instruction. A wide range of majors and minors in the usual academic fields is available. In addition, majors are offered in several special fields: art, communicative disorders, dietetics, drama, early childhood education, food and nutrition, forestry, home economics, medical technology, music, resource management, paper science, soil science, water resources, and wildlife.

Master's degree programs are also described in this catalog.

The Office of Development, Leonard L. Gibb, Director, attempts to orient, involve, and solicit all of the publics which inter-relate with the university. These publics include alumni, faculty, students, parents, foundations and area businesses. These efforts are directed to enhance the formula funding provided by the State of Wisconsin for the betterment of the University of Wisconsin - Stevens Point.

The University of Wisconsin - Stevens Point Foundation, Inc., Leonard L. Gibb, Executive Director, is organized for and shall be operated exclusively for educational purposes. This Foundation shall hold, administer, invest, and disperse for educational purposes such funds or properties as may from time to time be given to it by any person, firm, or corporation. All of the assets and earnings of these properties shall be used exclusively for the advancement of the University of Wisconsin - Stevens Point, and no part of the net earnings shall benefit any member of the Foundation.

Affirmative Action

The University of Wisconsin-Stevens Point is committed to equal educational opportunity. This means that all campus educational programs and activities are equally available to all students. The faculty, administration, and staff are in the process of identifying all practices which may discriminate against students on the basis of sex, race, color or national origin in recruitment and admission, curriculum, extracurricular activities, and supportive services. In addition, the university is committed to help students recognize that women and minorities can serve in all fields of human endeavor.

It is the policy of the University of Wisconsin - Stevens Point not to discriminate on the basis of sex in its education programs, activities, or employment policies as required by Title IX of the 1972 Education Amendments. Inquiries regarding compliance with Title IX may be directed to the Affirmative Action Office, 240 Main

Building, phone 346-2002.

Anyone who feels he or she has been discriminated against, or who believes a university practice is discriminatory, is invited to contact the Affirmative Action Office: Donna Garr for women and Gordon Haferbecker for minorities.

Parking

Limited parking facilities are available for faculty, staff, and students (both resident and commuting). To park in any of the University parking areas, it is necessary to display a parking permit on the vehicle. Application for the permit should be made at the Office of Protective Services in the George Stien Building. After the application is approved, the permit may be purchased at the Protective Services office or at the Cashier's office. Assignments for faculty, staff, and students are made in order of seniority. Permits are not honored in metered areas.

Protective Services

The Protective Services department is responsible for campus security and safety, and for the enforcement of campus regulations, including parking. The office is located on the far north side of the campus in the George Stien Building, and operates 24 hours a day, seven days a week, year-round. Students are urged to contact Protective Services in the case of emergencies, such as theft, sickness, injury, fire, etc. Call extension (346) 2368. The department also maintains the Campus Armory for the storage of student firearms. Students must supply their own padlocks to secure their weapons within the armory.



Governor Patrick J. Lucey and Chancellor Lee Sherman Dreyfus

Office Hours

The administrative offices at the university are open year-round from 7:45 a.m. to 11:45 a.m. and from 12:30 to 4:30 p.m. Monday through Friday. When classes are in session, the cashier's office and mail services are also open during the noon hour. All offices are closed on Saturday.

University Services

David L. Coker, Assistant Chancellor for University Services; **Adolph J. Torzewski,** Assistant to the Assistant Chancellor for University Services.

Co-Curricular Services, Helen R. Godfrey, Executive Director.

Admissions, John A. Larsen, Director.
Financial Aids, Philip C. George, Director.
Foreign Students, Marcus C. S. Fang, Director.
Placement and Career Counseling, Dennis E. Tierney, Director.
PRIDE, John C. Messing, Director.
Registration and Records, Gilbert W. Faust, Director.

Financial Services and Controller, (accounting, student payroll, and installment billing), Robert W. Taylor, Executive Director.

General Services, Hiram L. Krebs, Executive Director.

Custodial Services, Leonard J. Walkush, Director.
Facilities Management, Harlan H. Hoffbeck, Director.
Materiel Services, Gerald L. Burling, Director.
Maintenance Services, Melvin Engebretson, Director.
Protective Services, Alan R. Kursevski, Director.
Utilities Services, Gerald Drier, Director.

Student-Life Services, Frederick A. Leafgren, Executive Director.

Conference and Reservations, John Jury.
Counseling Center, Dennis E. Elsenrath, Director.
Food Service (Saga Foods contract), Jay Dee Cutting, Director.
Health Service, Donald D. Johnson, M.D., Director.
Housing, Melvin J. Karg, Assistant Director.
Student Activities, Robert W. Busch, Director.
University Center, Ronald A. Hachet, Director.

University Services provide the necessary support services required by students, faculty, and administrative staff in order to uphold the academic mission of this institution. The objectives of University Services include:

1. Out-of-class services for students attending this university as reflected in the functions of the Student Life Service and Co-curricular Service offices, which have as their goal to aid the individual student in reaching his highest potential with a minimum amount of frustration.
2. Services to the public, the community, and alumni, as well as service programs to the student, are functions of the Public and Alumni Service Office.

3. Management services for the constituents of the entire institution in areas of physical plant maintenance and financial affairs are the primary functions of the Controller and General Services operations.

Several of the service offices and selected student life information are described below. Additional information regarding these services, other aspects of student life, and activities will be found in the publication, The Student Handbook, available in the Office of Student Services and Information in the Student Services Building.

Student-Life Services—Frederick A. Leafgren, Executive Director.

Where Students Live—Melvin J. Karg, Assistant Director of Housing.

Students will find that the individual attention, counseling, programs, and facilities available in the residence hall can be of major assistance in establishing their university career on a firm foundation. Residence hall living is an integral and dynamic part of the total educational program.

The university regulation governing where students may live is as follows: FRESHMEN AND SOPHOMORE STUDENTS ARE REQUIRED TO LIVE IN RESIDENCE HALLS. Exceptions are made for married students, veterans, and students who reside with their parents or at the home of immediate relatives. Students having attained junior standing (56 or more credits) or completed four semesters are eligible to select other housing accommodations if they desire. Housing, both in residence halls and approved housing facilities, does not discriminate on the basis of race, religion, or national origin.

Staffed with professionally trained personnel, each residence hall represents a unique student community. The community, operating with its own elected student governing and programming bodies, assumes major responsibility for the direction and success of the year's activities. As a result, the residence hall becomes much more to the serious student than simply a place to sleep. It is both a living and a learning center. In a very real sense, it is a course of study in itself. Educational programs, social programs, athletic programs, and a wide variety of activities provide opportunities for students which contribute significantly to their total educational experience at this institution. The residence hall program is consistent with the objectives and goals established for students at this university.

Students living in residence halls are provided 15 or 20 meals per week at one of the residence centers. Residence hall contracts, which include room and board, are for the entire academic year. Juniors and seniors may request a semester contract. This option must be elected at the time the contract is signed.

A complete list of available off campus facilities may be obtained from the Housing Office. In addition, a free publication "Living Off-Campus" is available there. This booklet describes the various housing options available in the city of Stevens Point. The Housing Office also offers counseling and referral services to students encountering difficulties in their off campus housing arrangements.

University Health Service, Donald D. Johnson, M.D., Director.

The Health Service is located on the lower level of Nelson Hall, corner of Main and Fremont Streets. Hours are from 8:00 a.m. to 4:00 p.m. Monday through Friday; the telephone number is 346-4646. At all other times care is available through the office of Protective Services, phone 346-2368. There is a university physician on call at all times. He may be reached through the St. Michael's Hospital emergency room, phone 344-4400 if the above sources are not available.

Medications including prescription drugs and immunizations are dispensed from the Health Service. This would include medication ordered by the University Health Service Staff or your own doctor if it is stocked by the Health Service pharmacy.

Allergy shots may be brought to the Health Service for storage and administration.

The cost of these services is met by a portion of the student activity fee and there is no additional charge at the Health Service except in cases of prolonged medication use or unusual laboratory tests. All students registered on the Stevens Point campus who have paid the activity fee and have their health questionnaires on file at the Health Service are eligible for care.

The following are NOT provided at the Health Service:

1. X-rays.
2. Hospital in-patient or Emergency Room care.
3. Week-nights and week-end emergency care.

Students are referred to St. Michael's Community Hospital for these services. This facility is located adjacent to the campus on Illinois Ave. at Prais St., and will bill students for care. It is therefore imperative that students be covered by insurance of their own or through their parents. An excellent policy is available from the Student Senate office.

When you first come to the Health Service you may be seen by a nurse-practicioner or physician's assistant. These are highly trained individuals who specialize in college-age health. They will evaluate your problem and in many instances give you complete care. You may also be referred to one of the physicians or to other sources for care. Follow-up visits will usually be with the same staff member, although at any time you may request to see someone else.

Confidentiality is maintained at the Health Service because of the very private nature of many questions, tests, and treatments. This means your records, or any information regarding the reason for your visit, are not available to anyone, including faculty or parents. The only exceptions to this are (1) subpoena of records by a court, or (2) life-threatening conditions or actions.

In an effort to encourage adult-level communications,

excuses for class absence are not written by the Health Service. Faculty may verify by phone that a student visited the Health Service on a particular day; however no information is given regarding diagnosis or treatment unless the student wishes to sign a waiver authorizing the release of information.

If you have problems, suggestions, or would like an active role in the operation of the Health Service, check at the Health Service office for information on membership on the Student Advisory Board.

Should you be considering a career in the health field, you are invited to discuss this with one of the Health Service staff.

Counseling Center, Dennis E. Elsenrath, Director

The Counseling Center is located in 014 Nelson Hall, phone number 346-3553. Professionally trained counselors are available from 7:45 a.m. to 4:30 p.m. Monday through Friday, to assist students with their personal, vocational, and educational development. A variety of services and programs are available through the Counseling Center in assisting students in their progress toward achieving their own unique goals. Counseling Center services and programs include individual counseling, group counseling, testing services, occupational and educational information, a reading and study skills program, and academic tutoring.

University Center, Ronald A. Hachet, Director.

The University Center serves as a unifying force in the student's co-curricular life. It is a community center organized as a place for students, faculty, alumni, and friends of the university to gather, study, and share experiences. The center provides cultural, social, and recreational programs which supplement classroom education. It is located between Fremont and Reserve Streets, just north of the Park Student Services Center.

The University Center includes dining facilities, a snack bar, a campus information center (car pooling, ticket sales, duplicating, lost and found, check cashing, xeroxing, vending machine refunds, and all university information), facilities for coffeehouses, movies, and other types of entertainment, an arts and crafts area, a publicity services area (posters, mimeo, silkscreening, artwork, and button making), a games room, outdoor sports equipment rental, television lounges, the University Bookstore, materials center (music tape cassettes, typewriters, calculators, newspapers, magazines, and reference materials), offices for student organizations, and several meeting rooms available for use by student and faculty groups.

The University Store, located on the lower level of the University Center, is self-sustaining and is wholly owned and operated by the university. Its primary purpose is to furnish materials needed in the educational process, but other miscellaneous items related to campus living are also stocked. Profits, if any, are used to help defray expenses incurred in the operation of the University Center.



The University Store also is an official U.S. Postal Substation, offering postal service to the campus and community.

For a rental fee of $90 per credit each student is supplied with the basic textbooks instructors designate. Supplementary books required or recommended can be purchased in the Paperback Department.

At the end of each semester all textbooks must be returned to the Text Rental Department. Deadlines for return are established and published, and a late fee of three dollars is assessed for late returns. Students who fail to return books are billed in the amount they would be charged if they were purchasing the book. If students wish to purchase textbooks, they may do so within the limits imposed by the necessity of maintaining inventory control.

Student Activities, Robert Busch, Director.

The Student Activities office is located on the second floor of the University Center.

Brief descriptions of programs and services are as follows. Complete descriptions can be found in The Student Handbook.

Information regarding the formation of a new organization is available in the Student Activities Office in the University Center. Formal recognition is granted from the Student Assembly through the Organziation Recognition Committee. A 30 day grace period during which new organizations are granted full privileges is a standard policy designed to aid students in forming new groups and in submitting the proper materials for final recognition.

The Student Activities Office puts out a weekly calendar

listing all pre-scheduled events and activities in the campus newspaper. It is distributed at the Campus Information Center, University Center.

Forms for the registration of activities of student organizations are available in the Student Activities Office and in the Conference and Reservations Office.

Recognized student organizations or student groups which plan fund raising activities must register the activity with the Student Activities Office. If the event involves solicitations or subscriptions outside the campus community, the organization should know that these off-campus fund raising activities are not necessarily sanctioned or supported by the university. The Chancellor has made it known that the only sanctioned community-wide fund solicitation by the university will be the annual university fund drive. Therefore, if individual groups do appeal to the community they would be doing so on their own and without official endorsement by the university.

University facilities including faculty lounges and offices may not be used for solicitation of university faculty and staff personnel by private enterprise profit organizations. This includes solicitation by individual contact and by free advertising on campus such as flyers, handouts and use of campus mail and bulletin boards for advertising, etc. This policy does not apply to solicitors concerning instructional materials such as textbooks, supplies and equipment to be purchased from university funds. Solicitation by non-profit organizations should be first authorized by the Office of University Services, Room 224 Main.

Annually a Fall Leadership Training Workshop is held off campus prior to the beginning of school. This Workshop not only acquaints student leaders with each other and with basic information on groups and their responsibilities as officers, but it also serves as a vehicle for them to better understand themselves, their potential, and hopefully how this can be applied to making them a more effective person. Student leaders from all campus organizations are invited to attend this Workshop. In addition, throughout the year, any other student organizations may request leadership training or communication workshops for their groups by contacting the Student Activities Office.

Conference and Reservations

The Conference and Reservation office is located on the second floor of the University Center, phone 346-2427.

Room reservations are taken for the University Centers (including both the Allen and DeBot buildings), academic buildings (except for the regular academic schedule), and other campus grounds. Requests for special services such as projectors, screens, sound systems, lighting systems, and ushering personnel are also coordinated through this office.

The office is staffed and equipped to assist in the coordination of special meetings, workshops, conferences, and conventions. Student organizations, and faculty-staff groups and organizations in which individuals of the university are members, are encouraged to use these services in preparations for hosting special conferences. The coordination of food, housing, and other special needs and accommodations is a part of this program.

Placement and Career Counseling, Dennis Tierney, Director.

To assist graduating seniors and alumni of the university in selecting their initial employment following graduation and to locate promotional opportunities when desired, the following services are provided: (a) Initiating of a placement file to contain information pertaining to each graduating senior including his references and recommendations supplied by the seniors. This process should begin the first semester of the senior year, and be up-dated periodically. (b) Compiling of credentials for employing officials of materials collected in the placement file. (c) Counseling with graduating seniors regarding interviewing techniques, sources of positions relating to their interests, aptitudes, qualifications and preferences. (d) Maintaining a current library of employment sources and opportunities including brochures, job descriptions, annual reports, community descriptions, etc. to assist graduating seniors or alumni in their selection for good employment opportunities. (e) Scheduling interviews for graduating seniors, or alumni on campus or at convenient locations with employing officials. (f) Up-dating of placement file periodically or at request of candidate. (g) Expanding the sources of placement opportunities to include all geographic areas as well as employment interests of any graduating senior or alumnus. (h) Writing and printing of personal and academic resumes. Career counseling services are open to all students as well as to graduating seniors and alumni.

Student Government

The Student Government is divided into a Senate with 20 members (elected by housing regions) and an Assembly (with one representative from each student organization which desires a vote). Programs and opportunities for participation are discussed in The Student Handbook.

The University Activities Board is an all-campus programming board composed of student committees. It offers a wide variety of programs—traditional, innovative, and paracurricular.

The University Center, along with the Allen and DeBot Residence Centers, provides the space and facilities for student activities and services.

Every residence hall appoints a representative to participate in the Residence Hall Council which programs educational, cultural, social, and special events for residents in all residence halls on campus.

(See also The Student Handbook.)

Social Fraternities and Sororities

The activities of these groups are coordinated through the **Interfraternity Presidents' Council and the Panhellenic Council.** For social fraternities and sororities represented on this campus see The Student Handbook.

See The Student Handbook for further program information and for opportunities to participate in the following: Art Exhibits, Arts and Lectures Series, Departmental and Professional Organizations, Forensics, Debate, Public Speaking, Honorary Organizations, Musical Activities, Religious Groups, Special Interest Groups, Theatre and Interpretation.

Student Conduct

The University of Wisconsin-Stevens Point is concerned with the actions of individuals or groups that conflict with the welfare and integrity of the institution or disregard the rights of other students or faculty. Students and student groups are expected to cooperate in avoiding conduct which is thus prejudicial to the university or its students.

The University of Wisconsin System STUDENT DISCIPLINARY PROCEDURES which follow were adopted by the Board of Regents in January, 1976. These guidelines form the framework for student disciplinary procedures at each institution. (Local application of these procedures is described in the **Student Handbook,** to which students are referred for additional information concerning student disciplinary guidelines, UW Administrative Code, and other regulations governing conduct.)

17.01 POLICY STATEMENT. The Board of Regents of the University of Wisconsin System adopts the following policy on the standards and procedures for student discipline in the University System, acknowledging both the need to preserve the orderly processes of the University with regard to its teaching, research, and public service missions, as well as the need to observe the student's procedural and substantive rights.

17.02 DEFINITIONS. (1) "Chancellor" where used in the chapter shall mean the chancellor or his/her designee.

(2) "Investigating officer" means investigating officer or his/her designee.

(3) "Student," for the purposes of this chapter, means any person who is registered for study in any institution in the University for the current academic period. A person shall be considered a student during any period which follows the end of an academic period which the student has completed until the last day for registration for the next succeeding academic period or until fourteen (14) calendar days have elapsed after the commencement of classes for the next succeeding academic period, whichever occurs first.

(4) "Disciplinary sanction" or "sanction" shall mean any action affecting the status of an individual as a student which is taken by the University in response to student misconduct. The term shall include probation, resignation or leave for misconduct, cut-off or revocation of student financial aids, suspension or expulsion, removal from the course with no grade assigned in cases of academic misconduct, written reprimand, denial of particular University privileges, and other less severe actions not enumerated herein. Disciplinary sanctions do not include academic responses as defined in sec. 17.02(8). Each institution is authorized to adopt a more explicit listing of sanctions which is consistent with the provisions of this section.

(5) "Probation" means the student is permitted to remain enrolled in the University only upon condition that he/she comply with all University rules or regulations or with other standards of conduct which the student is directed to observe for the duration of the period of the probation and which may include loss of student privileges except those of attending classes and writing examinations. Probation may not exceed two semesters in duration for any given misconduct, except that violation of probationary conditions shall be cause for extension of the probation for more than two additional semesters or for suspension or expulsion.



(6) "Suspension" means a temporary loss of student status for a specified period of time, not to exceed two years, with resultant loss of all student rights and privileges. Upon completion of suspension the student shall have the same standing to re-enroll as he/she would have had if no suspension had been imposed.

(7) "Expulsion" means termination of student status with resultant loss of all student rights and privileges.

(8) "Academic response" means a formal action which may be taken by an instructor under sec. 17.13(2)(c) in response to "academic misconduct" as defined by sec. 17.06(2). It is to be distinguished from "sanction" or "disciplinary sanction" as defined in Sec. 17.02(4). It is limited to (1) reduction of grade for the assignment in question to a lower passing grade (if it is clear that the academic misconduct affected only a portion of the assignment or examination and the remainder constituted passing work) or to a failure, and (2) required performance of additional work for example to resolve uncertainties over the effect of the academic misconduct on the assignment or examination.

(9) "Instructor" for the purposes of this chapter means the faculty member who has responsibility for the overall conduct of a course and ultimate responsibility for the assignment of the grade for the course.

(10) "Institution" for the purposes of this chapter means any university, or an organizational equivalent designated by the board.

17.03 RIGHT TO PETITION FOR READMISSION. A student who has been expelled or suspended may petition for readmission. The petition must be in writing and directed to the chancellor of the institution which initiated the charges for which the student was suspended or expelled. Such petition may not be filed before the expiration of one year from the date of the final determination in expulsion cases, or before the expiration of one-half of the suspension period in suspension cases. The chancellor shall, after consultation with the elected committee which serves as the faculty's executive arm and with the elected officers of the principal student organization, adopt procedures for determining whether such petitions will be granted or denied.



17.04 EFFECT OF DISCIPLINE WITHIN THE UNIVERSITY SYSTEM. Suspension or expulsion shall be systemwide in effect. A student who is suspended or expelled from one institution in the University of Wisconsin System may not enroll in another institution in the System unless the suspension has expired by its own terms or one year has elapsed after the student has been suspended or expelled.

17.05 SYSTEMWIDE DISCIPLINARY AUTHORITY. The investigating officer for the institution at which a student was enrolled at the time that acts in violation of this chapter were alleged to have been committed by the student shall have authority to institute disciplinary proceedings against such student, notwithstanding that the institution against which the acts were alleged to have been committed is not the same institution at which the student was enrolled at the time of the commission of such acts.

17.06 OFFENSES DEFINED. (1) The University may discipline a student in nonacademic matters in the following situations. For the purposes of this section, the term "intentional conduct" shall include conduct which the student knew or reasonably should have known would result in occurrences prohibited by this section.

(a) For intentional conduct that seriously damages or destroys University property or attempts to seriously damage or destroy University property.

(b) For intentional conduct which constitutes a serious danger to the personal safety of other members of the University community. In order to illustrate the types of conduct which this paragraph is designed to cover, the following examples are set forth. These examples are not meant to illustrate the only situations or types of conduct intended to be covered.

1. A student would be in violation if he/she attacked or threw rocks or other dangerous objects at law enforcement personnel whose services had been retained or called for to protect members of the University community or University property, or if he/she incited others to do so when he/she knew or reasonably should have known that such conduct would result.

2. A student would be in violation if he/she sold or delivered a controlled substance as defined by the Wisconsin Uniform Controlled Substances Act. (ch. 161., Wis. Stats.) or if he/she possessed a controlled substance with intent to sell or deliver. For the purposes of this section "delivery" shall be defined as a delivery prohibited by (ch. 161. Wis. Stats.).

3. A student would be in violation if he/she removed, tampered with, or otherwise rendered useless University equipment or property intended for use in preserving or protecting the safety of members of the University community such as fire exit signs, extinguishers, alarms, or hoses, first aid equipment, or emergency telephones, or if he/she obstructed or caused to

be inoperable fire escape routes such as stairwells or elevators.

(c) For intentional conduct that obstructs or seriously impairs or attempts to obstruct or seriously impair University-run or University-authorized activities on any campus, including activities either outdoors or inside a classroom, office, lecture hall, library, laboratory, theater, union, residence hall, or other place where a University-run or University-authorized activity is carried on. The kind of intentional conduct referred to is conduct which by itself or in conjunction with the conduct of others prevents the effective carrying on of the activity—a result which the student knew or reasonably should have known would occur. In order to illustrate types of conduct which this paragraph is designed to cover, the following examples are set out. These examples are not meant to illustrate the only situations or types of conduct intended to be covered.

1. A student would be in violation if he/she participated in conduct which he/she should have known would prevent or block physical entry to, or exit from, a University building, corridor, or room to anyone apparently entitled to enter or leave in connection with a University-run or University-authorized activity.

2. A student would be in violation if, in attending a speech or program on campus sponsored by or with permission of the University, he/she engaged in shouted interruptions, whistling, derisive laughter, or other means which by itself or in conjunction with the conduct of others prevented or seriously interfered with a fair hearing of the speech or program, under circumstances where the student knew or reasonably should have known this would occur.

3. A student would be in violation if in a classroom he/she used techniques similar to those specified in the preceding paragraph, or filibuster-type tactics or other tactics, which by themselves or in conjunction with the conduct of others, prevented or seriously interfered with the carrying on of the teaching and learning process, under circumstances where the student knew or reasonably should have known this would occur.

4. A student would be in violation if he/she intentionally obstructed a University official or employee engaged in the lawful performance of his/her duties.

5. A student would be in violation if he or she removed pages from library books or parts of other materials or caused books or materials to be unavailable for use by others by removing them from their proper place without proper authorization or by hiding them in the library so that they are not available in the usual manner to persons wishing to use them.

(d) For unauthorized possession of University property or property of another member of the University community.

(e) For acts which violate the provisions concerning parking, traffic, I.D. Cards, University keys, drugs, smoking in unauthorized places, carrying firearms, unauthorized peddling, unauthorized use of sound-amplifying equipment, and other subjects covered by the published University of Wisconsin System Administrative Code (chap. UWS 18, Wis. Admin. Code).

(f) For making a knowingly false statement, either orally or in writing, to any university employee or agent on a university-related matter.

(2) The University may discipline a student for academic dishonesty. Academic dishonesty includes the following examples as well as other closely similar conduct aimed at making false representation with respect to a student's academic performance.

(a) Cheating on an examination;

(b) Collaborating with others in work to be presented, contrary to the stated rules of the course;

(c) Plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed or otherwise obtained) as one's own;

(d) Stealing examination or course materials;

(e) Falsifying records, or laboratory or other data;

(f) Submitting, if contrary to the rules of a course, work previously presented in another course;

(g) Knowingly and intentionally assisting another student in any of the above—including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

17.07 (1) DISCIPLINARY PROCEDURE. (1) The chancellor of each institution, after consultation with the elected committee which serves as the faculty's executive arm and with the elected officers of the principal student organization, shall designate a person as "investigating officer" who shall investigate cases of student conduct alleged to be in violation of secs. 17.06(1) and 17.06(2) of this chapter. Where it appears that a violation has occurred, the investigating officer shall proceed in accordance with the provisions of this chapter.

(2) Formal adjudication. If the maximum sanction sought by the investigating officer includes suspension or expulsion, the procedures in sec. 17.09 of this chapter shall apply and the investigating officer shall cause a statement of charges to be

prepared and served upon the student involved. The statement of charges shall contain:

(a) A concise summary—giving dates, time, place, and events—of the facts or conduct on which the charge is based.

(b) A citation to and quotation from the rule(s) alleged to have been violated.

(c) A statement of the maximum penalty sought by the investigating officer.

(d) An explanation of the consequences of failure to answer the statement of charges.

(e) Statements as to whether the university will or will not be represented by counsel and that the student may be represented by a person of his/her choice, including legal counsel, at his/her own expense.

(f) A copy of this chapter.

(3) Informal adjudication: (a) The chancellor shall, after consultation with the elected committee which serves as the faculty's executive arm, and with the elected officers of the principal student organization, establish institution regulations for an informal system of adjudication for cases in which the maximum penalty sought by the investigating officer does not include suspension or expulsion except that if adjudication in this manner would result in disqualifying the student for financial aids, the procedures in sec. 17.09 shall apply. The informal system shall include the following and such other provisions as are not inconsistent with this chapter: (i) representation of the student by a person of his choice, including legal counsel, at his/her own expense, (ii) written notice to the student of the offense with which he/she is charged, the facts or conduct on which that charge is based, and the penalties which may possibly be imposed, (iii) advance written notice of and an opportunity for a hearing at which the evidence against the student shall be reviewed and at which the student shall have an opportunity to present evidence and argument, including a written statement, to refute the charge, and (iv) a written decision which shall include findings of fact and conclusions. The procedures shall also provide for an appeal of the disciplinary decision within the institution.

(b) If, during informal adjudication, the investigating officer concludes that suspension or expulsion should be sought rather than a lesser sanction, the investigating officer may cause a statement of charges to be served upon the student in accordance with sec. 17.07(2), in which event the procedures in sec. 17.09 of this chapter shall apply.

(4) Settlement. Nothing contained in this chapter shall prevent the student, during an investigation of alleged misconduct, during informal adjudication, or after a statement of charges has been served but prior to a hearing provided in accordance with sec. 17.09, from submitting a written resignation from the University.

(a) In the event of such resignation, the investigating officer shall impose such sanction as he deems appropriate consistent with the statement of charges; provided, however, the student may, within ten (10) calendar days after receiving notice of the imposition of such sanction, request a hearing as provided by sec. 17.07 of this chapter.

(b) Nothing contained in this chapter shall limit the right of the university and the student during an investigation of alleged misconduct, during informal adjudication, or after a statement of charges has been served, to agree to a disciplinary sanction if the student agrees not to contest the charges (pleads "no contest"). Any such agreement shall be reduced to writing which, when signed by the student, shall conclude the case.

(5) Whenever charges or appeals under this chapter are pending, a student under charges, unless temporarily suspended pursuant to sec. 17.12 of this chapter, shall continue to have the same rights and privileges accorded other students. However, grades, or diplomas may be withheld pending final determination of the charges; a current transcript shall be issued at the request of the student but it may contain the notation "Disciplinary Charges Pending" on the face thereof.

(6) Service of notice or decisions. Each student shall be responsible for maintaining on file with the office specified by each institution his/her current school and permanent home addresses. Notification of these addresses shall be in writing.

(a) For service of a statement of charges under sec. 17.07(2) and of actions taken pursuant to sec. 17.09, copies shall be served in person or by certified, return-receipt-requested mail to both the student's institution and permanent home address. Where service is by mail, the date of service shall be the second day after the day of mailing.

(b) For informal adjudications pursuant to sec. 17.07(3), correspondence and notices may be served in person or by mail to the student's institution address. Where service is by mail, the date of service shall be the second day after the day of mailing.

17.08 (1) STUDENT CONDUCT HEARING TRIBUNAL; CAMPUS OPTION. The chancellor shall, after consultation with the elected committee which serves as the faculty's executive arm and with the elected officers of the principal student organization, adopt regulations providing for the establishment of a Student Conduct Hearing Tribunal which may be constituted in one of two manners as chosen by the student charged:

(a) A hearing examiner appointed by the chancellor



upon the filing of charges under sec. 17.07(2) asking suspension or expulsion. The hearing examiner shall be appointed from among qualified personnel of the various state agencies or other qualified residents of the state with experience in conducting hearings. If an examiner is an employee of a state agency other than the University, his/her appointment must be approved by the head of the agency by which he/she is regularly employed and the University shall reimburse such agency for the salary of the examiner and shall pay expenses incidental to his/her duties for the University. The examiner remains the employee of the agency by which he/she is regularly employed. The appointment of the hearing examiner from other state agencies shall be in compliance with sec. 16.24 and 20.901, Wis. Stats. (1971). If the examiner is not an employee of a state agency other than the University, appropriate arrangements for compensation and reimbursement for expenses shall be made by the chancellor; or

(b) A Student Conduct Hearing Committee with a membership of at least three persons, some of whom shall be students, whose presiding officer shall be appointed by the chancellor at any hearing held pursuant to due notice. The presiding officer shall constitute a quorum.

(2) Institutional regulations adopted under this section shall provide that, upon the filing of charges under sec. 17.07(2) asking for suspension or expulsion, the student shall be offered the choice of having his/her case heard by a tribunal described by either 17.08(1)(a) or (b) above. The student shall be informed in writing of his/her right to choose the type of tribunal at the time charges are filed. At the time a request for a hearing is made under sec. 17.09(1), the student shall also notify the chancellor of his/her choice; in the event timely notice is not received from the student, the chancellor shall decide which choice shall be used for adjudication of the case.

17.09 DISCIPLINE INVOLVING SUSPENSION OR EXPULSION. (1) A student charged in accordance with section 17.07(2) has ten (10) calendar days from the day of service to request a hearing in accordance with this section. The request for a hearing shall be in writing directed to the chancellor and shall also include an answer to the statement of charges which shall specifically admit, deny, or explain each of the facts alleged in the statement of charges unless the student is without knowledge in which case he/she shall so state, such statement being a denial. If an answer is filed which does not specifically admit, deny, or explain every allegation in the statement of charges, those allegations which are not admitted, denied, or explained shall be deemed denied. An answer which denies some or all of the allegations but which does not request a hearing shall be construed as a request for a hearing.

(2) If the student does not file an answer to the statement of charges in accordance with sec. 17.09(1), the allegations in the statement of charges shall be accepted as true and the university may proceed to expel, suspend, or impose other punishment on the student unless good cause to the contrary is shown. The sanction imposed may not exceed that specified in the statement of charges. Notice of such action shall be served on the student and become effective upon service in accordance with section 17.07(6).

(3) When a request for a hearing is made, the case shall be referred by the chancellor to the Student Conduct Hearing Tribunal established in accordance with sec. 17.08 of this chapter. Notice of referral to a Hearing Tribunal shall be sent to the student. The student shall also be notified of the name and address of the person who will present the university's case to the Tribunal.

(4) Hearing procedures.

(a) In this section, "presiding officer" shall mean the hearing examiner appointed in sec. 17.08(1)(a), or the presiding officer of the Student Conduct Hearing Committee, established in sec. 17.08(1)(b). "Tribunal" shall mean the hearing examiner appointed in sec. 17.08(1)(a) or the Student Conduct Hearing Committee established in sec. 17.08(1)(b).

(b) Duties of the presiding officer.

1. Take custody of the case file and papers.
2. Schedule hearings in accordance with these rules.
3. Issue subpoenas and administer oaths.
4. Rule upon offers of proof and receive relevant evidence.
5. Regulate the course of the hearing, dispose of motions, procedural matters or requests, and, if appropriate or necessary, order the removal of persons who unreasonably obstruct or impair the Tribunal's proceedings in its presence, and/or if such persons are students, order the investigating officer to commence disciplinary proceedings.
6. Schedule filing of briefs and proposed findings by the student and the university.
7. Produce a summary of the evidence.
8. Take any other actions necessary to conduct the hearing.

(c) Duties and powers of the Tribunal. Individual members of the Tribunal:

1. May challenge any ruling by the presiding officer and may, by majority vote, overrule such ruling but such matters unless otherwise convenient should be decided in closed session.
2. Shall, by majority vote, render written findings of fact, decision, and disciplinary sanction which does not exceed that specified by the statement of charges.
3. May examine witnesses.

(d) Evidence. Evidence having reasonable probative value shall be admitted, but irrelevant, immaterial and unduly repetitious evidence shall be excluded. The presiding officer and the Tribunal are not bound by common law or statutory rules of evidence.

(e) Burden of Proof. The burden of proof shall be on the university to establish by a preponderance of the credible evidence that conduct violative of University rules occurred.

(f) Record of the hearings. A record of the testimony and a file of the exhibits shall be made of all hearings conducted in accordance with this section. Either party may, at its own expense, have the record transcribed.

(g) Procedural rights of the student. The student shall have the right to confront and cross-examine witnesses against him/her, the right to present evidence and to be heard on his/her own behalf, the right to be represented by counsel at his/her own expense, and the right to a transcript of the proceedings at his/her own expense.

(h) Public hearings. Hearings to receive evidence or hear argument shall be public unless the student whose case is being heard requests a closed hearing or the Tribunal determines in extraordinary circumstances that it is necessary to hold a closed hearing, pursuant to sec. 66.77 (3)(e), Wis. Stats. to avoid unduly damaging the reputation of innocent persons. A record shall be made of the reasons for closing any hearing. The deliberations of the Tribunal shall not be public.

(i) Schedule of hearings. The presiding officer shall schedule the hearing as expeditiously as possible. The hearing shall be held on the date scheduled, except for good cause shown.

(j) Failure to proceed. Failure of a party to proceed shall constitute default. The Tribunal may either dismiss the charges, or, upon a prima facie showing, find that the student committed the conduct alleged.

(k) Decision.

1. The Tribunal's decision shall be rendered in writing within ten (10) calendar days after the close of the hearing, or within ten (10) calendar days after a written transcript is available if one of the parties requests a transcript pursuant to sec. 17.09(4)(g), and shall consist of a summary of the evidence, findings of fact, decision, and specification of the disciplinary sanction which does not

exceed that specified in the statement of charges.

2. The Tribunal's decision shall be served on the student in accordance with sec. 17.07(6) and on the chancellor's office.

3. The Tribunal's decision shall become final ten (10) calendar days after service on the student unless a timely appeal is filed pursuant to secs. 17.10 and 17.11 of this chapter.

17.10 APPEAL TO THE BOARD OF REGENTS. (1) The student or administration may appeal on the record to the Committee on Student Discipline of the Board of Regents. Said appeal must be filed within ten (10) calendar days of service upon the party of the decision appealed from and shall consist of written exceptions to the decision's findings of fact, decision, or disciplinary sanction.

(2) Upon receipt of the appeal and written exceptions, the Secretary of the Board shall transmit the written exceptions to the chairman of the Committee and shall cause the person with custody of the decision(s), file, exhibits, and transcript or recording of the hearing(s) to transmit them to the chairman of the Committee.

(3) If exceptions are filed under sec. 17.10(1), the Committee shall afford the parties an opportunity to file briefs and present oral argument.

(4) The Committee shall render written findings of fact, decision, and disciplinary sanction which does not exceed that specified by the statement of charges.

(5) The Committee's decision shall become final upon service upon the student in accordance with sec. 17.07(6).

(6) The Board of Regents reserves jurisdiction to review, upon its own motion, any disciplinary action against a student.

17.11 INTERMEDIATE APPEALS; CAMPUS OPTION (1) The chancellor of each institution is authorized, but not required by this section, after consultation with the elected Committee which serves as the faculty's executive arm and with the elected officers of the principal student organization, to establish appellate tribunals and procedures which are not inconsistent with this chapter for adjudication of appeals from decisions rendered in accordance with sec. 17.09. Such tribunals may include review by (i) an all-student, student-faculty, or all faculty committee, and/or (ii) review by the chancellor.

(2) An appeal to an appellate tribunal must be filed within ten (10) calendar days of service upon the party of the decision appealed from and shall consist of written exceptions to the findings of fact, decision, or disciplinary sanction.

(3) The parties shall have an opportunity to file briefs and present oral argument. Appeals shall be heard as soon as practicable but no later than seven (7) calendar days after the written exceptions are filed in accordance with sec. 17.11(2).

(4) A record shall be made of appellate tribunal proceedings.

(5) Appellate decisions shall be rendered within five (5) calendar days of the hearing and shall consist of a summary of the evidence, written findings of fact, decision, and disciplinary sanction which shall in no event be more severe than the sanction imposed by the Student Conduct Hearing Tribunal.

(6) Appellate decisions shall become final ten (10) calendar days after service upon the student in accordance with sec. 17.07(6) unless a timely appeal is filed either under this section, if further appeal is available, or under sec. 17.10.

(7) The student shall have the right at any time to appeal to the Regents in accordance with sec. 17.10. Intermediate appellate proceedings shall be terminated immediately upon the appellate tribunal's receipt of notice from the student that an appeal to the Regents has been filed.

17.12 TEMPORARY SUSPENSION. (1) A student may be temporarily suspended by the chancellor pending final action on the charges against him/her if his/her continued presence on campus would constitute a potential for serious harm to himself/herself or to the safety of other members of the University community or of University property.

Except as otherwise provided in sec. 17.12(3), the student shall be afforded an opportunity for a preliminary hearing prior to imposition of the temporary suspension.

In order to illustrate the types of conduct which warrant temporary suspension, the following examples are set forth. These examples are not meant to illustrate the only situations or types of conduct intended to be covered.

(a) A student who was arrested and charged with possession of controlled substances with intent to deliver was discovered to have large quantities of LSD, heroin, methamphetamines, or barbiturates in his/her university dormitory room.

(b) A student who was arrested for throwing a fire bomb into a University classroom building.

(c) A student who assaulted another student in the student union was arrested for engaging in conduct regardless of human life.

(d) A student whose behavior was judged by a psychiatrist to be psychotic, posing a threat to the safety of himself/herself or others.

(2) Before a temporary suspension may be imposed, the chancellor shall make an initial evaluation of the reliability of the information received and make such further investigation as circumstances permit. If the chancellor concludes that the alleged warrants temporary suspension of the student, he shall notify

the student of his intention to temporarily suspend him and, at the earliest practicable opportunity, provide the student with an opportunity to be heard.

(3) The chancellor shall maintain records of all attempts to notify the student in accordance with sec. 17.12(2), and, if all reasonable efforts to notify the student are unsuccessful, the chancellor may impose the temporary suspension without a preliminary hearing, provided, however, attempts to notify the student continue, and the student is afforded a preliminary hearing at the earliest practicable opportunity.

(4) Preliminary hearing.

(a) The preliminary hearing shall be held as soon as practicable.

(b) At the hearing, the student shall be given a statement of charges as required by sec. 17.07(2) (a) and (b) and a summary of the reason(s) for concluding that the alleged conduct warrants temporary suspension.

(c) The issues shall be limited to consideration of the reliability of the evidence against the student and whether the alleged conduct warrants temporary suspension.

(d) The chancellor's decision may be rendered orally but shall be confirmed in writing, as soon as practicable. The decision must be supported by credible evidence which is sufficient to indicate that there is probable cause to believe that the student engaged in the alleged conduct and that such conduct warrants temporary suspension.

(5) Accelerated hearing. The hearing on the charges as required by sec. 17.09 of this chapter shall be commenced not later than fifteen (15) calendar days after the imposition of the temporary suspension unless the student requests a delay of the hearing and continuation of the temporary suspension until a later date.

17.13 PROCEDURES FOR ACADEMIC MISCONDUCT. (1) The faculty and chancellor, in consultation with the elected officers of the principal student organization, shall by written regulation establish procedures for adjudicating alleged violations of sec. 17.06(2). Such regulations shall provide for an initial conference and a hearing before an Academic Misconduct Hearing Tribunal whose procedures are not inconsistent with the provisions of this section.

(2) Initial conference; student enrolled in course.

(a) When the instructor for a course believes that a student enrolled in that course has committed acts in violation of sec. 17.06(2), the instructor shall promptly schedule an initial conference with the student in accordance with this section. The purpose of the conference shall be to review the evidence against the student and to review the evidence and argument presented by the



student in his or her defense and to review the appropriateness of the academic response and/or disciplinary sanction which may be imposed by the instructor if, after the conference, he or she believes that the student has violated sec. 17.06(2). The instructor and the student may each be accompanied at the initial conference by one person of their choice.

(b) Notice. Reasonably in advance of the initial conference, the instructor shall inform the student in writing of the alleged offense and of the facts or conduct on which that allegation is based. The student shall be informed of the date, time and place of the initial conference. This notice shall be served on the student in accordance with sec. 17.07(6)(a) and shall be accompanied by a copy of this chapter and a copy of the institution's implementing regulations.

(c) Academic response or disciplinary sanction imposed by the instructor. The instructor may give the student a written reprimand and/or remove the student from the course without assignment of a grade; if the instructor believes that the student should be considered for more serious disciplinary sanctions, the instructor may request the investigating officer to proceed in accordance with sec. 17.07. The instructor may also impose an academic response if the student's own academic performance was affected by the academic misconduct. An academic response may not be imposed where the student's own academic performance was not affected such as in the following instances: (i) the student

assisted another student to engage in academic dishonesty, or (ii) the student stole a copy of an examination and the theft was discovered before the exam so that the student did not take the exam. In such cases, if the student is enrolled in the course, the instructor may impose the disciplinary sanctions permitted by this section or, if the student is not enrolled in the course, refer the matter to the investigating officer.

(d) Instructor's decision.

1. If, after the initial conference, the instructor believes that the student has not violated sec. 17.06(2), he or she shall so inform the student in writing.

2. If the instructor believes that the student has violated sec. 17.06(2), he or she shall inform the student of his or her decision in writing with a copy to the investigating officer; such decision shall be served in accordance with sec. 17.07(6)(b) and shall include (i) a full explanation of the facts on which the instructor's conclusions were based; (ii) specification of the disciplinary sanction or academic response imposed; (iii) further action in the case, if any, which the instructor has recommended to the investigating officer; and (iv) notice that the decision may be appealed to the Academic Misconduct Hearing Tribunal.

(3) Offenses committed by a student not enrolled in the course. When the instructor for a course believes that acts which violated sec. 17.06(2) have been committed by a student not enrolled in the course he or she shall refer the matter to the investigating officer who shall proceed in accordance with sec. 17.07.

(4) Appeal from the instructor's decision. The instructor's decision may be appealed to the Academic Misconduct Hearing Tribunal either as to the issue of whether the student did engage in conduct as alleged or as to the disciplinary sanction. Appeals shall be in writing and must be filed with the office or person designated by the campus regulations within ten (10) days of service of the instructor's decision; while such appeal is pending, the academic response and/or disciplinary sanction shall be stayed and no grade assigned for the course. If the student does not file an appeal within ten days of service of the instructor's decision, the instructor's decision shall become final.

(5) Academic Misconduct Hearing Tribunal.

(a) Membership. Tribunal membership shall be determined in accordance with the regulations adopted pursuant to sec. 17.13(1).

(b) Jurisdiction. The Tribunal shall hear appeals under sec. 17.13(4) and such other allegations of violation of sec. 17.06(2) as may be brought before it by the investigating officer.

(c) Procedures. Tribunal proceedings shall be regulated by the same procedures established by sec. 17.09 for Student Conduct Hearing Tribunal, except that:

1. For cases where the sanction sought does not include suspension or expulsion, the regulations adopted under sec. 17.13(1) may provide for procedures which are less rigorous but which provide at least that the student (i) may be represented by a person of his or her choice, including legal counsel, at his or her own expense, (ii) shall be afforded written notice of the offense with which he or she is charged and of the facts or conduct on which that charge is based, (iii) shall be afforded advance written notice of an opportunity for a hearing at which the evidence against the student shall be reviewed and at which the student shall have an opportunity to present evidence and argument, including a written statement, to refute the charge, and (iv) shall be given a written decision which shall include findings of fact and conclusions.

2. The sanction imposed by the Tribunal may not exceed the sanction imposed by the instructor unless the case is being heard in accordance with sec. 17.13(6)(b), in which event it shall not exceed the sanction requested by the investigating officer; further, the Tribunal may not modify the academic response imposed by the instructor unless the Tribunal finds that no violation of sec. 17.06(2) occurred, in which event the instructor shall eliminate any academic response which was based on the alleged academic misconduct.

(6) Role of the Investigating Officer with regard to academic misconduct. The investigating officer:

(a) Shall receive and maintain copies of letters sent



by instructors in accordance with sec. 17.13(2)(d) 2.

(b) May proceed in accordance with sec. 17.07, including the filing of charges before the Academic Misconduct Hearing Tribunal asking for suspension or expulsion:

1. Where the student alleged to have violated sec. 17.06(2) was not enrolled in the course against which the offense was committed.

2. Where the violation found by the instructor was of such an aggravated nature that disciplinary sanctions which could not be imposed by the instructor appear to the investigating officer to be warranted and not more than sixty (60) days have elapsed from the filing of the instructor's decision pursuant to sec. 17.13(2)(d) 2.

3. Where there are multiple instances shown of a student's academic misconduct and not more than sixty (60) days have elapsed from the filing of an instructor's decision pursuant to sec. 17.13(2)(d) 2 on the last instance.

17.14 NOTICE TO STUDENTS. Each campus shall publish and make freely available to students, a copy of the foregoing UW System Disciplinary Code together with (i) an Appendix reprinting the UW System Administrative Code, (ii) any amendments to these two Codes that are made after the Board of Regents adoption of a Disciplinary Code, and (iii) any provisions that have been adopted by the particular campus pursuant to the campus options allowed by this Disciplinary Code, and any other supplementary provisions not inconsistent with this Code.

Student Records

Release of Student Information

The Administrative Council of the University of Wisconsin-Stevens Point on June 4, 1974 approved guidelines concerning release of information about students as developed by the Committee on Records Management and Transcript Adequacy of the American Association of Collegiate Registrars and Admissions Officers. Questions should be addressed to the Registrar. See **The Student Handbook** for the policy.

The Family Education Rights and Privacy Act of November 20, 1974 (Buckley Amendment) entitles students to review "official records, files, and data directly related" to the student which the university maintains. The student may also request a hearing regarding any alleged "inaccurate, misleading, or inappropriate" information. In most circumstances, the university will not release information from student records to third parties without the student's consent or notice to the student. The "Buckley Amendment" is printed in **The Student Handbook.** Copies are also available at the reservation desk at the library and at the Office of Student Services and Information, Room 104, Student Services Building.

Other Services and Activities

New-student orientation is a two-day orientation program which new students (freshmen) and their parents are expected to participate in.

The program is designed to assist new students in adapting to university life as quickly and as easily as possible; to know the university, its customs and traditions, its curriculum, its policies, its personnel (both student and faculty) and its student life.

Opportunities will be provided for each new student to meet with an academic adviser and prepare his class schedule for the first semester. Students will also have opportunities to meet upperclass students as well as other new students in small discussion groups.

A special program has been planned for parents with emphasis placed on that which will be of most interest to them. Presentations on such topics as student health programs and health insurance, financial aid opportunities, housing and dining programs and parent-student understanding through the college years are made by the faculty and staff of the university.

While on campus, new students and their parents will be housed in residence halls and will use the dining facilities at the university.

Inquiries regarding the orientation of new students and of the "non-traditional students" are handled by the Office of Student Services and Information.

The **Center for Communicative Disorders** is located in the College of Professional Studies Building. The center staff provides students with a variety of services. It conducts testing of incoming students in order to identify problems of speech and hearing, and offers diagnostic and therapeutic services to university students. Students are encouraged to contact the center for personal assistance with their speech and/or hearing problems.

The diagnosis and treatment of speech and hearing difficulties are also extended to the people of Wisconsin. Some of the problems encountered in the center are stuttering articulation defects, cerebral palsy, cleft palate, voice disorders, hearing problems, language disorders, and aphasia.

The center, in conjunction with its educational program, provides practicum experience for students majoring in Communicative Disorders.

The **Office of Computing Services** is located in the Park Student Services Center. Student and faculty users may choose from a wide variety of capabilities and services provided by a professional staff and a large-scale Burroughs B6700 computer system. An extensive library of application programs is available for problem solving and research support. Users may write their own programs in a variety of languages including FORTRAN, BASIC, PL/1, COBOL, or ALGOL. Services are accessible on-line from time-sharing terminals located in classroom/office buildings as well as on a "while-you-wait" batch basis in the Computing Laboratory in the basement of the Student Services Building.

A Reading and Study Skills Laboratory is available for all students offering the opportunity for development of reading speed and comprehension, reading flexibility, lecture note-taking, study schedules, and examination preparation. Laboratory services may be arranged through the Counseling Center or the Reading and Study Skills Laboratory, room 307 in the Collins Classroom Center.

The **Writing Laboratory** is available to assist students in themes, research papers, letters, outlines, term papers, and resumes. The laboratory is in room 306 in the Collins Classroom Center, phone 346-3568.

The **Faculty Advising Center for Students (FACS)** is staffed by faculty well-versed on academic matters and has access to curricular information about any program offered on this campus. The center is located in 105 of the Collins Classroom Center, phone 346-2321.

The **Museum of Natural History,** located in the Learning Resources Building, functions in research, teaching, and community service. The curators have trained and done research in their special disciplines, including entomology, ichthyology, herpetology, ornithology, mammalogy, anthropology, and botany. Numerous exhibits on natural history are housed in the Museum. The August J. Schoenebeck Egg Collection, one of the largest in North America, including eggs of the extinct or nearly extinct passenger pigeon, ivory-billed woodpecker, and whooping crane, is on display. Three dinosaurs, exotic birds and butterflies, Native American implements, and many Wisconsin animals are represented. Each month many school children, local citizens, and university students visit the museum, which is the foremost university museum of natural history in the state.

The popular **Museum Lectures Series** presents talks on expeditions, animals, plants, and various aspects of museum work. Open to the public without charge, these talks are usually given monthly on a Monday evening.

A minor in Museum Techniques is offered. See the entry in the section of the catalog headed COURSES OF INSTRUCTION.

The **News and Publications Service** disseminates information concerning the offerings and activities at this university through the mediums of newspapers, radio, television, and publications of all types.

Special services include the release of news stories about students for their home town papers, scheduling of students and faculty members for appearances on area television programs, and publication of the faculty newsletter which is distributed each week.

The **Pointer,** the university newspaper, is produced weekly by a student staff recruited by the student editor and advised by a faculty member. The Pointer is the student voice on campus and gives the interested student an opportunity to learn and work in writing, editing, proofreading, layout, advertising and photography. Credit is available for students who elect to work under supervision of a Department of Communication faculty member.

Under the sponsorship of the Department of Communication, participation in **intercollegiate debate and forensics** is open to all students in the university, on a credit or a non-credit basis.

Participation in various phases of **radio and television** is open to all students in the university. Under the sponsorship of the Department of Communication, study is available on either a credit or non-credit basis.

The Campus Radio Station, WWSP-FM, broadcasts daily to the Stevens Point area. This educational station provides opportunities for experience in administration, programming and production. Each semester 50 to 75 students assume active roles on the staff of WWSP-FM.

University Film Society is a student-sponsored organization working closely with faculty to develop greater campus-wide interest and knowledge in the film medium.

Campus Television is also a student sponsored organization which produces weekly programming over the local cable television station. Students have an opportunity to produce, direct, and star in almost any type of program they wish to air.

University Broadcasting is responsible for providing facilities and staff to assist academic departments, administrative departments, and community groups in the areas of television and radio. In addition, University Broadcasting, through extensive cablecasting of public affairs and educational programs, helps to extend the university's boundaries into the surrounding communities. A staff of producers, directors, and technicians is also available as consultants to assist the university community in utilizing the broadcast medium within the various academic areas.

Projects and equipment are available on a broad basis jointly between the Department of Communication and University Broadcasting. For course work in these areas see the Department of Communication under "Courses of Instruction." Special workshops open to all students are available in all areas of Radio, Television, and Film.

The **Department of Military Science** offers students theory and practical work in management and leadership as required for military officers and of value in civilian pursuits. Courses are available to all students for academic credit, not just those enrolled in the Army ROTC program. A wide variety of allied student activities plus scholarships, a flight program and financial assistance are available for ROTC participants. Students on scholarship and those in the final two years of the program incur a service obligation.

Athletics - Robert H. Krueger, Director

The university sponsors the following sports on an intercollegiate basis for men: football, cross-country, and golf in the fall; basketball, hockey, swimming, and wrestling in the winter; and baseball, tennis, and track in the spring. Of these, hockey is the only sport that is not currently run on a conference basis. Nationally, the

university is affiliated with the NAIA and, with the rest of the colleges in Wisconsin, is assigned to District 14.

The university sponsors the following sports on an intercollegiate basis for women: field hockey, swimming, tennis, and volleyball in the fall; basketball in the winter; and track in the spring. The governing body for athletics is the Wisconsin Women's Intercollegiate Athletic Conference (WWIAC) and is made up of all universities and colleges in Wisconsin.

Athletes who fulfill the requirements established by the coaches and approved by the Athletic Committee are awarded an "S" and a certificate. Those who have won a letter in a varsity sport are eligible to become members of the "S" Club, an honorary organization from the standpoint of membership, a service organization from the standpoint of function. The "S" Club provides some of the awards granted by the university, stimulates interest in varsity athletics, and participates in a variety of activities calculated to benefit the whole school.

Club Sports and Intramurals

There is increased interest in the **club sport program** which currently offers opportunities for competition in soccer, bowling, gymnastics, and fencing. This program will expand in direct proportion to the interest of the students.

An **intramural program** has been planned to provide competitive and non-competitive activities mainly for those students who do not participate in intercollegiate athletics. Intramural athletic teams may be formed by residence halls, fraternities, religious organizations, independent groups, etc. A wide range of activities is provided to meet the needs and interests of all students.

Intramural activities for men include touch football; horseshoes; cross country; punt, pass, and kick; swimming; volleyball; racketball; foul throw; handball; basketball; indoor track; bowling; badminton; relays, and slow-pitch softball.

Intramural activities for women are planned by the Women's Recreation Association and include tennis, flag football, volleyball, table tennis, basketball, racketball, badminton, archery, swimming, track, and softball.

Co-recreational activities include tennis, racketball, and table tennis.

Special interest groups are also organized through the intramural program. They include the American Red Cross club, Judo club, Weight Lifting club, and Jog-a-long program.

Buildings

Old Main, the central portion of which is the original building opened in 1894, includes administrative offices, an auditorium and general classrooms.

Nelson Hall was opened in 1916 as the first dormitory in what was the state university system. It now houses the offices of the department of English, the Counseling Center, and the Health Service.

Located on Reserve Street a few blocks north of the Main Building, the **Science Building** houses the chemistry, geography and geology, physics, paper science, and psychology departments. It features a Foucault pendulum, planetarium, observatory, observation deck, facilities for radiation research, weather panel with remote recording instruments, and a cartographic reproduction center, a synoetics laboratory, and an operating room for experimental psychology.

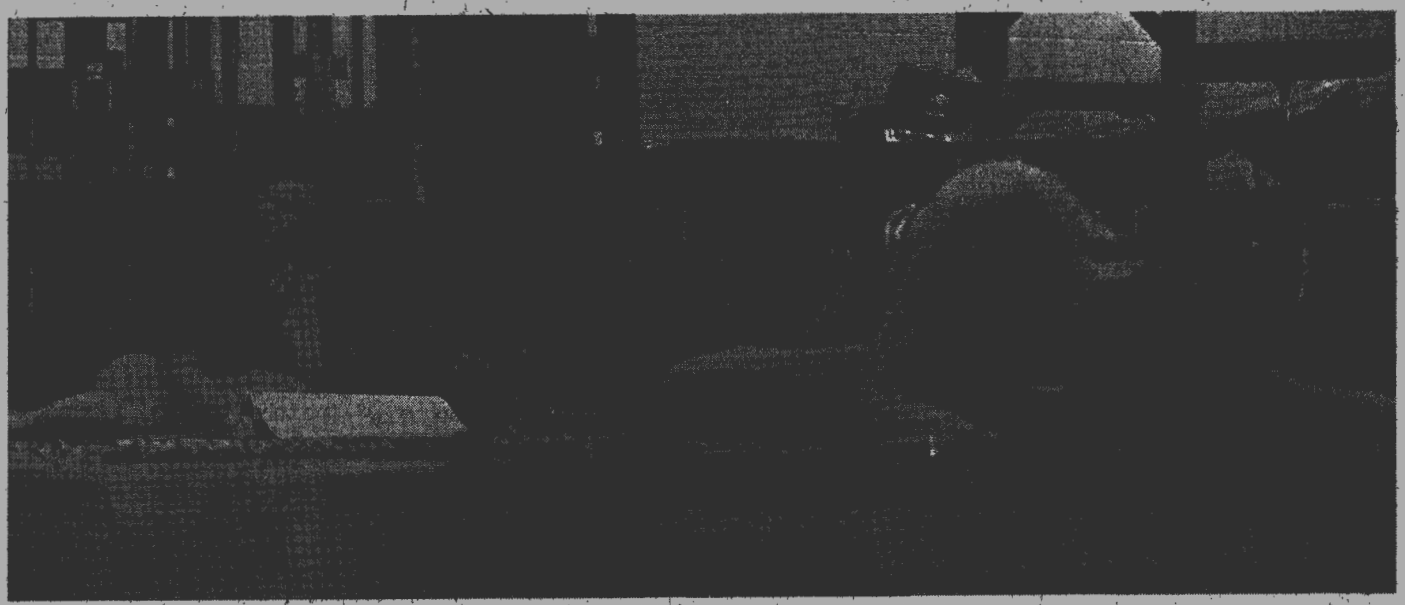
The **Joseph V. Collins Classroom Center** is located on Fourth Avenue at Isadore Street. It houses the business education, economics, foreign language, mathematics, political science, and sociology and anthropology departments, along with general classrooms and faculty offices.

The building housing the **School of Health, Physical Education, Recreation, and Athletics** is located at the corner of Fourth Avenue and Reserve Street, just north of the Science Building. It includes the Berg and Quandt Gymnasiums, an indoor practice area, swimming pool, handball courts, classrooms, and other specialized facilities.

The College of Fine Arts Building is located between Portage and Franklin Streets at Isadore Street. It houses the departments of art, theatre arts and dance, and music. Major features include the Edna Carlsten Art Gallery, the Peter J. Michelsen Concert Hall, and the Warren Gard Jenkins Theater. Also included are art studios, music studios, music practice rooms, and rehearsal rooms variously equipped for band and orchestra, choir, theater, opera, and dance.

The College of Natural Resources Building contains offices, laboratories, and research facilities for the College of Natural Resources and the Department of Biology. It is located on Franklin Street opposite the Memorial Forum.





The College of Professional Studies Building, located on Fourth Avenue between the Science Building and the Collins Classroom Center, houses the School of Communicative Disorders, the School of Education, the School of Home Economics, and the History Department offices. In addition to general classrooms, it provides special facilities for Home Economics laboratories and for the Center for Communicative Disorders.

The James H. Albertson Center for Learning Resources is located in the hub of the academic area, on Reserve Street between Portage and Franklin Streets. It houses the coordinated services of the Library, Documents, Area Research Center, Instructional Media, and University Broadcasting.

The Byron B. Park Student Services Center is located on Fremont Street just north of the Main Building. It houses the offices of Admissions, Registration and Records, Student Housing, Student Financial Aids, Controller, Cashier, Accounting, and Computing Services, the offices and facilities of the Military Science Department, and PRIDE.

University Archives, located in the Student Services Center, houses and services for campus use the records pertinent to the history of the university, including a collection of university and faculty publications and a file of the minutes and proceedings of faculty meetings.

The Water Resources Laboratory is a specialized research center, located off-campus in the town of Plover and is shared by the Department of Biology and the College of Natural Resources. It houses laboratories such as streambeds, fish tanks, and aquariums.

The Maintenance and Materiels Center houses the maintenance shops for each of the trades. The Purchasing Department is located here, in addition to a large Central Stores facility.

The George Stien Building, located on Maria Drive between Isadore Street and Reserve Street, houses the heating facilities for the entire university. The office for the Executive Director of General Services, the protection and security office, and the switchboard are also located in this building.

The Home Management House on Main Street serves as a laboratory for the study and application of theories and principles of management.

The Memorial Forum is located on the mall between the Albertson Center for Learning Resources and the Fine Arts Building.

Student Expenses

Robert W. Taylor, Executive Director for Financial Services and Controller

Academic Fees, per semester, are quoted for the 1975-76 school year and for the 1976 summer Session, and are subject to change.

Special students will be charged, for all courses taken, at the rate of the highest level course in which they are enrolled. Courses numbered 100 to 499 are undergraduate courses; 500-799 are graduate courses.

Students admitted to the Graduate College must pay graduate fees.

Students whose fees are paid in full by agencies outside the university (Vocational Rehabilitation, National Science Foundation, Veterans Administration in certain cases, ROTC, PRIDE, Indian scholarships, etc.) must have the notification of their eligibility sent to the University Cashier by the first day of classes, in order that proper arrangements can be made for the students to attend classes without payment of the fees by the student.

The following tables list the fees in the various categories of students:

I. Regular Session—UNDERGRADUATE—Wisconsin students

CREDIT HOURS	COURSE FEES	UNIVERSITY CENTER	ACTIVITY	TEXT RENTAL*	STUDENT HEALTH	FACILITY RESERVE	TOTAL
1	21.75	2.50	2.50	.80	2.50	.25	30.30
2	43.50	5.00	5.00	1.60	5.00	.50	60.60
3	65.25	7.50	7.50	2.40	7.50	.75	90.90
4	87.00	10.00	10.00	3.20	10.00	1.00	121.20
5	108.75	12.50	12.50	4.00	12.50	1.25	151.50
6	130.50	15.00	15.00	4.80	15.00	1.50	181.80
7	152.25	17.50	17.50	5.60	15.00	1.75	209.60
8	174.00	20.00	20.00	6.40	15.00	2.00	237.40
9	195.75	22.50	22.50	7.20	15.00	2.25	265.20
10	217.50	22.50	22.50	8.00	15.00	2.50	288.00
11	239.25	22.50	22.50	8.80	15.00	2.75	310.80
12 or more	262.00	22.50	22.50	9.60	15.00	3.00	334.60

*Plus 80¢ for each additional credit.

II. Regular Session—UNDERGRADUATE—Out-of-state students

CREDIT HOURS	COURSE FEES	UNIVERSITY CENTER	ACTIVITY	TEXT RENTAL*	STUDENT HEALTH	FACILITY RESERVE	TOTAL
1	81.25	2.50	2.50	.80	2.50	.25	89.80
2	162.50	5.00	5.00	1.60	5.00	.50	179.60
3	243.75	7.50	7.50	2.40	7.50	.75	269.40
4	325.00	10.00	10.00	3.20	10.00	1.00	359.20
5	406.25	12.50	12.50	4.00	12.50	1.25	449.00
6	487.50	15.00	15.00	4.80	15.00	1.50	538.80
7	568.75	17.50	17.50	5.60	15.00	1.75	626.10
8	650.00	20.00	20.00	6.40	15.00	2.00	713.40
9	731.25	22.50	22.50	7.20	15.00	2.25	800.70
10	812.50	22.50	22.50	8.00	15.00	2.50	883.00
11	893.75	22.50	22.50	8.80	15.00	2.75	965.30
12 or more	975.00	22.50	22.50	9.60	15.00	3.00	1047.60

*Plus 80¢ for each additional credit.

III. Regular Session—GRADUATE—Wisconsin students

CREDIT HOURS	COURSE FEES	UNIVERSITY CENTER	ACTIVITY	STUDENT HEALTH	FACILITY RESERVE	TOTAL
1	35.00	2.50	3.25	3.25	.35	44.85
2	70.00	5.00	6.50	7.50	.70	89.70
3	105.00	7.50	9.75	11.25	1.05	134.55
4	140.00	10.00	13.00	15.00	1.40	179.40
5	175.00	12.50	16.25	15.00	1.75	220.50
6	210.00	15.00	20.50	15.00	2.10	262.60
7	245.00	17.50	22.50	15.00	2.45	302.45
8	280.00	20.00	22.50	15.00	2.80	340.30
9 or more	316.00	22.50	22.50	15.00	3.00	379.00

IV. Regular Session—GRADUATE—Out-of-State students

CREDIT HOURS	COURSE FEES	UNIVERSITY CENTER	ACTIVITY	STUDENT HEALTH	FACILITY RESERVE	TOTAL
1	112.75	2.50	3.25	3.75	.35	122.60
2	225.50	5.00	6.50	7.50	.70	245.20
3	338.25	7.50	9.75	11.25	1.05	367.80
4	451.00	10.00	13.00	15.00	1.40	490.40
5	563.75	12.50	16.25	15.00	1.75	609.25
6	676.50	15.00	20.50	15.00	2.10	729.10
7	789.25	17.50	22.50	15.00	2.45	846.70
8	902.00	20.00	22.50	15.00	2.80	962.30
9 or more	1015.00	22.50	22.50	15.00	3.00	1078.00

V. Summer Session (1976)

	WISCONSIN STUDENTS		OUT-OF-STATE STUDENTS	
CREDITS	UNDERGRADUATE	GRADUATE	UNDERGRADUATE	GRADUATE
1	28.85	40.95	87.85	118.95
2	57.70	81.90	175.70	237.90
3	86.55	122.85	263.55	356.85
4	113.90	162.30	349.90	474.30
5	140.75	201.25	435.75	591.25
6	167.60	205.20	521.60	595.20
7	168.50	205.20	522.50	595.20
8	169.40	205.20	523.40	595.20
9	170.30	240.20	524.30	708.20
10	193.20	275.20	606.20	821.20
11	216.10	275.20	688.10	821.20
12	239.00	275.00	770.00	821.20

Determination of Resident or Non-Resident Status

The statute regarding the matter of the payment of additional fees by students who are not residents of Wisconsin is quoted below. It is the **responsibility of the student** to register correctly, as a resident or non-resident, under this law. Interpretation of this statute is the responsibility of the Director of Admissions. Any questions about it should be directed to him.

36.27 (2) NON-RESIDENT TUITION EXCEPTIONS. (a) Any adult student who has been a bona fide resident of the state for 12 months next preceding the beginning of any semester or session for which such student registers at a university or center, or any minor student whose parents have been bona fide residents of the state for 12 months next preceding the beginning of any semester or session for which such student registers at a university or center, or any minor student whose natural parents are divorced or legally separated who has resided substantially in this state during his years of minority and at least 12 months next preceding the beginning of any semester or session for which such student registers at a university or center, or any minor student who is an orphan and who has resided substantially in this state during his years of minority and at least 12 months next preceding the beginning of any semester or session for which such student registers at a university or center or whose legal guardian has been a bona fide resident for 12 months next preceding the beginning of any semester or session for which such student registers at a university or center, or any minor student under guardianship in this state pursuant to ch. 48 or 880 who has resided substantially in this state during his years of minority and at least 12 months next preceding the beginning of any semester or session for which such student registers at a university or center, is while he continues a resident of this state entitled to exemption from non-resident tuition, but not from incidental or other fees.

(b) Non-resident members of the armed forces and persons engaged in alternative service who are stationed in this state for purposes other than education and their spouses and children are entitled to the exemption under par. (a) during the period that such persons are stationed in this state.

(c) Any student who is a graduate of a Wisconsin high school and whose parents are bona fide residents of this state for 12 months next preceding the beginning of any semester or session for which the student registers at a university or center or whose last surviving parent was a bona fide resident of this state for the 12 months preceding his death is entitled to the exemption under par. (a).

(d) Any person who has not been a bona fide resident of the state for 12 months next preceding the beginning of any semester or session for which such person registers at a university or center, except as provided in this subsection, is not exempt from payment of the non-resident tuition.

(e) In determining bona fide residence at the time of the beginning of any semester or session and for the preceding 12 months the intent of the person to establish and maintain a permanent home in Wisconsin is determinative. In addition to representations by the student, intent may be demonstrated or disproved by factors including, but not limited to, filing of Wisconsin income tax returns, eligibility to vote in Wisconsin, motor vehicle registration in Wisconsin, possession of a Wisconsin operator's license, place of employment and self-support. Notwithstanding par. (a), a student who enters and remains in this state principally to obtain an education is presumed to continue to reside outside this state and such presumption continues in effect until rebutted by clear and convincing evidence of bona fide residence.

Payment of Academic Fees

Instructions on fee payments are included with registration material. A partial-payment plan is available for both semesters. Students selecting the partial-payment plan must sign a "credit agreement" card. Details of the plan are included in the Time Table.

For students **NOT** on the partial-payment plan, payment of the total amount of the fees is required before the first day of classes. A **penalty for the late payment** of fees is assessed if the fees are not paid before the second week of classes, as follows: Payment during the second week, $20 penalty; during the third and fourth week, $30 penalty; after the fourth week, cancellation of registration.

Students who are more than **30 days delinquent** in the payment of an account may be **suspended** from the university. Students who are delinquent in their financial obligations will not be allowed to receive grade reports, transcripts, or diplomas, nor may they enroll under the partial-payment plan for any future term until these obligations are removed.

Refunds

All academic fee payments are refundable provided the Registrar is notified in writing prior to the first day of classes that the registration is being cancelled. If such notification is **NOT received** from the student before the first day of classes a withdrawal fee of $20 will be charged to the student's account when the withdrawal is processed.

Adjustments of academic fees for students who **withdraw from the university** are calculated on the following basis:

In either semester: (12 weeks or more):
During the first week of classes, 100% of the total semester charges, less $20 withdrawal fee.
During the second week of classes, 80% less $20 withdrawal fee.
During the third week of classes, 60% less $20 withdrawal fee.
During the fourth week of classes, 40% less $20 withdrawal fee.
After the fourth week of classes, no refund.

In the Summer Session: (six weeks or more):
During the first week of classes, 100% of the total charges, less $10 withdrawal fee.
During the second week of classes, 70% less $10 withdrawal fee.
During the third week of classes, 30% less $10 withdrawal fee.
After the third week of classes, no refund.

In sessions of shorter duration, the refund will be pro-rated according to the schedules above.

A student whose **withdrawal from a class** results in a reduction of fees will receive an adjustment of the difference according to the tables above. In such cases, the withdrawal fee does not apply.



A refund of the room reservation deposit of the academic year contract will be granted if requested prior to July 1. A refund of the room reservation deposit on the second semester contract will be granted if requested prior to December 1. There is a one semester option available to juniors and seniors only. Refund of the deposit is granted at the end of the semester.

Refunds of fees for room and board are made on a pro-rata basis. In all cases the refund is calculated from the Monday following the date of termination of the contract.

To withdraw from the university, a student must report to the Office of Student Affairs to initiate the withdrawal procedure.

To terminate a residence hall assignment but remain in school, a student must report to the Housing Office. A release from the residence hall agreement is granted for the following reasons: marriage, student teaching, or participation in curricular programs which require off-campus living.

Housing and Dining Services

Facilities are available in the residence halls and dining services at the following rates: (The rates shown are for the 1975-76 academic year and are subject to change.)

Room $280.00 per semester per student for double occupancy, $560.00 for the academic year. This includes bed linens and their laundering. Students provide their own pillows, blankets, and towels.

Board - There are three plans available:

1. $325 per semester ($650 for the academic year). This provides 20 meals per week - three meals a day, Monday through Saturday, with a brunch and dinner on Sunday.
2. $307 per semester ($614 for the academic year). This provides 15 meals per week - three meals a day, Monday through Friday.
3. A coupon program which enables a student to pay for meals in the dining rooms and fast food lines of all three centers - $325 for 14 coupon books, or $300 for 12 coupon books.

All students who live in the residence halls must eat in the University's dining centers. All students (whether living on campus or off) may purchase any of the three board programs. Students no longer need to pay sales tax on any of the board programs.

These rates provide room and dining service only during periods in which the university is in session. They do not provide for vacation or other closed periods. The rates indicated above are subject to change without notice.

Information and housing application forms are mailed to all students admitted to the university. The housing application should be returned as early as possible, with a $75.00 room reservation deposit. The applications are processed in the order in which they are received.

Miscellaneous Fees

Certain courses require **additional** fees to cover the cost of materials and services beyond those usually provided, such as gold or silver or extra canvas in art courses, field trips, or rental of horses, bowling alleys, and ski tows in some physical education courses.

A fee of $5.00 will be assessed for a check which is returned by a bank as a non-negotiable item.

A fee of $2.00 will be assessed if it becomes necessary to replace a lost identification card. This fee is non-refundable.

A withdrawal fee of $20.00 will be charged to any student who withdraws from the university on the first day of classes or thereafter, in order to cover costs involved in processing the withdrawal.

A service charge on the unpaid balance will be charged to students who participate in the partial payment plan.

Financial Aids, Philip C. George, Director

Requests for financial aid from entering freshmen and transfer students will be considered only after a student has been officially admitted to the university.

An entering freshman should make application for financial aid on the Combined Admissions-Financial Aid Application form. (Part II). This form along with the Wisconsin Financial Aid Form (FAF) must be mailed as directed. All undergraduate students must also apply for the Basic Educational Opportunity Grant. These forms are available through the high school guidance office or the Office of Student Financial Aids at the university.

A transfer student should obtain the necessary application blank from the Office of Student Financial Aids.

A continuing student in the university may secure application materials from the Office of Student Financial Aids. Returning undergraduate students who have previously received aid will automatically be sent a new application blank sometime during the latter part of the fall semester. Any student who does not receive an application blank may pick one up at the Office of Student Financial Aids.

In all cases, the financial aid application form and the Wisconsin Financial Aid Form (FAF) provide the needed data for a decision as to the student's eligibility and the type of assistance to be proposed. A financial aid proposal will normally be mailed in May to each recipient outlining the amount and kind of aid he may receive. If there is a delay of Federal appropriations, the formal proposal may not be sent until mid-summer. However, in this case a letter of eligibility for aid will probably be mailed in May or when the completed application is received. A signed copy of this proposal must be returned by the deadline date to indicate acceptance or rejection of the proposal. Failure to return the proposal by the deadline is tantamount to a rejection.

Financial aid is not automatically renewed for succeeding years. The student must file a new application for each year or summer session.



Loans, Grants, and Scholarships

The following specific programs may be incorporated into the financial aid proposal, but please keep in mind that all aid proposed by the Office of Student Financial Aids is based on student need only. Except where otherwise noted, students must carry at least a half-time course load to maintain eligibility for aid.

Basic Educational Opportunity Grant: Awarded on the basis of need and family income, the Basic Grant is applied as a credit to the student's billing account with the university. Application is made on a separate application form available at the high school guidance office.

Wisconsin Higher Education Grant: Available to freshmen and upperclassmen in limited numbers. The value of each grant is variable depending upon need. The grant ranges from $100 to $1500 for an academic year. Grants are not automatically renewable. Awards are determined by the Wisconsin Higher Educational Aids Board.

Supplemental Educational Opportunity Grant: Restricted by Federal guidelines to exceptionally needy students. It may be continued for four full years, and the award may range from $200 to $1000 per year, not to exceed one-half of the student's entire need.

National Direct Student Loans: Up to $1500 annually for undergraduate students, up to $2500 for graduate students (both dependent upon need). Loan is interest free until nine months after leaving school; interest then is charged at 3% during the repayment period which may not exceed 10 years and 9 months. A cancellation feature applies to those entering teaching for special duty such as teaching the handicapped or teaching in economically deprived areas and for military service. Students may be eligible for additional loans on a year to year basis. Funding limitations may reduce maximum loan amounts.

Wisconsin State Loans: Up to $2500 for undergraduate students, or graduate students. Available to Wisconsin residents only, based upon need, interest at the rate of 7% is charged during the repayment period. Repayment begins nine months after school attendance ceases.

Wisconsin Tuition Waivers: A limited number of students from out of Wisconsin may qualify for a partial waiver of the non-resident fee. Such waivers are considered for non-residents during the regular application review and vary in amount from $200 to $1200, based on demonstrated need. Selected foreign students are awarded a waiver of all fees except those assessed for room and board and on-campus charges. Full-time attendance is required.

Guaranteed Loan Program: Another source of financial aid for students not eligible on a strict need basis is through local banks, savings and loan associations, and credit unions. The federal government provides a guarantee of repayment and an interest subsidy if the borrower's parents can demonstrate a financial need. These loans are available in amounts of $100 to $2500. Applications are obtained from the bank and a need analysis statement is available at the Office of Student Financial Aids.

Emergency Loans: An emergency loan fund is maintained for short term, urgent credit needs. Any student desiring such a loan must see the professional staff of the Office of Student Financial Aids.

College Work Study Program Jobs: Students who qualify for federal aid and desire employment may be offered a job under this program. No student may be employed more than 15 hours per week while classes are in session and no more than 40 hours per week during vacation periods.

Other Campus Employment: Additional opportunities for employment on campus are available through the regular student assistance program and the university food service facilities. Interested students should contact individual department chairmen and the university food service directly or contact the Office of Student Financial Aids, where a number of community jobs are listed.

Veterans Benefits

A Veterans Representative is available in the Admissions office to answer questions or to assist in applying for benefits.

Students attending school under the G.I. Bill will receive payment from the Veterans Administration according to the schedule below:

Sem hrs. carried		No. of dependents			
Undergrad	Grad	0	1	2	Add'l depend.
12+	9+	*$270	$321	$366	+$22 ea
9-11	6-8	203	240	275	+ 17 ea
6-8	5	135	160	182	+ 11 ea
1-5	1-4	(Lump sum for fees)			

*per month

Full GI benefits for full-time veteran students participating in the last two years of the Army ROTC program are in addition to the $100 per month ROTC stipend or the ROTC scholarship.

VA Educational Loan

Up to $600 per academic year. Loan is interest free until 9 months after schooling has stopped and 8% thereafter. Applications are available through the Veterans Representative.

VA Work Study

Veterans enrolled full-time may apply to work up to 250 hours in a semester at $2.50/hour. Applications are available through the Veterans Representative.

VA Tutoring Assistance

The VA pays up to $60/month for tutorial assistance for eligible veterans. Maximum assistance is $720. Applications are available through the Veterans Representative.

Wisconsin Veterans Economic Assistance Loan: Up to $3000 at 3% interest for educational or other reasonable purposes. Applications are available through the County Veterans Service Office.

Wisconsin Veterans Vietnam Era Educational Grant: For full time undergraduate veterans who served on active duty for 90 days or more since August 5, 1964. Applications are available at the Office of Student Financial Aids.

Wisconsin Veterans Part-Time Study Grant: Wisconsin residents who are war-time veterans are eligible for a part-time study grant from the State of Wisconsin. The grant covers the cost of fees and textbooks for undergraduate students enrolled for less than twelve credits. Graduate students may also qualify if they are enrolled for less than eight credits, and if they are no longer eligible for the G.I. bill. Application for the grant should be made through the county Veterans Service Officer.

Army ROTC Scholarships: ROTC Scholarships are available to qualified students in Military Science. Scholarships—which include full tuition, books, fees, and a non-taxed stipend of $100.00 per month—range in value to about $6,500.00 for the resident student or $11,000.00 for the non-resident. Scholarships are awarded on a competitive basis, with the full four-year scholarships being awarded to graduating high school seniors and the shorter scholarships going to students participating in the ROTC program. Scholarship recipients are required to accept a Regular Army Commission as a Second Lieutenant and spend four years on active duty.



Special Services

The staff of the Office of Student Financial Aids is available for students and parents who desire consultation on financial aid programs. Appointments may be made with the office located in the Student Services Center.

The university maintains an account to accommodate agencies and organizations desiring to pay stipends to a student through the university. Any such agency is welcome to avail itself of this service.

The University Foundation is authorized to receive tax deductible contributions for private scholarship and loan programs.

Admission

John A. Larsen, Director of Admissions

Entrance Requirements for Freshmen

Freshman applicants must satisfy the following minimum requirements to be considered for admission:

I. Graduation from a recognized high school or its equivalent.

A. A recognized high school is one which either is accredited by a regional accrediting association or state university, or is recognized or accredited by a state department of public instruction or its equivalent.

B. An applicant who has not graduated from a recognized high school must prove evidence of satisfactory completion of the requirements for a high school equivalency certificate or a diploma from a recognized high school, school system, or State Department of Public Instruction, based on the General Education Development examination or the Wisconsin High School Equivalency Examination or other established criteria.

II. A minimum of nine high school credits from the following fields: English, Speech, Foreign Language, Natural Science, Social Science, Mathematics. A minimum of three years of English is recommended. A high school credit represents a norm of five class periods per week in one field of study for a school year of 36 weeks. Students admitted on the basis of an equivalency certificate or diploma or GED examination shall be considered to have fulfilled these minimum requirements.

III. A student ranking at or above the 25th percentile (upper three-fourths) of his high school graduating class will be admitted if requirements I. and II. are satisfied.

IV. A student ranking below the 25th percentile (lower one-fourth) of his high school graduating class will be admitted on probation if requirements I. and II. are satisfied, and if he completes an ACT (American College Test) examination with a composite score of 17 or above, or its equivalent on an SAT (Scholastic Aptitude Test) examination.

V. A student ranking below the 25th percentile (lower one-fourth) of his high school graduating class who does not qualify on the basis of requirement IV. may establish eligibility for admission on probation by:

A. enrolling in a Summer Session at the University of Wisconsin-Stevens Point or at any regionally accredited college or university, where he must carry six semester hours or more and earn an overall grade point ratio of 1.5 (C=2.0 on a four-point base) or better; or

B. enrolling in the second semester of the academic year at the University of Wisconsin-Stevens Point where he must carry 12 or more semester hours and earn a grade point ratio of 1.5 or better.

VI. Applicants who do not qualify according to the above requirements may appeal for special consideration through the Director of Admissions. Students lacking rank-in-class or test score qualifications may be considered if, on the basis of other factors, they appear to have a reasonable probability of success. Particular consideration in admission will be given to applicants who have been out of school for two or more years, service veterans with at least 180 days of active duty, and students who have been disadvantaged as a result of substandard education, family income level, or ethnic background.

VII. Requirement for out-of-state students are the same as for resident students.

Application for Admission

A high school graduate who wants to enroll in the university should write to the Director of Admissions for an application form, which should be given to the high school principal or counselor when properly filled out. The applicant should request the principal or counselor to send the form to the Admissions Office after adding a record of his credits. A student's eligibility to enroll will then be determined.

A student may make application for admission after October 1st of his senior year in high school. He should follow the procedure outlined in the preceding paragraph.

Entrance with Advanced Standing

A student who has taken work at another college may enroll at Stevens Point with advanced standing. Such a student should follow the same procedure as entering freshmen (see above). He should also request that a transcript of his credits be sent to the Director of Admissions from each college he has previously attended. Credits with a grade of D or better, earned at an accredited institution of college level, may be counted toward graduation, but not necessarily toward a major, provided they fit the general pattern of the curriculum selected by the student.

Probation and suspension regulations of this university will be applied in determining the academic status of transfer students.

No more than 72 credits will be accepted from any two year college.

Credits transferred from County Teachers Colleges are applicable only in the Elementary Education curriculum.

If a prospective transfer student has been dropped for any reason by the institution he last attended, he is generally ineligible for admission to this university until he has been out of school for at least one semester following his first suspension or two years (four semesters) following his second suspension. Then he may make application for admission to the Director of Admissions. Each case is



considered on its merits. If a students' academic record at another college is such that he would have been dismissed had the record been earned at Stevens Point, his admission is also subject to the rules indicated above, even though he was not dropped from the previous college.

Advanced Standing Test Programs

The university participates in two programs through which a student may receive credit and placement by examination. The programs are the Advanced Placement Program and the College Level Examination Program (CLEP). Additional information in respect to specific examinations which are accepted may be obtained by writing to the Director of Admissions.

In addition, information concerning those tests accepted, as well as sample examinations and reading materials pertaining to certain specific areas, may be obtained from the Reserve Desk in the Learning Resources Center.

Armed Services Cooperative Education Program and Project AHEAD

ASCEP is designed to assist personnel in the armed forces to develop a comprehensive file of educational experiences (USAFI, service training schools, correspondence courses, etc.) and to help simplify procedures for their admission to this university. Participants in this program can take advantage of the counseling service provided through the Admissions Office to help determine courses which may be taken while the student is in the service and which can be applied toward college degree requirements. Further information is available by writing to the Director of Admissions.

Re-entry of Former Students

Former students wishing to re-enter the university must request permission to do so from the Director of Admissions. If the student has attended another college or university since he last attended Stevens Point, a transcript from each must be filed before eligibility to return will be determined.

Readmission of a Student Who Has Been Suspended

See "Readmission" under "Academic Work" in the next section of this catalog.

Late Registration

No student may register in the university, or for an additional course, after the end of the sixth day of classes in any semester.

Academic Work

Academic Regulations

Primary responsibility for learning and following the regulations of the university and for completing all graduation requirements at the proper time **rests with the student.** While faculty advisers will assist students in planning their programs, they are not expected to relieve students of their responsibility.

Academic Honors

The faculty has established a program of academic honors to recognize students for outstanding academic achievement.

Semester Honors are awarded each semester for that semester's work, and are announced after the end of the semester. A student must complete at least 12 semester hours of work in order to be eligible for this recognition, except for students taking student teaching **only,** in which case the minimum is ten semester hours.

Highest Honors are awarded to those students who have earned a grade point ratio of 3.75 or above; **High Honors** earning a grade point ratio of 3.50 to 3.74; and **Honors** for those achieving a grade point ratio of 3.20 to 3.49.

Graduation Honors are awarded on the basis of all points and credits earned in courses, including those transferred, which apply toward the degree. Recognition in the commencement program is based on work which has been completed prior to the final semester. Notation of honors on the student's permanent record includes the final semester.

Academic Advising

Each student is assigned to an adviser who is available to help him arrange his academic program along lines suggested by the student. It is suggested that a student consult his adviser each semester to review the progress of his academic work and to discuss his course of study for the following semester.

The services of the Counseling Center are also available to all students to discuss academic difficulties or any other phase of the student's life at the university.

In addition, the university has established the Faculty Advising Center for Students (FACS). The Center is staffed approximately 40 hours per week by faculty volunteers. Although the primary mission of the center is to assist students who have not decided on a major, FACS will work with any student who needs assistance.

Majors and Minors

The following table indicates what majors and minors are available in the several Colleges of the university. See also the listing of major and minor areas for teacher certification later in the catalog under the COLLEGE OF PROFESSIONAL STUDIES.

	Major	Minor
American Civilization	X	X
Anthropology		X
See also Sociology and Anthropology		
Art	X	X
Art Education	X	X
Art History		X
Asian Studies		X
Biology	X	X
Business Administration	X	
Business Education	X	
Chemistry	X	X
Coaching		X
Communication	X	X
Communicative Disorders	X	
Comparative Literature		X
Computer Science		X
Conservation—See Resource Management		
Dance		X
Dietetics	X	
Drama	X	X
Early Childhood Education	X	
Economics	X	X
Elementary Education	X	
English	X	X
Environmental Law Enforcement		X
Environmental Studies		X
Forestry	X	X
French	X	X
General Science	X	X
Geography	X	X
Geology		X
German	X	X
Health Education		X
History	X	X
Home Economics		X
Home Economics in Business	X	
Home Economics—Food and Nutrition	X	
Home Economics Education	X	
Instructional Resources (Formerly Learning Resources)		X
Latin American Studies	X	X
Library Science		X
Mathematics	X	X
Medical Technology	X	
Museum Techniques		X
Music	X	X
Music—Applied	X	
Music Education—Instrumental	X	
Music Education—Vocal	X	
Music Literature	X	
Outdoor Education		X
Paper Science	X	
Philosophy	X	X
Physical Education	X	
Physics	X	X
Political Science	X	X
Psychology	X	X
Public Administration		X
Recreation		X
Religious Studies		X
Resource Management	X	X
Russian		X
Russian and East Central European Studies	X	X
Safety Education		X
Social Science	X	X
Sociology		X
Sociology and Anthropology	X	X
Soil Science	X	X
Spanish	X	X
Special Learning Disabilities		X
Water Resources	X	
Wildlife	X	
Writing		X

There is a **curriculum** in military science, as part of a voluntary Army ROTC program. There are also curricular offerings in astronomy, Chinese, peace studies, and Polish.

Department Acceptance of Candidates for Majors and Minors

In curricula in which a major field of study is required, a student must declare himself a candidate for a major in a department by no later than the time he has earned 56 credits (exclusive of required physical education) toward graduation. A declaration of intent to major in a given department is accomplished at registration by filling in the appropriate blank on the registration card with the name of the major.

Students at the junior level should, if they intend to declare a **minor**, indicate this intent by filling in the blank for minor designation on the registration card.

A student may be discontinued as a major candidate only if he is notified in writing that the decision has been made. A copy of such notification is to be sent to the Records office. The written notice must be given prior to the completion of two-thirds of the credits required for the major or prior to the beginning of the student's senior year, whichever occurs first; except that a student in good standing as a major candidate during his junior year, who does not continue to meet the standards of the department during his senior year, may be discontinued as a major.

A department may wish to accept or retain a student as a major candidate during his senior year on a conditional basis. The department must notify any such student in writing, at the time of acceptance prior to the senior year, of specific conditions that must be met. If a student, during his senior year, fails to satisfy the written conditions, the department has the right to discontinue his candidacy and shall give written notice of such decision.

A student must have a cumulative grade point ratio of 2.00 in his major(s), including prescribed collateral courses, in order to be eligible for departmental approval to graduate with the major(s).

A student who believes a departmental action on his major candidacy is unreasonable or unfair has the right to discuss the decision with the dean of the college concerned.

The Semester Hour; The Credit

The unit used in computing the student's study load is the semester hour, which represents one hour of class work, or its equivalent in other forms of instruction, per week for one semester. Two, or sometimes three, hours of laboratory work are usually considered the equivalent of one hour of class work.

A semester hour's work completed with a grade of D or better becomes a credit.

Study Load

In order to graduate, a student must earn 120 credits in addition to credits in required physical education.

A normal study load is 15 semester hours plus one semester hour of physical education when required. Exceptions **up to** 18 semester hours may be granted as provided for in each college. The student's Dean may permit 18 semester hours, plus one semester hour of required physical education; but permission to do so is granted only in highly unusual cases and only to students whose academic records warrant the exceptions.

Students registering more than one week in any semester will find it difficult to carry the normal load for that semester, and may be required to take a reduced load.

Veterans under Public Law 550 are expected by the Veterans Administration to carry 12 semester hours (nine for graduate students) to qualify for full benefits. (See details under FINANCIAL AIDS.) Students claiming **Social Security** benefits are required to carry at least 12 semester hours.

Grading System

Semester grades are recorded by letter only and each letter grade carries a specific number of points per semester hour. The scale of grades and points follows:

Grade	Points per Semester Hour
A (excellent)	4
B (good)	3
C (satisfactory)	2
D (poor)	1
F (failure)	0

These additional designations are used:

S is used to indicate the satisfactory completion of a non-credit course.

W (Withdrawn) indicates that a course was officially dropped after the end of the second week of classes. Courses dropped before the end of the second week of classes do not appear on the student's record. A grade of W is not included in calculating the grade point ratio. (A student other than a freshman who officially withdraws from the university after the ninth week of classes while doing failing work in a course ordinarily will be assigned a WF in that course. For exceptions, see the section on "Withdrawal from the University.")

WF (Withdrawn failing). This designation is used when a student other than a freshman who is doing failing work withdraws officially from the University after the ninth week of classes. A freshman will be given W's at any time that he officially withdraws from the university. A WF is not included in calculating the grade point ratio. (For exceptions, see the section on "Withdrawal from the University".)

P (Pass) and **F** (Fail). See the following section.

Inc (Incomplete) indicates that the student's work in a course is incomplete, and that the student has obtained the instructor's permission to complete the course. A grade of Inc is not included in calculating the grade point ratio. (See statement on "Incompletes.")

A student who voluntarily stops attending a class at any time without completing the prescribed change of program procedure will be considered as still registered and will receive an F in the course at the end of the semester.

The Grade Point Ratio (GPR) is computed by dividing the number of points earned by the number of semester hours elected (at this university). The designations S, W, WF, P, and Inc are not included in the computation of the grade point ratio. The maximum ratio is 4.00; the minimum is 0.00. The grade point ratio is used in determining eligibility for honors, for admission to certain majors, colleges, and curricula, and for membership in a number of campus organizations, when scholastic achievement is one of the criteria.

The Point-Credit Ratio is based on the number of credits earned in courses passed (at this university) and on the number of points earned in these courses. The maximum ratio is 4.00; and minimum is 1.00. A student must have a point-credit ratio of 2.00 in order to be eligible for graduation.

The Pass-Fail Grading Program

The Pass-Fail grading program provides greater opportunities for the college student to secure a more liberal and broader academic experience than is usually possible under the traditional, many-stepped grading program. It permits a student to take courses from a personally and intellectually oriented motive, rather than from the pressure to secure and maintain a high grade point ratio. It tends to encourage the student to take a course outside the field of his major concentration in which his prerequisite knowledge would not be adequate to sustain a high letter grade. Such a program would permit the student to experience learning for its own sake.

1. The Pass-Fail program will apply only to undergraduate courses.
2. a. P designates that the student passed the course, and that credit is granted for the course. A grade of P will **not** be included in calculating the grade point ratio.
   b. F designates that the student failed the course and that credit is not granted. A grade of F **will** be included in calculating the grade point ratio.
3. a. No more than 20 credits of Pass-Fail courses (other than required Physical Education) will be counted toward degree requirements.
   b. No more than two courses in the major and no more than one course in the minor may be taken on a Pass-Fail basis.
   c. The student will be limited to selecting no more than five credits per semester (other than required Physical Education) under the Pass-Fail program.

4. a. The Pass-Fail program will not be open to students on academic probation (except for courses in required Physical Education and in Lecture Forum).

   b. A student may elect to register under the Pass-Fail program in those courses and/or sections which the various academic departments have indicated are available under this option. Such courses and/or sections are designated in the Time Table. Each department has the right to determine which of its courses it will include or exclude from the program and under what conditions.

   c. Special registration is required. Students electing the Pass-Fail option should register for it at the Registration Office not later than the beginning of the third week of classes. A change either to or from the Pass-Fail option will not be permitted after the eleventh day of classes.

5. Departments shall guarantee the option of a standard grade in all courses offered under the Pass-Fail program, except that departments may establish courses or sections of courses on a Pass-Fail only basis with the prior approval of the Curriculum Subcommittee and the Academic Affairs Committee.

Incomplete

A report of incomplete indicates that the student's work in a course is incomplete and that the student has obtained the instructor's permission to complete the course. An Incomplete is normally given only where extenuating circumstances exist, or where research or performance needs to be extended beyond the normal limits of a semester (or other term). The instructor will indicate to the chairman of his department the work to be completed in order for the student to receive credit.

An Incomplete must be removed during the student's next semester in attendance or it automatically becomes a failure. An extension of this time limit may be granted by the Dean of the appropriate college after consultation with the instructor if the reasons are determined to be beyond the control of the student.

A student does not remove an incomplete by registering in a subsequent semester to re-take the course.

In order to remove an incomplete, the student must make arrangements with the instructor for the satisfactory completion of the work remaining to be done in the course. When the work is completed, the instructor will report the removal of the incomplete to the Record Office. It is the **responsibility of the student** to make these arrangements. The student should also report the completion of the course to the Record Office so that appropriate follow-up measures may be taken.

Audit

To "audit" a course is to attend class regularly, without the obligation of participating in class discussions, laboratory work, examinations, performances or any class activity other than listening.

A. A course may be audited under the following conditions:

   1. Audited courses do not carry academic credit.

   2. The university's attendance policy applies to audited courses.

   3. A course may be audited only if the instructor permits, and if there is space in the class.

   4. The student is limited to a combined credit-audit load of five credits beyond the normal maximum study load. (See paragraph headed "Study Load".)

   5. The student must be regularly registered for the course and pay the regular fees, counting the audited course as part of his total study load. (In certain circumstances, special reduced fees are available. See B., below.)

   6. Additional special registration is required for a course being audited. Report to the Registration office after classes begin, but not later than the 11th day of classes, to fill out the proper form. Approval of both the instructor and the department chairman is required.

   7. An "audit" may not be changed to "credit," nor a "credit" to "audit" after the 11th day of classes.

   8. The student's record will show "audit" for the course if the instructor certifies by such a grade that the prescribed conditions have been met.

   9. A student who has audited a course may take the course at a later date for credit.

   10. A student who later seeks credit by examination for a course previously audited must be enrolled in the university at the time the examination is taken and is subject to such fee charges for the examination as the university may establish.

   11. Regent, University, and Student Government regulations applying to students apply equally to those who are auditing courses.

   No exceptions to these regulations are permitted except in unusual circumstances and with the permission of the Dean of the College in which the student is registered.

B. Students who are registered for "audited" courses are assessed fees according to the following conditions:

   1. Persons 62 years of age or older are exempt from the payment of course fees. Registration for courses audited under this policy are arranged at the Office of Extended Services.

   2. Persons under 62 who are enrolled part-time are assessed one-half the resident course fees for the

courses audited (non-residents shall pay, in addition, the appropriate non-resident tuition.)

Part-time students taking courses for both credit and for audit will not be assessed segregated fees for the courses taken for audit.

The usual fees will be assessed for courses taken for credit.

3. Persons enrolled **ONLY** for "audited" courses will not be assessed segregated fees, nor will they be eligible for the use of services supported by those fees (e.g., Activity, Health, University Center).

4. Any special costs for course instruction, other than the normal fee, will be assessed, such as for materials for certain art courses.

5. Refunds will be permitted according to the refund schedule shown in the section on Student Expenses.

Grade Review

Provisions for a grade review procedure were adopted by the Faculty on November 12, 1970, and by the Graduate Faculty on October 21, 1971. On May 10, 1973, and February 28, 1974, the procedure was amended by the Faculty Senate, and now includes the following:

I. Without wishing to infringe upon the traditional freedom of every instructor in his classroom, but in the interest of avoiding misunderstandings and complaints concerning final grades, . . . (the Faculty) . . . recommends that every instructor be urged to make a clear statement of his grading policies and procedures to each of his classes at the beginning of each semester.

II. **The Screening Sub-Committee** for Grade Review shall be composed as follows: one Dean (selected by the Chancellor of the University), two full-time faculty members (elected at large by the Faculty), three student members (one chosen from the Student Senate, two elected at large from the student body as the Student Senate shall prescribe). The term of office shall be one year from the beginning of the fall semester.

The duties and responsibilities of the sub-committee shall be to function as a screening board to receive and assess any student complaints concerning an alleged lack of fairness in the final grading process. Any student who, after consultation with the instructor concerned, continues to feel that he has a legitimate grievance concerning the final grade received in any course, may present that grievance in writing to the sub-committee at a time not later than the end of the sixth week of the first semester after which he receives the grade in question. The sub-committee shall in turn, solicit a written statement of the explanation from the instructor concerned, and this instructor shall respond in writing within twenty school days of the subcommittee notification. If, on the basis of preliminary evaluation and investigation, a majority of the sub-committee concludes that any kind of grade change may possibly be warranted, or if the instructor involved fails to respond in writing, it shall forward all relevant data to the **Sub-Committee for Grade Review** (see paragraph III., below), with a directive that the grievance be investigated and a determination as to its validity be made.

III. **The Grade Review Sub-Committee** shall be composed of three faculty members representing three distinct academic departments chosen as follows:

a. A Chairman appointed by the Academic Affairs Committee; one member elected by the Student Affairs Committee from among at least three nominees submitted by the Student Senate; one temporary member for each case appointed by the Chairman of the instructor's department;

b. An alternate member, appointed by the Executive Committee of the Faculty Senate, elected by the Faculty; shall serve whenever it is necessary to maintain the condition of three faculty members representing three distinct academic departments, but in no case shall there be more than one member from the instructor's department;

c. The term of office, except for the temporary member, shall be one year from the beginning of the fall semester.



If the **Grade Review Sub-Committee** determines that a valid evaluation of the grievance requires special academic expertise, or at the request of the instructor concerned, the sub-committee shall solicit an independent evaluation in writing from a body of three impartial experts appointed by the chairman of the instructor's department, in consultation with the instructor and the sub-committee chairman. The sub-committee shall accept the evaluation and recommendations of the impartial body of experts on matters of academic content when such evaluation and recommendation are solicited.

After its investigation, the **Grade Review Sub-Committee** shall inform both the student and the instructor of its decision in writing. In the event that the sub-committee finds that a change of grade is warranted, it shall in addition recommend to the instructor the appropriate grade change. If the instructor refuses to make the recommended grade change within ten school days of the sub-committee notification, the chairman of the instructor's department and the Dean of the College involved shall take one or more of the following steps to protect the student's interests:

a. Attach to the student's permanent record a statement of the recommended change of grade and the reasons for not changing the grade;
b. Exempt the challenged grade from any calculation in the student's grade point ratio, unless the student wishes the grade to be included;
c. Authorize the student's graduation minus the credit hours represented by the challenged grade in the event that the original grade was an F.

A student may initiate the Grade Review procedure in the Office of Student Services and Information, Room 104, Student Services Center.

Transferred Credits

Credits transferred from other institutions are not used in calculating grade point ratios. The cumulative grade point ratio is determined only by the credits and grade points earned on this campus.

Credits transferred from accredited institutions for courses in which grades of D or better were earned may count toward graduation, and may be used to meet requirements for prerequisites and for specific courses, but not necessarily for a major.

A student who earns his **last** credits toward a degree at some other university or college must file a transcript of such credits in the Record Office not later than 30 days after the date of the UW-SP graduation. Failure to meet this deadline will result in the delay of the student's graduation until a subsequent graduation date.

Correspondence Courses

Correspondence credits from an accredited university may be applied toward an undergraduate degree. These are considered non-residence credits and are subject to the limitations on extension credit indicated in the section on extension courses.

A student's load must take into account any extension or correspondence credits which he expects to be taking. Such courses should be approved in advance by his adviser.

This university does not offer any correspondence courses.

Repetition of Courses

Courses in which a student receives a grade of D may **NOT** be repeated unless prior authorization to do so is granted by the dean of the college in which the student is enrolled.

Courses in which a student receives a grade of F may be repeated on the approval of the adviser. Such a course may be repeated **ONLY ONCE,** unless exception is granted by the dean of the college in which the student is enrolled. Repetition of such a course will result in **ONLY ONE** adjustment of the grade point ratio. Further repetition of the same course will **NOT** result in further cancellation of previous F grades, unless specific exception is granted by the dean.

When a course initially completed at this university (with a grade of D or F) is repeated at this university (not at another university), only the credit and grade earned in the latter attempt will be figured in the grade point ratio.

There is no provision for repeating a course in which a grade of A, B, or C has been earned.



A student who is repeating a course under these prescribed conditions must fill out a special REQUEST TO REPEAT COURSE form which is available at the registration office.

Classification

A student is classified according to the number of credits he has earned and which are creditable toward a degree, according to the following schedule:

Number of credits	Classification
0- 17	1st sem freshman
18- 29	2nd sem freshman
30- 43	1st sem sophomore
44- 59	2nd sem sophomore
60- 73	1st sem junior
74- 89	2nd sem junior
90-103	1st sem senior
104 & over	2nd sem senior

Credits in general physical education and credits transferred from other institutions will be included in determining classification.

Academic Status

Policy regarding the academic status of students is determined by the Board of Regents. A student's academic status is determined by the **minimum acceptable standards** which are defined as follows:

Total credit earned	Required cumulative grade point ratio
1-17	1.60
18-43	1.80
44 and over	2.00

A student whose cumulative grade point ratio is at or above the minimum acceptable standards will **NOT** be on probation.

I. Probation

A. A student whose cumulative grade point ratio is below the mimimum acceptable standards will be on probation.

B. A student may be placed on probation for any of the following additional reasons:

1. A freshman may be admitted on probation. See the statement under "Entrance Requirements for Freshmen."
2. A transfer student will be placed on probation at the time of his admission if he does not meet the minimum acceptable standards as stated above.
3. A student who has been readmitted after being suspended for academic reasons is placed on probation (unless his grade point ratio has been raised to the minimum acceptable standard as a result, for instance, of his having attended a summer session).

A student who is on probation must meet the minimum acceptable standards by the end of his second consecutive semester on probation or he will be suspended. (See II. A., B., and C., below for exceptions.)

A semester is defined for this purpose as a term (other than a summer session) in which the student is enrolled for seven or more semester hours at the end of the second week of classes in the semester. For students carrying less than seven semester hours, two such terms shall be considered the equivalent of one semester.

II. Suspension

A. Students who are on probation must meet the minimum acceptable standard at the end of their second consecutive semester on probation or they will be suspended.

B. Students will be suspended for any of the following additional reasons:

1. A student registered as a first-semester freshman will be suspended if his grade point ratio is less than 0.75 at the end of the semester.
2. Any student other than a first-semester freshman will be suspended at the end of any semester in which his grade point ratio is less than 1.00 and his cumulative grade point ratio is less than the minimum acceptable standard.
3. A student who has been readmitted on probation following an academic suspension must earn a 2.00 grade point ratio for his first semester of attendance following readmission or he will be suspended.
4. A transfer student who has been admitted on probation will be suspended at the end of his first semester in attendance at this university if his grade point ratio is less than the minimum acceptable standard.

Readmission

All requests for readmission, including those by prospective transfer students who have been suspended by another college or university, will be made to the Director of Admissions. The following conditions apply:

A. A student who has been suspended may not be readmitted before the lapse of at least one semester, unless it can be satisfactorily demonstrated that his academic suspension was due to factors beyond his control and that the cause(s) has (have) been removed.

B. Similarly, a student who has been suspended for a second time, and each time thereafter, will not be eligible for readmission until a period of two years has elapsed, unless it can be satisfactorily demonstrated that the cause(s) has (have) been removed.

C. A student whose request for readmission is denied may appeal the decision to a faculty committee assigned such responsibilities of appeal. He should address the appeal to the Director of Admissions who will forward it to the committee. In making its decision, the committee considers the conditions mentioned above.

D. A prospective transfer student from any college or university who was suspended by the institution he last attended is generally ineligible for admission to this university until he has been out of college for at least one semester following his first suspension or for two years following his second or any subsequent suspension. Each case is considered on its merits.

E. A student who has been suspended may attend a summer session, after which his academic status will be reviewed at his request.

F. Any student who has been suspended for academic reasons and not enrolled for one or more semesters immediately following the suspension action will be granted an option (known as ACADEMIC

BANKRUPTCY) to have his prior academic record adjusted as follows:

1. Credits in courses in which a grade of D or better was earned shall count toward graduation.
2. All courses in which a grade of D was earned shall count toward satisfying prerequisites, and general degree requirements for graduation, but not necessarily toward a major or minor.
3. The previous work shall remain as part of the official academic record but the cumulative grade point ratio shall be determined on the basis of the number of semester hours attempted and the grade point earned at UWSP following readmission.
4. In order to graduate, a student must, after electing this option, earn thereafter:

   a. A minimum of 30 credits and an overall point credit ratio of 2.00 in such credits;

   or

   b. Sufficient credit points to bring his/her overall point credit ratio to 2.00.

NOTES:
1. This option may be exercised **only once** in a student's career.
2. Students considering this option should be aware that employers, graduate schools, and/or accrediting agencies may evaluate the **total** record of the candidate.

Change of Program

A. Drop and Add Procedure.

A student is expected to complete the courses in which he is enrolled. However, he may drop a course during the first two weeks of classes in any semester, if he has permission from his adviser. Similarly, he may add a course during the first week of the semester provided the prescribed degree requirements are being met. No student may register for a course after the sixth day of classes. In order to be valid, all changes must follow the procedure established by the registration office. The change of program procedure begins in the registration office, where instructions and forms are available.

(Note to advisers: If a change of program during the first two weeks involves only a change of sections in the same course, the change will be handled by the chairman of the department offering the course. It need not be approved by the adviser or the dean. All other changes during the first two weeks of classes will be handled by the adviser and the chairmen of the departments concerned.)

Dropping a course after the second week and through the ninth week of classes will be permitted if approved by the student's adviser and instructor. After the ninth week of classes in a semester, decisions on drops will be made by the dean of the college in which the student is enrolled. The dean will permit drops after the ninth week only if the reasons for dropping are illness, personal duress, or are clearly beyond the control of the student.

A student who officially drops a course after the second week of classes in a semester will receive a W in the course. Repeated occurrence of W will be cause for review of the student's record by the committee of Academic Deans, and possible dismissal of the student from the university.

A student who voluntarily stops attending a course at any time without completing the prescribed change of program procedure will be considered as still registered and will receive an F in the course at the end of the semester.

B. Withdrawal from the University.

A student who finds it necessary to leave the university at any time during the semester should contact the Office of Student Services and Information, Room 104, Student Services Center, to initiate procedures for withdrawal either in person or in writing. A phone call is not sufficient to withdraw a person after a semester (or summer session) has begun. Subsequent procedure requires the approval of the dean of the college in which the student is enrolled. (If a student withdraws from the university during the **first two weeks** of classes, no grades are earned or recorded; during the **third through the ninth weeks** a W is recorded for each course.) A student, other than a freshman, who officially withdraws from the university after the ninth week of classes in a semester will be assigned grades of WF or W, except that during the final five weeks of the semester an Inc may be assigned at the discretion of the instructor. A freshman will be given W's at any time that he officially withdraws from the university. The dean of the college in which the student is enrolled, after consultation with the instructor, may assign a W if at the time of withdrawal the reasons for withdrawal are determined to be for illness, personal duress, or for reasons clearly beyond the control of the student.

A student who voluntarily leaves the university at any time without completing the prescribed withdrawal procedures will be considered as still registered and will receive an F in each course in which he is enrolled. In order to be valid, any withdrawal procedures initiated during the semester must be completed by the last day of the semester in which the student leaves the university.

Students who have withdrawn from the university after the second week of classes may return for the following semester without formal readmission, and they may register for the following semester during the period established for the registration of other continuing students.

Reports

At the end of each semester, a report of the student's grades is mailed to him at his home address.

Transcripts

A student may order transcripts of his record by addressing a request to the Record Office. The first transcript is furnished without charge. Subsequent transcripts are furnished for $1.00 each, except that when more than one is ordered at a time the charge is $1.00 for

the first one and twenty-five cents for each additional copy. Requests must be made in writing. Students who are delinquent in their financial obligations to the university will not be allowed to receive a grade report, a transcript, or a diploma.

Requests for information concerning activities and scholastic records of students or former students of University of Wisconsin-Stevens Point will not be honored without an authorization for release of the information by the individual whose record is involved. (Exceptions are made only in accordance with the Family Educational Rights and Privacy Act of 1974.)

Final Examinations

All instructors are expected to meet with their classes during the final examination period at the time and place scheduled, either to give a final examination, or to provide an alternative educational experience. If the instructor wishes to change the time and/or place for his final examination, the change must be approved by the Dean of his college.

If illness or an emergency makes it impossible for the instructor to give his examination as scheduled, he shall explain the situation to his chairman and dean and propose a means of making up the examination.

Instructors, at their discretion, may modify the schedule for students who have three examinations on one day, or for other good reasons.

Smoking in Classes

Smoking by students, faculty, or staff is not allowed in university classrooms. It is the responsibility of the instructor to insure that smoking is not permitted in his classroom or laboratory session. Smoking is not allowed in academic buildings except in certain designated smoking areas and in faculty and administrative offices.

Attendance

The university expects all students to attend classes regularly. Within this general guideline an instructor may establish more detailed policies on attendance for his classes.

The instructor is expected to give a clear explanation of his attendance policies to all of his classes at the beginning of each semester. The university does not have a system of permitted "cuts." Regular attendance is expected, and the implementing of this policy is the joint responsibility of the student and instructor.

Each student has the responsibility to confer with his instructors regarding all absences. If sudden departure from campus prevents his communicating with each of his instructors, a student who is absent for emergency or extraordinary reasons is expected to notify the Executive Director of Co-curricular Services, Room 104, Student Services Center.

Failure on the part of a student to make satisfactory arrangements with his instructors regarding excessive absences may be cause for the student's dismissal from a class or from the university. Dismissal may be authorized by the Executive Director of Co-curricular Services or by the Dean of the College in which the student is enrolled. Such dismissal may carry a grade of F in the course from which the student is dismissed, or in all courses if he is dismissed from the university.

A faculty member in charge of any off-campus trips by an authorized university group (such as class field trips, athletic teams, musical or dramatic organizations and debate) shall duplicate lists of participating students, distribute a copy to each student in the group, and send a copy to the Office of Student Services and Information, Room 104, Student Services Center. Each participating student is responsible for making appropriate arrangements in advance with instructors of each class to be missed.

Instructors should furnish students a reasonable amount of help in making up work missed, where the reason for absence concerns emergencies, off-campus trips, illness, and the like.

Residence Requirements

No more than 90 transfer credits may be accepted for a degree at the University of Wisconsin-Stevens Point.

To be eligible for a degree a student must have earned at least 30 of the total credits (exclusive of required physical education) required for the degree in residence or by extension at this university.

Application for Graduation

Seniors should apply for graduation at the beginning of their senior year, as indicated in the statement of degree requirements for each of the colleges of the university. Candidates for the Master's degree should follow the instructions for application as listed in the section on the Graduate College.

Interim Session and Mini-courses

A number of courses are being offered between semesters and during the period following the end of the school year and before summer school starts. Each period is usually about three weeks, and a maximum of one credit per week can be completed in this time. The program is administered through the Office of Extended Services, and current information can be obtained from that office.

Second Baccalaureate Degree

A student who has completed one baccalaureate degree may be granted a second baccalaureate degree if he completes:

1. 30 additional credits;
2. all requirements of the second degree.

Courses completed for the first degree may be used to satisfy requirements of the second degree. The major completed must be one that is acceptable for the second degree.

Extension, Evening, and Saturday Classes—Orland E. Radke, Director of Extended Services.

The university offers evening extension classes in some 15 to 20 cities in central Wisconsin. A good number of evening and Saturday morning courses are offered on-campus.

These courses are designed to meet the needs of adults wishing to continue or renew their educational experiences. Courses are offered at the freshman as well as the senior level and choices can be made from about 40 different courses. Graduate courses are also available.

For a three credit off-campus course, classes meet once a week for 16 weeks, and each meeting lasts two and one-half hours. Fees are $22.55 per undergraduate credit and $35.00 per graduate credit. On-campus evening and Saturday classes are listed in the regular time table. Fees for on-campus classes are $30.30 per undergraduate credit and $44.85 per graduate credit. (Fees quoted are for 1975-76 and are subject to change.)

Students are billed for fees through the Business Office. Payments must be made as indicated on the invoice. There is a penalty fee for late payments. Books, where applicable, are included in the fee payment. Credits will be filed in the Registrar's Office at Stevens Point.

The following limitations are imposed on credits earned in extension, evening, and Saturday courses, and each student is responsible for staying within these limitations:

1. Degree candidates must be formally admitted as a student to the University of Wisconsin-Stevens Point. Application forms must be processed through the Admissions Office.
2. Students who are employed as full-time teachers shall be granted no more than four credits total for extension, correspondence, evening and Saturday courses in any one semester. Exceptions to this policy must be approved by the appropriate Academic Dean.
3. Extension, correspondence, evening and Saturday courses shall be counted as part of a student's study load if he is regularly enrolled in a college or university during the semester the courses are taken.
4. It is suggested that students consult an adviser for assistance in selecting courses.

For information on courses currently being offered in extension, contact the Office of the Director of Extended Services.

Summer Sessions Winthrop C. Difford, Director.

The university operates an eight-week summer session each year. A variety of courses is available both at the undergraduate and the graduate levels. High school graduates, not otherwise eligible for admission to the university, may establish eligibility on the basis of summer school attendance. The regular faculty provides the instruction, and the full facilities of the university, including residence halls and the University Center, are available.

Each summer the Universities of Wisconsin sponsor and direct various summer session camp programs. Students should consult their adviser regarding the applicability of credits toward requirements in their curriculum.

A summer school time table may be secured by writing to the Director of Summer Sessions.

Graduate Study

Master of Science, Master of Science in Teaching, and Master of Arts in Teaching programs are available in specific areas. See the later section of this catalog entitled "The Graduate College."

Universities of Wisconsin work cooperatively to provide opportunities within reasonable access to all students of the State.

A limited number of graduate assistantships are available to qualified students who participate in the academic-year program on a full-time basis.

PRIDE—Programs for Recognizing Individual Determination through Education, John C. Messing, Director

The PRIDE office coordinates all services of the university for minority and/or educationally disadvantaged students. Formal programs are **Upward Bound** for Native American high school students, **Ease-In** for university students, tutoring for elementary and secondary school students in nearby Native American and Mexican American communities, and on-campus tutoring for minority college students. Less structured activities include assistance to minority and/or educationally disadvantaged students with any social, academic, or financial problems, and efforts to increase university and community awareness of minority concerns and contributions.

Concentrated Studies Program

The **Concentrated Studies Program** offers students the opportunity to fulfill a number of general degree requirements in several areas; including Communication, English, History, Humanities, and the Social Sciences. Instead of taking five courses simultaneously during the semester, students in the concentrated studies program take only one course at a time, with each course running for four weeks. The program aims to improve classroom performance by simplifying the academic demands placed upon the student. CSP classes meet five days per week for about two hours each day. For further information contact Burdette Eagon, Dean of Learning Resources.

Cooperative Education Program

The **Cooperative Education Program** is a unique five year program designed to prepare students more fully for a career in the field of their major studies. It is available to both men and women.

The program accomplishes its purpose by arranging for the student to alternate between periods of full-time study on campus and periods of full-time, paid employment,

off-campus in work directly related to the student's major field of study and career goals. (A "period" as here used is either a semester or a summer term, depending on when the period occurs.) In this way the student attains a four year academic education and at the same time gains roughly one and one-half years of valuable practical experience in his chosen professional field. A number of co-op work assignments are also available on campus as well.

Although it may take five years to complete the program, students who are participating in it find that they gain these benefits:

1. The knowledge and training they acquire gives them a head-start toward employment after graduation.
2. It increases their self-confidence through finding that they can handle responsibility and make judgments.
3. They gain greater understanding of other people and skill in human relations.
4. They find greater meaning in their classroom work, as they see its principles and theories applied in the work-a-day world. They then return to the campus with greater motivation and get a greater return from their academic efforts.
5. Although financial assistance is not the basic purpose of the program, Co-op students find that their earnings in the work period do help them to meet part of their school expenses.

Students desiring more information about the program should address their request to the Office of **Career Counseling and Placement**, Room 106, Main Building.

International Programs, Pauline Isaacson, Director

Four current major overseas study programs, the **Semesters in Britain, in Germany, in Poland,** and **in the Far East,** enable students to earn 12 to 17 credits while abroad. Two new programs are pending for Semester II, 1976-77, one **in Spain** and another **in Asia** which will include time **in Mainland China.**

Two groups of students go to London, **England,** each year, one in August and one in January. In addition to approximately three months liberal arts study in England, the "Semester in Britain" groups spend almost one month in travel-study on the European Continent. In the Fall, 1975, the groups visited Paris, Geneva, Rome, Florence, Salzburg, Munich, Rothenburg and Luxembourg in addition to having numerous study tours in England. The "Semester in Britain" is open mainly to juniors and seniors and attracts students from all disciplines. Two UW-SP faculty members accompany and live with the group.

The liberal arts program in **Germany** operates during the first semester of each year and is based in Munich, Bavaria, in southern Germany, not far from the scenic mountain areas. Courses in the German language and literature are part of this program, but it is not necessary to have studied German prior to being accepted in the program or during the course of the semester abroad. The first month in Europe features visits to other parts of Germany and Austria including North Germany, Berlin, small cities as well as large. Sophomores, juniors and seniors from all majors are accepted in the "Semester in Germany." One faculty member accompanies and lives with the group.



New in 1975, the first semester in **Poland** program is based in Craoow, a medieval city, site of the distinguished Jagiellonian University, where our group lives in the dormitories and has classes. Instruction is in English. The "Semester in Poland" is open to sophomores, juniors, and seniors from all majors. Travel Study to other areas of Poland is part of the program. In the final three weeks, the group concentrates on Travel Study to Budapest, Vienna, Zagreb, and other places of special interest. One UW-SP faculty member will accompany and live with the group.

New in 1973, the semester in the **Far East** is UW-SP's first program outside Europe. The program will continue each second semester with departure in January and return in early May. Liberal arts in nature, the "Semester in the Far East" is open to second semester sophomores, juniors, and seniors from all majors. Following principal study at the University of Malaya, Kuala Lumpur, the group will continue study in Bangkok, Thailand, and other places of interest in the Far East. Usually the group travels via Europe and has a stop there. Previous foreign language training is not required, but students are encouraged to enroll for Bahasia Malaysia. (English is spoken widely in Malaysia.)

Students, from UW-SP or other universities, who are interested in applying for UW-SP's Semester Abroad Programs, may secure application forms and additional information by writing to the Director.

Additional semester programs are in the planning stages.

Summer programs in England and Germany and in Latin Europe are features of 1976. For succeeding summers, and interim periods, other programs are developing.

A summer program of study in natural resources management is offered annually through the College of Natural Resources in cooperation with the Baden-Wurttemberg, German, Ministry for Nutrition, Agriculture, and Environment. The one-month program is available to qualified juniors, seniors, and graduate students. Center for study is the Hornberg Castle located

in the northern Black Forest.

On the Stevens Point campus, the following Area Studies Programs are available to students: majors and minors in Latin American Studies, Russian and East Central European Studies, and American Civilization. A minor in Asian Studies is also available.

Educational Services and Innovative Programs, Burdette W. Eagon, Dean

Services of this office include:

The Learning Resources Center—housing the coordinated services of the **Library and Instructional Media** (See the section immediately following); **University Broadcasting**—having responsibility for the operation of the campus radio station and all off-campus telecommunications; **University Archives**—collecting and preserving the records of the university's life and activities in all their relationships; **Experimental Courses and Innovative Programs**—fostering latitude and flexibility of course development and providing assistance to recommended faculty and student proposals.

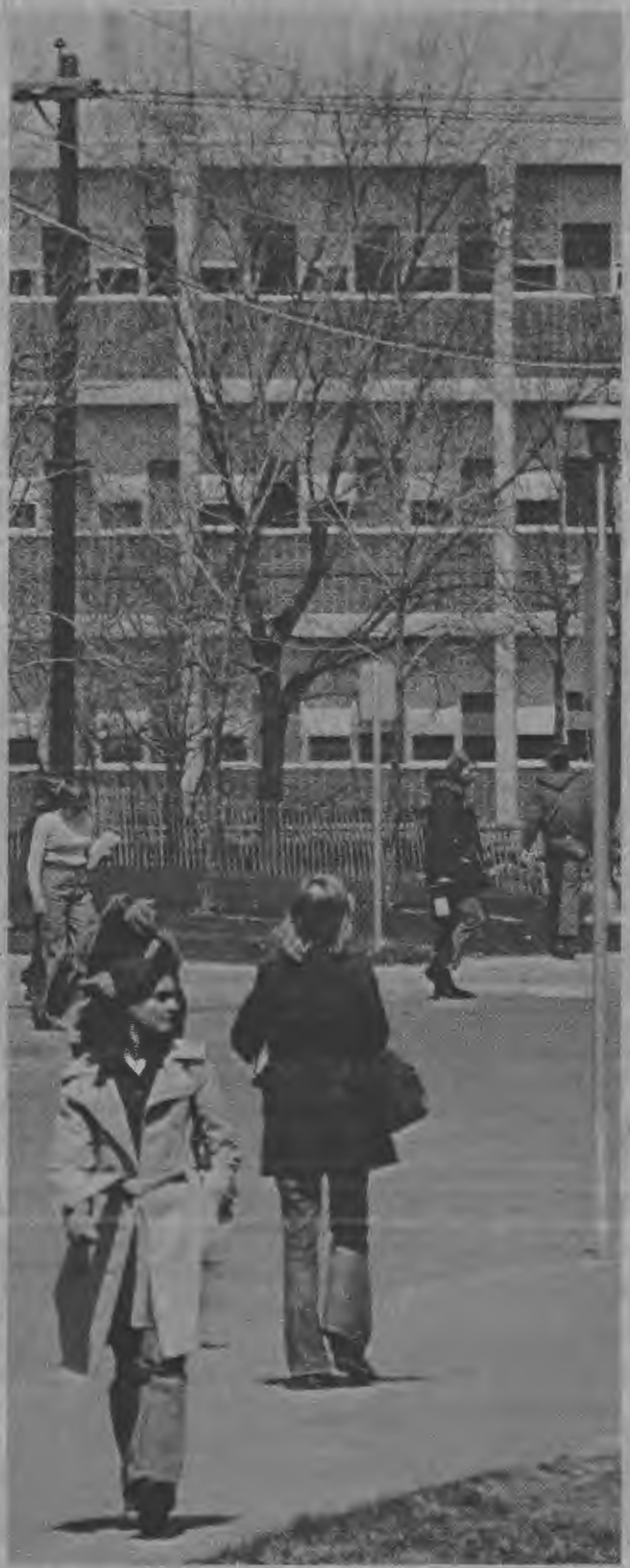
The Learning Resources Center

The **James H. Albertson Center for Learning Resources** houses a print and non-print collection of over 300,000 items. It holds journal files of over 2,500 titles which offer backfiles coverage on several titles into the 19th century. The Library is an official federal and state documents depository containing a rich selection from 1950, including an extensive congressional series from the year 1825 and a complete microprint edition of United Nations publications. In cooperation with the State Historical Society, the Library maintains an Area Research Center for 13 counties in north central Wisconsin. Another strong area of collection is the large and diversified files of national and state newspapers.

Interlibrary Loan, one of the services of the Library Reference department, borrows books and sends for photo-duplication of materials for faculty and students.

The **Instructional Materials Center** houses a collection of basic texts used in the public schools plus a collection of study prints, maps, globes, study kits, simulation games, art objects, and sources for locating other instructional materials. The non-print collection for the university is also housed in the IMC. This includes holdings in 16 mm films, filmstrips, transparencies, tapes, and single concept films.

The **Instructional Media Service** is maintained to assist the instructional and research activities of the university in the effective use of instructional technology. Production facilities in photography and graphic arts are available to serve the instructional staff by providing services to support the selection, production, and utilization of instructional materials and equipment. A laboratory facility, equipped with self-instructional materials, is designed to allow faculty and students to become acquainted with audio-visual equipment and production procedures. An electronic retrieval and



distribution system provides for the transmission of selected audio tapes throughout the Learning Resources Center and video programs to most classrooms on campus. An office of Instructional Development offers consultation in the production and utilization of a variety of instructional materials and teaching strategies.

College of Fine Arts

William J. Hanford, Dean; Carol Hopper, Assistant to the Dean

At Stevens Point, the fine arts are identified as a major concern of education and are taught for humanistic purposes. Traditionally, six of the fine arts have emerged as major arts: art, drama, dance, music, architecture, and literature. The College of Fine Arts offers instruction in the first five of these. Offerings in art, drama, dance, and music are well developed. Offerings in pre-architecture are currently available covering the first two years, preparing the student to transfer to a school of architecture. The sixth of the fine arts, literature, is offered in various departments of the College of Letters and Science. The Department of Communication, offering courses in Communication, Journalism, and Radio-TV-Film, is in the College of Fine Arts.

Program

The fine arts program comprises two types of educational offerings: (a) courses of study, and (b) productions of art exhibits, concerts, plays, forensics, etc. In many productions, students may enroll for credit, as they do in courses. In all productions, students may participate without credit. Many courses and productions are open to participation by all students enrolled in the university. Attendance at all productions is open to all students enrolled in the university as well as to all residents of central Wisconsin. A number of courses and productions are offered off-campus in communities of central Wisconsin. In summary, the College of Fine Arts merges both curricular and co-curricular aspects into a single program. This serves three groups: the fine arts majors, the general student body, and the citizens of central Wisconsin.

Degrees

Bachelor of Science and Bachelor of Arts degrees are offered for students majoring in art, communication, and drama. The Bachelor of Music degree is offered for students majoring in music and music literature.

Curriculum for the Bachelor of Arts Degree

I. **English Language and Literature**—12 credits as follows:
   A. English 100 or 101, and 102.
   B. English 211 and 212, or 213 and 214.

II. **Foreign Language**—24 credits (including four credits in conversation and composition courses beyond the first-year level) in one language, or 28 credits in two languages, or 30 credits in three. No less than eight credits in a single language will be accepted; and a minimum of 14 credits must be offered in one. High school work with grades of C or better will be accepted for this requirement at the rate of four college credits for each high school unit up to a total of six units or 24 credits. However, a minimum of eight college credits is required.

III. **Special Humanities Requirements**—10 credits within the following range of studies: art history, history of music, literary criticism, philosophy of art, colloquium. Students majoring in fields other than language and literature may satisfy this requirement with 10 credits in any literature course or courses numbered 200 or above.

IV. **History**—12 credits, including six credits of American history.

V. **Social Studies**—six credits, selected from the following: Natural Resources 370; human geography (courses numbered 110 to 340, and 369 to 375); economics; philosophy (logic excluded); political science; psychology; sociology and anthropology.

VI. **Natural Science, and Mathematics or Logic**—one year of laboratory science; and one year of mathematics or one year of logic.

VII. **Physical Education**—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective credit options and count toward graduation.

VIII. **Major study and approved electives** to total 120 credits in addition to the required physical education (total: 124). A minimum of 40 credits must be selected from courses numbered 300 or above.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Order of Required Studies:

Each student is expected to complete in the first two years the required courses listed in the curriculum above

(except in number VII. and VIII.), although some exceptions may be granted by the student's adviser **and** the dean. In any case, the following shall be completed:

1. All requirements in English composition and literature and foreign language (unless more than two years are required).
2. Social studies—six credits.
3. Natural Science, and mathematics or logic (contact the dean for approved mathematics course sequence).
4. History—six credits.
5. By the the end of the sophomore year the student must select a major study and plan his course with an adviser assigned by the chairman of the major department.

Curriculum for the Bachelor of Music Degree

I. **English**—six credits: English 100 or 101, and 102.

II. **Communication**—two credits: Communication 101, or any equivalent performance course in oral communication.

III. One of the following:

A. **Foreign Language**—eight credits.

The equivalent of one year of college work in one language must be completed before credit will count toward this requirement.

Students will be placed in foreign language courses on the basis of their high school records, or a placement examination, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by two acceptable units of high school work completed in one language. Normally, an acceptable unit is one year's work with a grade of C or better.

B. **Mathematics**—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average of C or better in the aggregate of three units.

IV. **History**—six credits: History 105 and 106, or 107 and 108, or 211 and 212.
(Students seeking **teacher certification** must complete this requirement by taking six credits in American history.)

V. **Humanities**—nine credits, selected so as to include courses in at least two of the following groups:

A. History and appreciation of art, dance, music, theater; history of art, dance, music, theater.

B. Any literature course may be used to satisfy this requirement; except that if the survey course in Dramatic Literature or American Literature or English Literature is selected, the full year course must be completed to be credited on this requirement.

C. Philosophy (logic and philosophy of science excluded), colloquium.

VI. **Social Studies**—nine credits, selected so as to include courses in at least two of the following groups:

A. Economics.
B. Human Geography (courses numbered 110 to 340, and 369 to 375).
C. History (in addition to IV., above).
D. Natural Resources 370.
E. Political Science.
F. Psychology.
G. Sociology and Anthropology.

VII. **Natural Science.** Select either A. or B.:

A. **Eight to 10 credits** from the following courses (cr in parens):

1. Astronomy 105(4), 106(4), 311(3).
2. Biology 101(5), 130(5), 160(5).
3. Chemistry 101(5), 103(3), 105(5), 106(5), 115(4), 116(4). (See note 3 under Chemistry.)
4. Geography 101(5), 102(5), 103(5).
5. Geology 101(5), 104(4), 105(4).
6. Physics 101(5), 103(5), 104(5), 110(3), 211(4), 212(4).

In any one subject, if the course numbered 101 is used to meet this requirement, the other courses listed for that subject can not be used.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

For students taking the Bachelor of Music Degree in **Applied Music** this requirement may be reduced to five credits with two acceptable units of high school science, or may be eliminated with three acceptable units of high school science. An acceptable unit is one year of work with a grade of C or better.

B. Three courses selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Dean of the College of Fine Arts.

VIII. **Physical Education**—four credits.

Students will register in one section of Physical



Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective options and count toward graduation.

IX. Music as specified under "Music" in the section of the catalog describing COURSES OF INSTRUCTION. The degree is available in three options:

A. Bachelor of Music.
B. Bachelor of Music in Applied Music.
C. Bachelor of Music in Music Literature.

X. (For **teacher certification** ONLY) **Professional Education**—20 credits: Education 323, 336, 380, 381, 398.

Students seeking teacher certification should refer to the pertinent material under COLLEGE OF PROFESSIONAL STUDIES.

XI. Approved electives to total 120 credits in addition to required physical education and required performance ensemble. (Total academic credits and physical education: 124. Performance credits variable, normally 16. See Music Department description for qualifications and exceptions.)

XII. At least 40 credits must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Curriculum for the Bachelor of Science Degree

I. English—six credits: English 100 or 101, and 102.

II. Communication—two credits: Communication 101, or any equivalent performance course in oral communication.

III. One of the following:

A. Foreign Language—eight credits.

The equivalent of one year of college work in one language must be completed before credit will count toward this requirement.

Students will be placed in foreign language courses on the basis of their high school records, or a placement examination, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by two acceptable units of high school work completed in one language. Normally, an acceptable unit is one year's work with a grade of C or better.

B. Mathematics—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average grade of C or better in the aggregate of three units.

IV. **History**—six credits.

All history courses may be applied toward this requirement. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

(Students seeking **teacher certification** must complete this requirement by taking six credits in American history. Any American history course may be applied toward this requirement.)

V. **Humanities and Social Science**—18 credits, distributed as follows:

A. **Humanities**—nine to 12 credits, selected so as to include courses from at least two of the following groups, with a maximum of six credits in any one group:

1. All courses in American Civilization.
2. Any literature course, whether in English or another language, (except English 275). The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
   a. All courses in Colloquium.
   b. All courses in Comparative Literature, except 231 and 232.
   c. English 103, 108, 170, 200, 203, 207, 211, 212, 213, 214, 280, 281, 282, 283, 285, 286, 287, 288, 303, 308, 310, 311, 312, 313, 323, 324, 325, 327, 330, 333, 334, 336, 361, 362, 363, 367, 370, 371, 372, 375, 378, 380, 382, 383, 385.
   d. French 341, 342, 350, 355, 360, 370.
   e. German 356, 357, 360, 370, 441, 442.
   f. Spanish 341, 342, 353, 450, 451, 460, 471.
3. Foreign Language culture and civilization:
   a. French 331.
   b. German 331.
   c. Russian 331.
   d. Spanish 331, 332.
4. All courses in Philosophy.
5. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
   a. Art 282, 283, 381, 382, 383, 384, 385, 386, 387, 388.
   b. Communication 105, 107, 121, 219, 302, 352.
   c. Comparative Literature 231, 232.
   d. Dance 101.
   e. Drama 105, 213, 215, 251, 252, 317, 318, 410, 412, 462.
   f. Home Economics 329.
   g. Music 100, 101, 102 (except for B.M.), 120, 121, 300, 320, 321, 322, 323, 324, 325, 326, 327, 420, 421, 426, 427, 428.
6. For students not majoring or minoring in Art: Art 103, 104, 221, 231, 234, 241, 251, 261, 271, 321, 331, 332, 341, 343, 345, 347, 351, 361, 371.
7. All courses in Religious Studies.
8. Peace Studies 230, 240.

B. **Social Science**—six to nine credits, with a maximum of six credits in any one group:

1. Economics.
2. Human Geography (courses numbered 110 to 340, and 369 to 375).
3. Natural Resources 370.
4. Political Science.
5. Psychology.
6. Sociology and Anthropology.
7. Peace Studies 200, 310, 370.

VI. Natural Science. Select either A. or B.:

A. **Eight to 10 credits** from the following courses (cr in parens):

1. Astronomy 105(4), 106(4), 311(3).
2. Biology 101(5), 130(5), 160(5).
3. Chemistry 101(5), 103(3), 105(5), 106(5), 115(4), 116(4). (See Note 3 under Chemistry.)
4. Geography 101(5), 102(5), 103(5).
5. Geology 101(5), 104(4), 105(4).
6. Physics 101(5), 103(5), 104(5), 110(3), 211(4), 212(4).

In any one subject, if the course numbered 101 is used to meet this requirement, the other courses listed for that subject can not be used.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. Three courses selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Dean of the College of Fine Arts.

VII. **Physical Education**—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as

sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective options and count toward graduation.

VIII. **Major study and approved electives** to total 120 credits in addition to required physical education (total: 124 credits).

IX. **At least 40 credits** must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Teacher Certification

Students who wish to qualify for certification to teach at the secondary school level, with a major offered in the College of Fine Arts, have two options available:

Option I. In the College of Professional Studies they must complete:





A. The general requirements for the Bachelor of Science degree in the College of Professional Studies.

B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.

C. The professional education sequence established for certification in secondary education.

Option II. In the College of Fine Arts, they must complete:

A. The general requirements for the Bachelor of Arts, or Bachelor of Music, or Bachelor of Science degree in the College of Fine Arts.

*B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.

*C. The professional education sequence for those seeking teacher certification at the secondary school level, including 20 credits in the following courses: Education 330-340, or Art Ed 331, or Mus Ed 325-326, or Comm Ed 380 (two credits in the major field and two credits in the minor field, if required); Education 380, 381, 398. (Psychology 200 is a prerequisite for Education 381.) Students not having a minor will elect at least two credits of other education courses. (Additionally, students are advised to take Education 386.)

***See the appropriate paragraphs in the section on the College of Professional Studies.**

College of Letters and Science

S. Joseph Woodka, Dean
William A. Johnson, H. Howard Thoyre, Assistant Deans

The University of Wisconsin-Stevens Point offers courses in Letters and Science leading to the Bachelor of Arts and Bachelor of Science degrees.

The aims of the general courses for the Bachelor of Arts and the Bachelor of Science degrees are: (a) to provide the student with a sound education in social studies, sciences, languages, and humanities which will prepare him to be a well informed citizen qualified for responsibilities and leadership in a democratic society; and (b) to provide the basic training for professional, technical, and graduate studies. Most professional and technical fields require education beyond the four-year level, and an increasing number of non-professional fields require a college degree. Employers wish to secure the services of persons with sound educational backgrounds. It is the purpose of the Letters and Science curricula to provide this education.

Advisers

Each student in Letters and Science is assigned to an adviser in accordance with the stated policy of the university. The adviser is available to assist the student in his selection of courses and to help him in meeting academic requirements for graduation. It is recommended that the student consult his adviser at the time he makes his course selections, but the student must realize that it is his own responsibility to meet all college and university requirements, rules, and regulations.

Freshmen and sophomores are advised to consult the chairman of the department in which they intend to major, to be sure that they are meeting departmental requirements concerning advising and curriculum.

By the time the student has earned 56 credits (exclusive of required physical education) he must have selected the area of his major study. At that time and thereafter, the chairman of the student's major department may assign an adviser who will assist the student in developing his program of studies.

Semester Study Load

In order to graduate, a student must earn 120 credits in addition to credits in required physical education.

A normal (average) study load in the College of Letters and Science is 15 academic credits per semester plus one credit of physical education when required. In order to approximate an average of 15 academic credits per semester, students usually register for 12-16 academic credits per semester plus one credit of physical education each year. This is considered a "normal" study load.

Students in the College of Letters and Science MUST observe the following regulations, if they wish to carry more than the "normal" load:

A student who wishes to carry 17 academic credits (exclusive of required physical education) in any semester must obtain the signature of **both** his adviser and his major department chairman. Permission to carry 17 academic credits will depend primarily on the quality of the student's academic record.

A student desiring to carry 18 academic credits (exclusive of required physical education) must secure the signature of the Dean of the College. Each request is decided on its own merits, although permission to carry 18 academic credits is generally given only in highly unusual cases and only to students whose academic records warrant the exception.

Curriculum for the Bachelor of Arts Degree

I. **English Language and Literature**—12 credits as follows:

A. English 100 or 101, and 102.

B. English 211 and 212, or 213 and 214.

II. **Foreign Language**—24 credits (including four credits in conversation and composition courses beyond the first-year level) in one language, or 28 credits in two languages, or 30 credits in three. No less than eight credits in a single language will be accepted; and a minimum of 14 credits must be offered in one. High school work with grades of C or better will be accepted for this requirement at the rate of four college credits for each high school unit up to a total of six units or 24 credits. However, a minimum of eight college credits is required.

III. **Special Humanities Requirements**—10 credits within the following range of studies: art history, history of music, literary criticism, philosophy of art, colloquium. Students majoring in fields other than language and literature may satisfy this requirement with 10 credits in any literature course or courses numbered 300 or above.

IV. **History**—12 credits, including six credits of American history.

V. **Social Studies**—six credits, selected from the following: Natural Resources 370; human geography (courses numbered 110 to 340, and 369 to 375); economics; philosophy (logic excluded); political science; psychology; sociology and anthropology.

VI. **Natural Science and Mathematics or Logic**—one year of laboratory science, and one year of mathematics or one year of logic.

VII. **Physical Education**—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward

this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective credit options and count toward graduation.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

VIII. **Major study and approved electives** to total 120 credits in addition to the required physical education (total: 124). A minimum of 40 credits must be selected from courses numbered 300 or above.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Order of Required Studies:

Each student is expected to complete in the first two years the required courses listed in the curriculum above (except in number VII. and VIII.), although some exceptions may be granted by the student's adviser **and** the dean. In any case, the following shall be completed:

1. All requirements in English composition and literature and foreign language (unless more than two years are required).
2. Social studies—six credits.
3. Natural science, and mathematics or logic (contact the dean for approved mathematics course sequence).
4. History—six credits.
5. By the end of the sophomore year the student must select a major study and plan his course with an adviser assigned by the chairman of the major department.

Curriculum for the Bachelor of Science Degree

I. **English**—six credits: English 100 or 101, and 102.

II. **Communication**—two credits: Communication 101 or an equivalent performance course in oral communication.

III. **Foreign Language**—eight credits.

The equivalent of one year of college work in one language must be completed before credit will count toward this requirement.

Students will be placed in foreign language courses on the basis of their high school records, or a placement examination, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by two acceptable units of high school work complete in one language. Normally, an acceptable unit is one year's work with a grade of C or better.

IV. **Mathematics**—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average grade of C or better in the aggregate of three units. A unit is one year's work.

V. **History**—six credits.

All history courses may be applied toward this requirement. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

(Students seeking **teacher certification** must complete this requirement by taking six credits in American history. Any American history course may be applied toward this requirement.)

VI. **Humanities and Social Science**—18 credits, distributed as follows:

A. **Humanities**—nine to 12 credits, selected so as to include courses from at least two of the following groups, with a maximum of six credits in any one group.

1. American Civilization.
2. Any literature course, whether in English or another language. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
3. Foreign language culture or civilization.
4. Philosophy.
5. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
6. For students not majoring or minoring in Art, specialized courses in the performance of Art.
7. Religious Studies.
8. Peace Studies 230, 240.

For a listing of specific courses which meet the Humanities requirement, see paragraph V.A., under the curriculum for the Bachelor of Science Degree in the College of Fine Arts.

B. Social Science—six to nine credits, with a maximum of six credits in any one group:

1. Economics.
2. Human Geography (courses numbered 110 to 340, and 369 to 375).
3. Natural Resources 370.
4. Political Science.
5. Psychology.
6. Sociology and Anthropology.
7. Peace Studies 200, 310, 370.

VII. Natural Science. Select either A. or B.:

A. Eight to 10 credits from the following courses (cr in parens):

1. Astronomy 105(4), 106(4), 311(3).
2. Biology 101(5), 130(5), 160(5).
3. Chemistry 101(5), 103(3), 105(5), 106(5), 115(4), 116(4). (See Note 3 under Chemistry.)
4. Geography 101(5), 102(5), 103(5).
5. Geology 101(5), 104(4), 105(4).
6. Physics 101(5), 103(5), 104(5), 110(3), 211(4), 212(4).

In any one subject, if the course numbered 101 is used to meet this requirement, the other courses listed for that subject can not be used.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. Three courses selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Dean of the College of Letters and Science.

VIII. Physical Education—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective credit options and count toward graduation. (See restrictions in XI., below.)

IX. Major and approved electives to total 120 credits in addition to required physical education (total: 124 credits).

X. At least 40 credits must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

XI. The "One Hundred Credit Rule"—At least 100 of the 120 credits (exclusive of required physical education) must be earned in courses offered in the College of Letters and Science and the College of Fine Arts, except that:

1. all credits required for majors or minors acceptable in the College of Letters and Science will count as Letters and Science credits;
2. all credits earned in completion of the preceding general degree requirements, through item VII., for a Letters and Science degree will count as part of the 100 credits;
3. students who complete a major in a college other than Letters and Science or Fine Arts may count as many as 22 of the required credits as part of the 100 credits.

The Dean of the College of Letters and Science will evaluate credits transferred from other institutions to determine compliance with this rule.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Teacher Certification

Students who wish to qualify for certification to teach at the secondary school level, with a major offered in the College of Letters and Science, have two options available:

Option I. In the College of Professional Studies, they must complete:

A. The general requirements for the Bachelor of Science degree in the College of Professional Studies.

B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.

C. The professional education sequence established for certification in secondary education.

Option II. In the College of Letters and Science, they must complete:

A. The general requirements for the Bachelor of Arts or Bachelor of Science degree in the College of Letters and Science.

*B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.

*C. The professional education sequence for those seeking teacher certification at the secondary school level, including 20 credits in the following courses: Education 330-340, or Art Ed 331, or Mus Ed 325-326, or Comm Ed 380 (two credits in the major field and two credits in the minor field, if required); Education 380, 381, 398. (Psychology 200 is a prerequisite for Education 381.) Students not having a minor will elect at least two credits of other education courses. (Additionally, students are advised to take Education 386.)

Major Study

By the time he has earned 56 academic credits (exclusive of required physical education) the student must declare his intention to major in a given department. This is accomplished at registration by filling in the appropriate blank on the registration card with the name of the major. A department may refuse to accept or to continue a student for major study in that department if the student's general academic record does not satisfy regulations established by the department and the university. See the statement headed "Department Acceptance of Major Candidates" in the section of the catalog headed ACADEMIC WORK.

Acceptable majors in the College of Letters and Science are: American civilization, biology, business administration, chemistry, economics, English, French, general science (Paragraph A. under general science in section COURSES OF INSTRUCTION), geography, German, history, Latin American studies, mathematics, philosophy, physics, political science, psychology, Russian and East Central European studies, social science (Paragraph A. under social science in section COURSES OF INSTRUCTION), sociology and anthropology, and Spanish.

Minor Study

The Letters and Science degree does not require a minor, but any minor listed in the catalog may be completed. Students at the junior level should, if they intend to declare a minor, indicate this intent by filling in the blank for the minor on the registration card. The minor need not be in any of the departments of the College of Letters and Science, so long as the "One Hundred Credit Rule" is observed. (See paragraph XI. in the statement of the curriculum for the degree.)

Preparation for Professional Study

Students planning to enter various professional schools complete part of their college work before being admitted to professional study. A student with such an objective may register in Letters and Science and will be assigned an adviser familiar with the requirements of the profession which he plans to follow. The student will plan his studies within the curriculum of either the Bachelor of Arts or the Bachelor of Science degree and will be responsible for his professional studies.

General descriptions of requirements for some professions are given on the following pages. More specific suggestions will be sent upon request. Different schools training for the same profession sometimes require different pre-professional studies; hence each student must be acquainted with the requirements of the school which he plans to enter, and should consult carefully and frequently with his adviser. The problems confronting each student are given careful consideration by his adviser and the Dean of Letters and Science. **However, the student is responsible for meeting all college and university requirements, rules, and regulations.**

Dentistry

Students preparing to enter dental college should take a course similar to the premedical course. Generally speaking, dental schools strongly recommend, but do not specifically require, foreign language. The ruling of the Dental Educational Council of America calls for at least six semester hours of the following: English, biology, physics, and inorganic chemistry, and most schools require a year of organic chemistry. However, some require a minimum of three semester hours. Sufficient additional credits to total at least 60 hours must be submitted as preparation for the customary three years in leading schools of dentistry.

Education

A student who is considering preparation for teaching should follow the general requirements for the Bachelor of Science degree. He should include the specific requirements of that college and of the major study which he plans to pursue.

Students who have not determined the teaching area for which they will study should consult not only their advisers but also the Assistant Dean of the School of Education.

Engineering and Scientific Research

The requirements for professional and graduate study in the fields of engineering and research vary with the specialization but are centered in mathematics and sciences, and often necessitate foreign language ability for research. From one to four years' preparation for these professions (depending upon the specialization) may be completed at Stevens Point. Advisers assist in the student's selection of studies, which should lead toward the Bachelor of Science degree.

Law

Prelegal studies require three to four years. A good record made while completing the general and major requirements for a Bachelor of Arts or a Bachelor of

*See the appropriate paragraphs in the section on the College of Professional Studies.

Science degree will qualify a candidate for admission to Law School. Law Schools recommend, however, that candidates select majors in social studies (history, economics, political science, American institutions) and gain some understanding of American economic, political, and constitutional history as well as an acquaintance with philosophy and social psychology.

Medicine

A student who wishes to prepare for a career in medicine registers as a candidate for a B.S. or B.A. degree. He may major in any field and integrate the pre-medical requirements with the requirements for a degree in his major field.

Completion of pre-medical requirements does not insure admission to a medical school. This is very competitive. Most medical schools make their selection on the basis of three criteria: at least a "B" average, the recommendation of instructors, and a satisfactory score on a medical aptitude test.

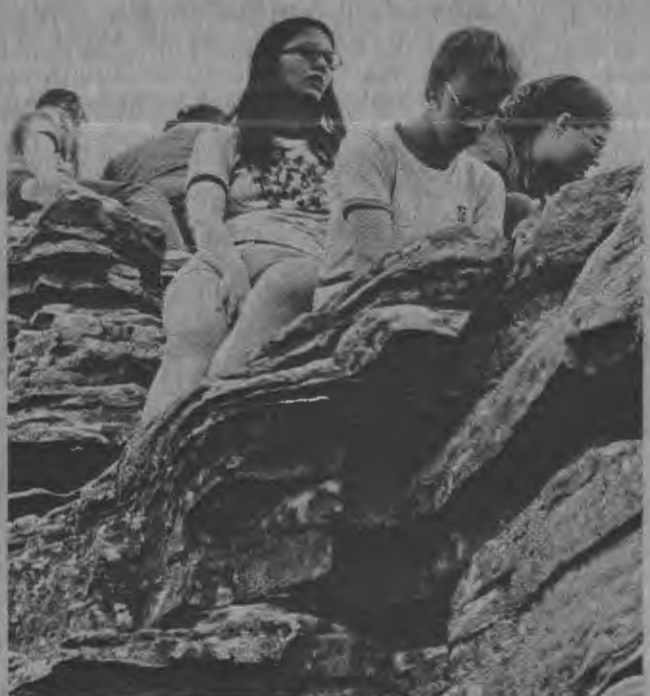
Most medical schools require that the Medical Aptitude Test be taken before admission. This test is administered annually and may be taken in the sophomore or junior year. Few candidates are accepted with less than four years of undergraduate work.

Mortuary Science

This university provides the two years of pre-professional training necessary to enter a mortuary school.

Other Pre-Professional Studies

Students planning to enter other fields will be assigned to advisers who are familiar with requirements in those fields.



College of Natural Resources

Daniel O. Trainer, Dean
James G. Newman, Assistant to the Dean

The University of Wisconsin-Stevens Point offers curricula in natural resources leading to the Bachelor of Science degree in the following disciplines:

Forestry

The basic mission of the forestry program is to train undergraduates for forest management positions with public agencies and industries. Forestry and the other resource disciplines are closely integrated to provide a solid background for forest ecosystem management.

The department of Paper Science and Technology offers a curriculum which is designed to develop an individual who is well versed in the physical and engineering sciences; and who understands the interrelationships among these disciplines in order to apply them as an industrial scientist or engineer, and ultimately as a member of management, in the paper and allied industries.

Resource Management

This curriculum allows for different concentrations in disciplines which depend on a broad, general background. Minimum requirements are not sufficient, in most cases, to achieve professional development, therefore, a concentration in one of the following fields is strongly recommended: park management and outdoor recreation, land use planning, environmental law enforcement, or environmental or outdoor education. Due to the flexibility of the program it is also recommended that the student work closely with his/her adviser on course selection.

Soil Science

A curriculum which emphasizes the basic sciences to provide an understanding of soil properties and processes in order to wisely manage land for any purpose. This curriculum meets the requirements for a soil scientist as set forth by the Soil Science Society of America.

Water Resources

Options are offered in water science or water management. The science option emphasizes basic sciences and enables the student to work in fields requiring knowledge of aquatic biology and pollution abatement. The management option gives the student a broad background in surface and ground water management as well as local and regional planning of water resources.

Wildlife Management

The wildlife curriculum offers study options in aquatic or terrestrial wildlife ecology. The programs in each of these areas is flexible enough to adequately prepare a student

for graduate school or for management positions at the Bachelor of Science level.

Details of these curricula are located in the section COURSES OF INSTRUCTION.

Minor studies are offered in Forestry, Soil Science, Resource Management, Outdoor Education, and Environmental Law Enforcement.

A **Master of Science degree** also is offered in Natural Resources.

A six week summer camp session is required of students on completion of their sophomore year for all majors and options except water science, which may substitute an approved alternate experience. The field experience taught in Soils, Forestry, Wildlife, and Water is designed to acquaint the student with actual field experience prior to the intensive studies of the junior and senior years.

Students majoring in the College of Natural Resources who are also candidates for secondary school teaching will enroll as freshmen in the College of Natural Resources and apply before their junior year for admission to the College of Professional Studies.

Advisers

Each student in the College of Natural Resources is assigned to an adviser from the faculty of the discipline in which the student intends to major. The adviser will assist the student in selecting courses, improving abilities, making vocational plans, and other aspects of university life. The student's program must be approved each semester by the adviser. The Assistant to the Dean is the adviser to all freshmen and sophomores.

While the adviser can guide and assist the student, **the student is responsible** for meeting all college and university requirements, rules, and regulations.

Semester Study Load

In order to graduate, a student must earn 120 credits in addition to credits in required physical education.

A normal (average) study load in the College of Natural Resources is 15 academic credits per semester plus one credit of physical education when required. In order to approximate an average of 15 academic credits per semester, students usually register for 12-16 academic credits per semester, plus one credit of physical education each year. This is considered a "normal" study load.

The Dean's signature is required on all study list cards with a load of 18 academic credits or more.

Students who have failed to maintain an average of 15 academic credits per semester should plan to attend summer school or an extra semester.

Curriculum for Bachelor of Science Degree

I. **English**—six credits: English 100 or 101, and 102.

II. **Communication**—two credits: Communication 101, or an equivalent performance course in oral communication.

III. **Mathematics**—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average grade of C or better in the aggregate of three units.

IV. **History**—six credits.

All history courses may be applied toward this requirement. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

(Students seeking teacher certification must complete this requirement by taking six credits in American history. See the Dean of the College of Professional Studies for a list of American history courses fulfilling this requirement.)

V. **Humanities and Social Science**—18 credits, distributed as follows:

A. **Humanities**—nine to 12 credits, with a maximum of six credits in any one group:

1. American Civilization.
2. Any literature course, whether English or another language. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
3. Foreign Language culture or civilization.
4. Philosophy.
5. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
6. For students not majoring or minoring in Art, specialized courses in the performance of Art.
7. Religious Studies.
8. Peace Studies 230, 240.

For a listing of specific courses which meet the Humanities requirement, see paragraph V.A. under the curriculum for the Bachelor of Science Degree in the College of Fine Arts.

B. **Social Science**—six to nine credits, with a maximum of six credits in any one group:

1. Economics.
2. Human Geography (courses numbered 110 to 340, and 369 to 375).
3. Political Science.
4. Psychology.
5. Sociology and Anthropology.
6. Peace Studies 200, 310, 370.

VI **Natural Science.** Select either A. or B.:

A. **Eight to 10 credits** from the following courses (cr in parens):

1. Astronomy 105(4), 106(4), 311(3).
2. Biology 101(5), 130(5), 160(5).
3. Chemistry 101(5), 103(3), 105(5), 106(5), 115(4), 116(4). (See Note 3 under Chemistry.)
4. Geography 101(5), 102(5), 103(5).
5. Geology 101(5), 104(4), 105(4).
6. Physics 101(5), 103(5), 104(5), 110(3), 211(4), 212(4).

In any one subject, if the course numbered 101 is used to meet this requirement, the other courses listed for that subject can not be used.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. Three courses selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Dean of the College of Natural Resources.



VII. Physical Education—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective credit options and count toward graduation.

VIII. Major study and approved electives to total 120 credits in addition to required physical education (total: 124 credits).

IX. At least 40 credits must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

X. To be approved for graduation in the College of Natural Resources, the student must have a minimum grade point ratio of 2.00 in the courses required for the major, including collateral courses and summer camp.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Teacher Certification

Students who wish to qualify for certification to teach at the secondary school level, with a major offered in the College of Natural Resources, have two options available:

Option I. In the College of Professional Studies, they must complete:

A. The general requirements for the Bachelor of Science degree in the College of Professional Studies.
B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.
C. The professional education sequence established for certification in secondary education.

Option II. In the College of Natural Resources, they must complete:

A. The general requirements for the Bachelor of Science degree in the College of Natural Resources.
*B. The specified major under plan I., II., or III., as listed under major-minor options in secondary education.
*C. The professional education sequence established for certification at the secondary level.

*See the appropriate paragraphs in the section on the College of Professional Studies.

College of Professional Studies

Arthur L. Fritschel, Dean; Gerald F. Johnson (- 1976, Robert F. Balas (1976-), Assistant Dean, School of Communicative Disorders; Thomas E. McCaig, Assistant Dean, School of Education; Robert O. Bowen, Assistant Dean, School of Health, Physical Education, Recreation, and Athletics; Vera Rimnac, Assistant to the Dean; Agnes A. Jones, Assistant Dean, School of Home Economics.

The College of Professional Studies (often referred to as **COPS**), is composed of the School of Communicative Disorders; the School of Education; the School of Health, Physical Education, Recreation, and Athletics; and the School of Home Economics. Programs in the Gesell Institute, and in Medical Technology and Military Science (Army ROTC) are also administered in this college. Descriptions of the majors and minors are listed by departments in a later section of the catalog headed COURSES OF INSTRUCTION.

Baccalaureate Degrees

Bachelor of Science degrees are offered in each of the schools:

The School of Communicative Disorders has a major in Communicative Disorders.

The School of Education, with (1) a major in Elementary Education; and (2) Professional Education courses leading to teacher certification in a number of majors and minors which are listed in a later paragraph. (The Bachelor of Music degree is available for majors in Music, Applied Music, and Music Literature.)

The School of Health, Physical Education, Recreation, and Athletics, with (1) three options in the major in Physical Education; and (2) minors in (a) Coaching, (b) Health Education, (c) Recreation, and (d) Safety Education.

The School of Home Economics, with majors in (1) Home Economics Education, meeting State of Wisconsin requirements for teacher certification; (2) Home Economics in Business, with options in (a) Fashion Merchandising, (b) Housing and Interiors, (c) Food and Equipment, (d) Communication; (3) Food and Nutrition, with options in (a) General Food and Nutrition, (b) Experimental Food and Nutrition and (c) Food Service Management; and (4) Dietetics with options in (a) Coordinated and (b) Traditional programs.

Graduate Degrees

Master of Science in Teaching degrees are offered in elementary education, elementary education with emphasis in reading, or in special learning disabilities, and in biology, communication, English, history, and social studies.

Master of Science degrees are offered in Communicative Disorders (with emphasis areas in speech and language pathology, and audiology), in home economics education, and nutrition and food science.

The Master of Arts in Teaching degree is also offered. For details, see the section entitled GRADUATE COLLEGE later in the catalog.

Professional Programs in the School of Communicative Disorders

Pre-Professional Program

(1) All majors in the School of Communicative Disorders will be in the pre-professional program during their freshman and sophomore years. All transfer students above the sophomore level will be in the **pre-professional** program for at least one semester.

(2) During the preprofessional period the student will take courses which will satisfy his general education requirements, some of his required psychology courses, and at least 12 credits in the major.

(3) During the second semester of the sophomore year, the student will obtain forms from the coordinator of undergraduate studies, so that he may apply for the professional program. Only those students who are accepted into the professional program will be allowed to register for junior-senior courses.

(4) Criteria for acceptance into the professional program.

a. Overall grade point ratio of 2.25.

b. Grade point ratio of 2.50 in major courses. (Instructors will submit mid-term grades for second semester sophomore level classes).

c. A grade of at least C in Communicative Disorders 295.

d. Those students who wish certification to practice in the school setting will also obtain forms from the School of Education during the second semester of the sophomore year. Only those who are accepted will be allowed to enroll in the educational course sequence. Criteria for entrance are a grade point ratio of 2.25 and the recommendation of the School of Communicative Disorders. Only those students who qualify for the professional program in Communicative Disorders under criteria (a., b., c., and d.) above will be recommended.

Professional Program

Those students who qualify for the professional program will be allowed to enroll in the junior-senior courses within the major. They will be expected to maintain a grade point ratio, both general and in the major, which will allow them to qualify for entrance into the Graduate program.

Clinical practicum and student teaching are open only to those students who have been accepted into the professional program.

Professional Education Program

Students must file formal application for admission to an education curriculum. Forms are available in Room 112 in the COPS building.

Admission to the Professional Education Program or to the School of Education is a prerequisite for the following courses: Education 301, 304, 308, 324, 325, 328 through 340, 381, and 398.

Admission to the Professional Education Program and Course Work in the School of Education

A. Students interested in **Secondary Education** shall apply for admission to the professional education program during their sophomore year.

1. Each student must secure an application form from the office of the Dean of the College of Professional Studies.
2. Each applicant, after securing his application form, will see an adviser in the Advising Center of the School of Education, Room 468, COPS, or the office of the Assistant Dean, SOE, Room 466, COPS.
3. Ultimate responsibility for advising in the major and minor academic areas rests with the chairmen of the major and minor academic areas, and for advising in the professional education courses rests with the School of Education adviser.

B. Students interested in **Elementary Education** may apply for admission to Professional Studies in Room 112, COPS, during their freshman year. They may ask for an adviser from the Assistant Dean, SOE, Room 466, COPS, or from the Advising center, SOE, Room 468, COPS.

C. **All students** must meet the following criteria for admission to the professional education program.

1. A grade point ratio of at least 2.00 in freshman English. Exceptions may be made on terms prescribed by the Dean of the College.
2. Completion of a speech and hearing screening test. Remedial services will be made available to any person who fails any portion of the screening test and who seeks these services.
3. A GPR of at least 2.25 based on credits earned at this university.

D. The Dean of the College of Professional Studies will secure a report for advising purposes for each student from the Office of Student Services and Information.

E. Students who are denied admission to the professional education program, may file a special petition with the Teacher Education Review Committee for further consideration. Provisional admission to the program may be granted in certain cases to students who do not meet all of the criteria for full admission.

F. Students enrolled in the MAT program will follow the application procedure described above.

Transfer Students:

Transfer students and those who have completed a baccalaureate degree from an accredited institution (in meeting the conditions of paragraph C., above) will be conditionally admitted to the Professional Education Program for their first semester, if they satisfy the following requirements:

1. Possess a minimum grade point ratio of 2.25.
2. Possess a grade of C or better in freshman English.

Full admission to the Professional Education Program will be granted when the other requirements have been satisfied. Students who have the baccalaureate degree will need to secure a letter of recommendation from the department of their academic major in the institution from which they graduated.

Students who do not satisfy the above requirements will take the number of credits necessary at this institution to satisfy the above requirements before they may enroll in courses in the Professional Education Program.

Transfer students must earn nine credits on this campus previous to the semester in which they do their student teaching.

Curriculum for the Bachelor of Science Degree
(Except for Elementary Education)

I. **English**—six credits: English 100 or 101, and 102.

II. **Communication**—two credits: Communication 101 or an equivalent performance course in oral communication.

III. One of the following:

A. **Foreign Language**—eight credits.

The equivalent of one year of college work in one language must be completed before credits will count toward this requirement.

Students will be placed in foreign language courses on the basis of their high school records, or a placement examination, and will not receive credit for courses taken at a lower level than that in which they are placed. This requirement may be satisfied by two acceptable units of high school work completed in one language. Normally, an acceptable unit is one year's work with a grade of C or better.

B. **Mathematics**—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average grade of C or better in the aggregate of three units.

IV **History**—six credits.

All history courses may be applied toward this requirement. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

Students qualifying for certification to teach at the secondary school level will meet this requirement with six credits in American history. Any American history courses may be applied toward this requirement.

(The Bachelor of Music degree, which is described in the section on the COLLEGE OF FINE ARTS, requires History 105 and 106, or 107 and 108, or 211 and 212.)

V. **Humanities and Social Science**—18 credits, distributed as follows:

A. **Humanities**—nine to 12 credits, selected so as to include courses from at least two of the following groups, with a maximum of six credits in any one group:

1. American Civilization.
2. Any literature course, whether in English or another language. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
3. Foreign language culture or civilization.
4. Philosophy.
5. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
6. For students not majoring or minoring in art, specialized courses in the performance of Art.
7. Religious Studies.
8. Peace Studies 230, 240.

For a listing of specific courses which meet the Humanities requirement, see paragraph V.A., under the curriculum for the Bachelor of Science Degree in the College of Fine Arts.

B. **Social Science**—six to nine credits, with a maximum of six credits in any one group:

*1. Economics.
2. Human Geography (courses numbered 110 to 340, and 369 to 375).
3. Natural Resources 370.
4. Political Science.
*5. Psychology.
**6. Sociology and Anthropology.
7. Peace Studies 200, 310, 370.

*Required for Home Economics majors.
**Recommended for Home Economics majors.

VI. **Natural Science.** Select either A. or B.:

A. **Eight to 10 credits** from the following courses (cr in parens):

1. Astronomy 105(4), 106(4), 311(3).
2. Biology 101(5), 130(5), 160(5).
3. Chemistry 101(5), 103(3), 105(5), 106(5), 115(4), 116(4). (See Note 3 under Chemistry.)
4. Geography 101(5), 102(5), 103(5).
5. Geology 101(5), 104(4), 105(4).
6. Physics 101(5), 103(5), 104(5), 110(3), 211(4), 212(4).

In any one subject, if the course numbered 101 is used to meet this requirement, the other courses listed for that subject can not be used.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. Three courses selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Dean of the College of Professional Studies.

VII. **Physical Education**—four credits.

Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level. Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

Students transferring from other institutions will meet this requirement on the basis of one credit per year. Thus, students entering as seniors will be required to earn one credit; as juniors, two credits; as sophomores, three credits; and as freshmen, four credits.

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation, and Athletics during registration.

Students may elect additional Physical Education courses beyond the four credits required for graduation. Additional Physical Education courses satisfy general elective credit options and count toward graduation.

VIII. **Major and minor studies,** as required.
(See statement below regarding major-minor options in secondary education.)

IX. **The required professional education sequence** for those seeking teacher certification at the secondary

school level includes 20 credits in the following courses: Education 330-340 (two credits in the major field; two credits in the minor field, if required); Education 100, 380, 381, 398. (Psychology 200 is a prerequisite for Education 381.) Students not having a minor will elect at least two credits of other education courses.

All persons applying for teacher certification after July 1, 1977, must have completed a discrete course in reading. Courses which meet this requirement are Education 308 and 386, and English 381.

X. **Approved electives** to total 120 credits in addition to required physical education (total: 124 credits).

XI. **At least 40 credits** must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

XII. Completion of the **Human Relations requirement** as required by the Wisconsin Department of Public Instruction for certification. A copy of these requirements may be obtained from the office of the Dean of the College of Professional Studies, Room 112, COPS.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Teacher Certification

Students who wish to qualify for certification to teach at the secondary school level have two options available:

Option I. In the College of Professional Studies, they must complete the curriculum described above.

Option II. If they have a major which is offered in another college, they may meet graduation requirements by completing:

A. The general requirements for the Bachelor of Arts, Bachelor of Music, or Bachelor of Science degree in the college offering the major. (Although Communication 101 is not required for the Bachelor of Arts degree, it is required for teacher certification.)

B. The specified major under plan I., II., or III., as listed below under major-minor options in secondary education.

C. The professional education sequence established for certification in secondary education. (See paragraph IX., above.)

The successful completion of the basic degree requirements, major-minor requirements and the professional education sequence described above enable a graduating senior to apply for an initial three-year **license to teach** in Wisconsin, in accordance with the certification requirements set up by the State Department of Public Instruction. The secondary education curriculum prepares students for teaching positions in grades seven through 12 in the junior and/or senior high schools. Applications for the license should be filed with the office of the Dean of the College of Professional Studies.

All students seeking initial certification are required to file a check list in connection with the **DPI Human Relations Requirement.** Information about the specific requirements may be obtained from the School of Education adviser or from the office of the Dean of the College of Professional Studies. Students should be aware of the fact that this is a requirement for certification and that courses required to meet general degree requirements may or may not meet the specific Human Relations requirement.

Major-Minor Options in Secondary Education

Students will meet one of the following options:

Plan I. One approved major of at least 34 credits and a minor of at least 22 credits. In a number of instances, the department requirements for a major or minor in this university exceed the number of credits required for certification.

Plan II. Two approved majors of at least 34 credits.

Plan III. One college-or university-approved broad field or comprehensive major of at least 54 credits. The broad field majors are offered only in art, communicative disorders, general science, home economics, music, social science, and physical education.

Requirements for the majors and minors are listed under the course descriptions for each department. Students working for teacher certification should note that in some cases the teaching major differs from the major for the student not seeking teacher certification.

Major and Minor Areas for Teacher Certification

Area	Major	Minor
Art K-6	X	
Art K-12	X	X
Art 7-12	X	
Biology	X	X
Business Education	X	
Chemistry	X	X
Coaching		X
Communication	X	X
Communication and Drama	(1)	
Communicative Disorders	X(2)	
Dance		X
Drama	X	X
Driver Education, for certification ONLY		
Early Childhood Education	X(3)	

Area	Major	Minor
Economics	X	X
English	X	X
French	X	X
General Science (Broad Field)	X	
Geography	X	X
German	X	X
Health Education		X
History	X	X
Home Economics Education	X	
Instructional Resources K-12		(4)
Library Science		X
Mathematics	X	X
Music K-12	(5)	
Philosophy	X	X
Physical Education K-12	X	
Physical Education K- 6	X	
Physics	X	X
Political Science	X	X
Psychology	X	X
Recreation		X
Resources Management	X(6)	X(6)
Russian		X
Safety Education		X
Social Science (Broad Field)	X	
Spanish	X	X
Special Learning Disabilities		X

(1) Students interested in the Communication-Drama major should check with the department chairmen.

(2) After July 1, 1975 a master's degree is required for certification.

(3) May be secured through the Elementary Education department or the School of Home Economics.

(4) Minor in Instructional Resources leads to certification as school librarian and as audio-visual director.

(5) Major in music leads to certification in Instrumental K-12, Vocal K-12, or Instrumental and Vocal K-12.

(6) Leads to certification in conservation.

A department may refuse to accept a student for major or minor study if the student's general academic record is not satisfactory to that department. The department is also empowered to disapprove a student's retention as a major or minor if his achievement does not continue to meet the standards of that department.

NOTE: Students who major or minor in any of the social sciences (economics, geography, history, political science, and sociology and anthropology) are required by statute to take Economics 200 or 323. Students who major or minor in any of the social sciences or in any of the sciences (biology, chemistry, and physics) are required by statute to take Natural Resources 370. (Substitutes may be approved by the Assistant Dean of the School of Education.)

Curriculum for the Bachelor of Science Degree in Elementary Education

I. **English**—six credits: English 100 or 101, and 102.

II. **Communication**—two credits: Communication 101 or an equivalent performance course in oral communication.

III. **Foreign Language**—eight credits; or **Mathematics**—four credits.

IV. **American History**—six credits; History 211 and 212.

V. A. **Humanities**—nine credits:

1. English 211 and 212, or 213 and 214.
2. Music 100.

B. **Social Science**—14 or 15 credits:

1. Human or regional geography—two or three credits (courses numbered 110 to 340, and 369 to 375).
2. Natural Resources 370 (Intermediate-Upper Elementary, only).
3. Psychology 200 and 260.
4. Electives to total 14 or 15 credits.

VI. **Natural Science**—13 to 15 credits:

Any three of the following: Biology 101; Chemistry 101 or 103; Geography 101; Geology 101, Physics 101.

The student is advised to take college courses in areas not covered in his high school program.

VII. **Physical Education.**

Students normally register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level.

In the Elementary Education Curriculum, Physical Education 231 and 232 may each be substituted for two credits of Physical Education 101, as follows: Physical Education 101, 2 cr; and 231 or 232, 3 cr; (Total: 5 cr.) (Four credits apply toward the Phy Ed 101 requirement; the additional credit will apply toward the 120 credits required in paragraph X, below.)

Some courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

VIII. **Related Subject Matter**—24 credits; Art 101 and 102; English 275; Mathematics 229, 239, 349; Mathematics Education 229, 239, 349; Physical Education 280.

IX. **Professional Education.** One of the following:

A. **Primary Education** (Grades 1-3): Education 100, 304, 308, 324, 325, 381, 398; Art Education 322; Music 381; Physical Education 231.

B. **Kindergarten-Primary Education** (Grades K-3):

Add Education 301 to the listing under Primary Education. Part of the student teaching will be done in Kindergarten.

C. **Intermediate-Upper Elementary Education** (Grades 4-8): Education 304, 308, 324, 325, 381, 383, 398; Instructional Resources 331; Art Education 322; Music 381; Physical Education 232.

D. **Kindergarten-Grade 8** (grades K-8): Add Education 301 and Student Teaching in Kindergarten to the listing under C.

X. **Approved electives** to total 120 credits in addition to required physical education.

Students should use some of their elective credits as an area of concentration, or a minor in some field of study, if certification for junior high school teaching is desired.

XI. **At least 40 credits** must be earned in courses numbered 300 or above. The dean of the college may, at his discretion, accept a minimum of 32 credits.

XII. Completion of the **Human Relations requirement** as required by the Wisconsin Department of Public Instruction for certification. A copy of these requirements may be obtained from the office of the Dean of the College of Professional Studies.

Centers for the Study of Teaching

Pre-student-teaching centers have been established at the primary and intermediate grade levels and may soon be planned for secondary schools. Teacher candidates work in a public school with teachers and students while taking professional education courses.

These centers meld theory and practice **before** the student teaching experience and assist students in determining whether or not they wish to teach before being locked into the curriculum. Students desiring to study teaching at such centers should plan their programs with their advisers **before** taking profession education courses. Information about these centers may be obtained from Dr. Betty Allar, Coordinator of the Center, or the Assistant Dean of the School of Education. (See Plan B under **Student Teaching Plans** later in this section.)

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Early Childhood Education and Kindergarten Certification

Students wishing to major in **Early Childhood Education** have two options available — Elementary Education or Home Economics. Both programs follow a common pattern of courses leading to certification for nursery school and kindergarten. Graduates of this program **will not** be certified for any level above kindergarten. The Home Economics option emphasizes parent education. There is also the possibility that the student may obtain certification for teaching in vocational programs by following the vocational certification option.

Students wishing to prepare for **kindergarten teaching** may do so in one of two ways: (1) Majoring in Early Childhood Education, either Elementary Education or Home Economics option. This program leads to Nursery School- and Kindergarten certification only. (2) Majoring in Elementary Education and taking the kindergarten option listed above. This option would certify the graduate for grades K-8.

I. **General Degree Requirements**

Students will follow the general requirements for the Bachelor of Science degree.

II. **Major Requirements**

Education 242, 301, 381, 398; Psychology 200; Home Economics 101 **or** Art 101; Home Economics 261 **or** Psychology 260; Home Economics 253 **or** 351; Home Economics 361 **or** Education 241.

III. **Required Support Courses**

(Home Economics option elect 9 credits from the following:)
(Elementary Education option elect 12 credits from the following:)
Communicative Disorders 266; 280; Education 351, 353; Physical Education 231.

Completion of I., I., and III. meets Wisconsin certification requirements for Nursery-Kindergarten (N-K). Students choose either IV. or V., below.

IV. **Elementary Education Option**

A. Education 349.

B. One of the following:

1. Completion of a minor in one of the following: art, biology, dance, drama, learning disabilities, music, psychology, sociology and anthropology.
2. Completion of a concentration of 15 credits in a) one of the minor fields listed above, or b) in two of the fields listed above, with no more than nine credits in any one field.

V. **Home Economics Option** (20 credits).

Home Ec. 104, 105, 211, 364, 366, 371, 467; P.E. 252.

Vocational Certification

The student may wish to obtain certification for teaching in vocational programs. Completion of the above course of study and 2,000 hours of work experience in the area of employment are required for a Provisional Certificate. Academic requirements

for a Standard Certification in vocational education may be fulfilled by taking the following additional courses: Home Economics 394, 395, a course in evaluation, such as Education 383 or Home Economics 726. (Note: The Standard Certificate also requires three years of successful teaching experience and 4,000 hours of work experience in the specialized field.)

Program in Special Learning Disabilities

The program is described in a later section of this catalog entitled COURSES OF INSTRUCTION under the heading SPECIAL LEARNING DISABILITIES.

Curriculum in Elementary Education for County College Graduates

Graduates of the regular state approved two-year county teachers college course may be tentatively admitted to junior standing in the School of Education upon satisfactory evaluation of their records by the Dean of the College of Professional Studies. Students transferring with less than 60 acceptable credits will be placed on probation for one year and must earn a grade point ratio of 2.25 or higher before filing an application for formal admission. Students may not take education courses until they have been formally admitted to the School of Education.

Past experience has indicated that most county college transfer students will need to take the following courses in order to meet degree and certification requirements:

1. Communication 101.
2. Five or more credits of Education 398.
3. Humanities—six credits, selected from:
   a. American Civilization.
   b. Any literature course, whether in English or another language. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
   c. Foreign Language culture or civilization.
   d. Philosophy.
   e. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
   f. For students not majoring or minoring in Art, specialized courses in the performance of Art.
   g. Other courses approved for humanities credit as listed in each semester's timetable.

   For a listing of specific courses which meet the Humanities requirement, see paragraph V. A., under the curriculum for the Bachelor of Science Degree in the College of Fine Arts.
4. Mathematics—six credits of mathematics and the associated methods course. Specific courses will be determined by the student in consultation with advisers in the Mathematics Department and the School of Education.
5. Physical Education—two credits.
6. Science: Chemistry 101 or 103; and Physics 101.

   Students desiring the degree in either primary or intermediate-upper elementary education will take additional required courses appropriate to these areas. These requirements will be indicated on the students' planning sheets.
7. Electives to total 62 credits beyond the county teachers college course. (A total of 64 credits is required of those who began their county college work before 1954.)

Since the student must earn 40 credits in courses numbered 300 or above, most electives should be in that category. The dean of the college may, at his discretion, accept a minimum of 36 credits in junior-senior courses.

NOTE: Candidates for degrees must fill out an APPLICATION FOR GRADUATION during the registration period, or in the Registration and Records office, at the beginning of their senior year (defined as the accumulation of 86 credits applicable toward a degree, not counting required physical education). No degree will be granted unless the candidate receives the approval of the faculty during the semester or summer session in which the work is completed.

Special Education

At the present time there are special education programs in Communicative Disorders, and in Special Learning Disabilities. Students who are interested in these majors may apply to the Assistant Dean of the School of Communicative Disorders, or, for SLD, to Darvin Miller in the School of Education.

A. **Education Certification in Communicative Disorders.** The Communicative Disorders sequence allows the student to work in a public school setting with students of all ages, from pre-school through high school, and leads to teacher certification upon completion of the Master's degree. For further description of this major, see the departmental listing in the section COURSES OF INSTRUCTION.

B. **Certification in Special Learning Disabilities.** The program in Special Learning Disabilities prepares certified teachers in Special Learning Disabilities to serve as resource teachers to teachers in the regular classroom, to teach in special education resource rooms, or to teach in self-contained classrooms for learning disabled children.

Student Teaching—Thomas J. Hayes, Director, Student Teaching and Laboratory Experiences

This final step in the sequence of teacher preparation is of extreme importance since it involves experience in an actual classroom situation. At least ten credits of student teaching (Education 398) are required for graduation and recommendation for teacher certification. The organization of the overall program is the responsibility of the Director of Student Teaching, who works closely with student teachers, members of the university faculty, and

administrators and teachers in the cooperating schools.

Students are placed for student teaching in many different schools that cooperate with the university in this important phase of teacher education. Placements are made by the student teaching office and location decisions are based on a combination of things such as availability of qualified cooperating teachers, type of curriculum used, type of school organization, number of student teachers in the area, distance from the university, and choice of the student.

A student should not plan to do student teaching in his home town or in a school from which he has graduated or in a school district in which a relative is currently employed or serves as a school board member.

Transfer students must do nine credits of work on this campus previous to the semester in which they do their student teaching.

Student Teaching—Elementary Education and Early Childhood Education

The student should apply at the office of Student Teaching for admission to student teaching.

Requirements for admission to student teaching at the elementary level are:

1. Completion of application forms for student teaching.
2. Admission to the School of Education.
3. A cumulative grade point ratio of 2.25 or better for student teaching and of 2.50 for internship.
4. Completion of techniques courses in elementary education or early childhood education.
5. For early childhood majors in the education option: Completion of Education 349.
6. Recommendation from the Assistant Deant School of Education.
7. A medical statement indicating the student is free from tuberculosis based on an examination within the last year.
8. Submission of completed application forms by the date set by the Student Teaching Office during the semester preceding the one in which the student teaching is done.

Student teachers will have completed methods courses prior to student teaching. Students will enroll in Education 398 (Student Teaching) in the second semester of the junior year or the first or second semester of the senior year. Thirteen credits of Education 398 are required for both elementary education and early childhood education. The assignment of student teaching usually requires work at two grade levels, e.g. 1/2 semester in grade 4 and 1/2 semester in grade 5. Students in the kindergarten-elementary program must teach at the kindergarten level for part of the assignment. Students in the early childhood program must do part of their student teaching in kindergarten and part in a preschool setting. The typical student teaching program is for a complete semester on a full-day basis. Students are invited to apply for the intern program described later in this section.

All students in elementary education are to attend orientation meetings held during the semester prior to student teaching. Information relative to requirements for student teaching, location, and levels of teaching is provided in the orientation programs.

Internship—Elementary Education

See Student Teaching Plan B, below.

Student Teaching—Secondary Education

The student should apply at the office of Student Teaching for admission to student teaching.

Requirements for admission to student teaching at the secondary level are:

1. Completion of application forms for student teaching.
2. Admission to the Professional Education Program.
3. A cumulative grade point ratio of 2.25 or better for student teaching and of 2.50 for internship.
4. A grade point ratio of 2.25 in the major and minor fields, and of 2.50 in the major and minor fields of internship.
5. Recommendation from the chairman of the student's major and minor department.
6. Completion of the techniques courses in the area(s) to be taught. A medical statement indicating the student is free from tuberculosis based on an examination within the last year.
8. Submission of completed application form no later than February 15 of the academic year preceding the one in which student teaching will be done.

Student Teaching Plans

The university offers several plans in order to provide realistic student teaching experiences. Each pattern calls for the completion of specific courses of study, and it is imperative that each student bear in mind the sequence of courses, etc., in the careful long-range planning of this overall program of teacher preparation.

Plan A. (Block) (Not available to Art Education majors and minors; see Plan D., below.)

1. The student is enrolled in the "professional semester" or "block" program of student teaching. He will have completed Education 380 and one other course in professional education.
2. During the second semester of the junior year or during the senior year the student will take 15 hours of work in professional education.
   A. The first segment of the semester (approximately seven weeks) is devoted to Education Psychology (Education 381) and a course in the techniques of teaching. This work is taken on campus. Inasmuch as not all techniques are offered on the "block" program, it is imperative that the student plan his course sequence very carefully.
   B. The remainder of the semester (approximately

10 weeks), is spent in student teaching in an approved cooperating school on a full-time basis. This normally means that the student will actually live in the community and attend faculty meetings, extra-curricular activities, etc. University coordinators will check the progress of the student teacher and several special seminars may be held to discuss the student teaching experience. At the end of this period, the cooperating teacher and the university coordinator will provide an evaluation of the work of the student.

C. It is the student teacher's responsibility to arrange for his own housing and meals.

D. The student teacher may be required to return to the campus during the final week of the semester to confer with the university instructors and supervisors in order to gain further insight into the actual problems of teaching.

Plan B. (Internship - Elementary and Secondary)

1. A student who is planning to teach at either the elementary or secondary level may enroll as a "teaching intern."
2. The required courses in professional education must be completed before the student begins the teacher-internship. In secondary education, he must also have completed at least three-fourths of the work toward the major, and all of the minor if he wishes to teach it.
3. The intern is a paid member of a public school staff who spends an entire semester in a school system. During this time he is involved in experiences covering the entire range and variety of a teacher's duties, both in and out of the classroom.
4. Other considerations:

A. A student entering the internship program should have a cumulative grade point ratio of 2.50 or better, and a grade point ratio of 2.50 or better in the major and in the minor, if he wishes to teach in his minor.

B. No on-campus work may be carried during the semester.

C. A summer conference may be required.

D. The student must apply for a special intern-teaching license which costs $20.00.

E. The student may be assigned to either the fall or spring semester.

F. The intern must report for the orientation program that is organized by the cooperating school system.

G. Students considering the internship plan should contact the Student Teaching office as soon as possible. Internship assignments for the full school year are usually made during February for the following year, and it is therefore necessary for the student to have his application completed by that time.

Plan C. (Special plan for Art Education majors and minors.)

1. The student teaching experience for art education majors will be 18 weeks in length, with nine weeks at the elementary level and nine weeks at the secondary level for full state certification K-12, for 14 credits. Either level can be done first, but starting at the elementary level is preferable.
2. A maximum of three additional credits of special work may be taken concurrently by the student while teaching, provided that these three people concur that the student teaching experience will not suffer: the university coordinator, the university professor in charge of the course, and the cooperating teacher.
3. All Education courses should be taken prior to student teaching.
4. The student must have completed at least three-fourths of the work toward the major and all of the minor, if he wishes to teach in it, prior to the student teaching experience.
5. Minors will teach full time for nine weeks at the level in which they are seeking certification, and receive seven credits.
6. The junior high level will count toward secondary certification.

The Student Education Association

The Student Education Association is a preprofessional group for students interested in teaching. The organization is open to all students with this interest, regardless of admission to the School of Education. Programs usually include topics not covered in the education courses and add to an understanding of the field. The membership provides liability insurance: WEA-NEA membership is available through the organization, and advising in the field.

Wisconsin Indian Teacher Corps Program

The Wisconsin Indian Teacher Corps Program at the University of Wisconsin-Stevens Point is a two-year federally funded project (1975-77) involving five to ten graduate interns in elementary education. Interns will earn a Master's Degree and elementary certification. The purpose of the program is to: (1) develop a viable in-service program for teachers in the respective communities; (2) initiate multi-unit organization and Individually Guided Education in the elementary schools in the program; and (3) to develop a competency-based teacher education program at the university. Special emphasis will be on diagnostic prescriptive teaching.

The project, one of 87 Teacher Corps programs throughout the country, involves the Local Education Agencies and reservations of Ashland (Bad River Reservation), Bayfield (Red Cliff Reservation), Bowler (Stockbridge-Munsee Reservation), Hayward (Lac Court Orielles Reservation), and Danbury (St. Croix Reservation). Information regarding the Teacher Corps Program may be obtained in the office of the Director, Dr. Terrence J. Snowden.

The Associate Degree

General Requirements for the Associate Degree

I. English—six credits: English 100 or 101, and 102.

II. Communication—two credits: Communication 101, or an equivalent performance course in oral communication.

III. One of the following:

A. **Foreign Language**—eight credits.

The equivalent of one year of college work in one language must be completed before credit will count toward this requirement.

Students will be placed in foreign language courses on the basis of their high school records, or a placement examination, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by two acceptable units of high school work completed in one language. Normally, an acceptable unit is one year's work with a grade of C or better.

B. **Mathematics**—four credits.

Students will be placed in mathematics courses on the basis of their high school records, and will not receive credit for courses taken at a lower level than that in which they are placed.

This requirement may be satisfied by acceptable work in three units of high school mathematics, excluding general mathematics. Acceptable work is an average grade of C or better in the aggregate of three units.

IV. History, Humanities, and Social Science—12 credits, selected so as to include courses from at least two of the following groups, with a maximum of six credits in any one group:

A. **History.** All history courses may be applied toward this requirement. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. **Humanities**—courses from the following:

1. American Civilization.
2. Any literature course, whether in English or another language. The courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.
3. Foreign Language culture or civilization.
4. Philosophy.
5. Any course in the literature, history, philosophy, appreciation, or logic of Art, Communication, Dance, Drama, Music.
6. For students not majoring or minoring in Art, specialized courses in the performance of Art.
7. Religious Studies.
8. Peace Studies 230, 240.

For a listing of specific courses which meet the Humanities requirement, see paragraph V. A., under the curriculum for the Bachelor of Science Degree in the College of Fine Arts. (Courses numbered 300 and above are open only to students who have accumulated 56 credits toward a degree.)

C. **Social Science**—courses from the following:

1. Economics.
2. Human geography (courses numbered 110 to 340, and 369 to 375.)
3. Natural Resources 170.
4. Political Science.
5. Psychology.
6. Sociology and Anthropology.
7. Peace Studies 200.

V. Natural Science. Select either A. or B.:

A. **Five or six credits** from the following courses:

1. Astronomy 105, 106.
2. Biology 101, 130, 160.
3. Chemistry 101, 103, 105, 106, 114, 115, 116. (See note 3 under Chemistry.)
4. Geography 101, 102, 103.
5. Geology 101, 104, 105.
6. Physics 101, 103, 104, 110, 211, 212.

In any one subject, either the course numbered 101 or course(s) numbered above 101 will be counted toward this requirement, but not both.

Courses need not be taken in sequence, nor need a sequence be completed, except that stated prerequisites must be met.

B. **Two courses** selected from the following: Astronomy 100, Biology 100, Chemistry 100, Geography 100, Geology 100, Physics 100.

These courses are designed to increase the student's knowledge, understanding, and appreciation of the science, and its significance in man's attempt to prosper in his environment.

Substitution for the courses listed in this requirement may be accepted with the consent of the Vice Chancellor for Academic Affairs.

VI. Physical Education—two credits.

Students will register in one section of Physical Education 101 in each of their two academic years; they may not repeat the same activity at the same level. Certain courses in Dance may be applied toward this requirement. (See the listing under Dance, in the section COURSES OF INSTRUCTION.)

A student who has a medically identified basis for special physical activity programs should contact the School of Health, Physical Education, Recreation,

and Athletics during registration.

VII. Additional approved work to total 62 credits.

A minimum of 30 credits, including the last 15, must be earned at the University of Wisconsin-Stevens Point.

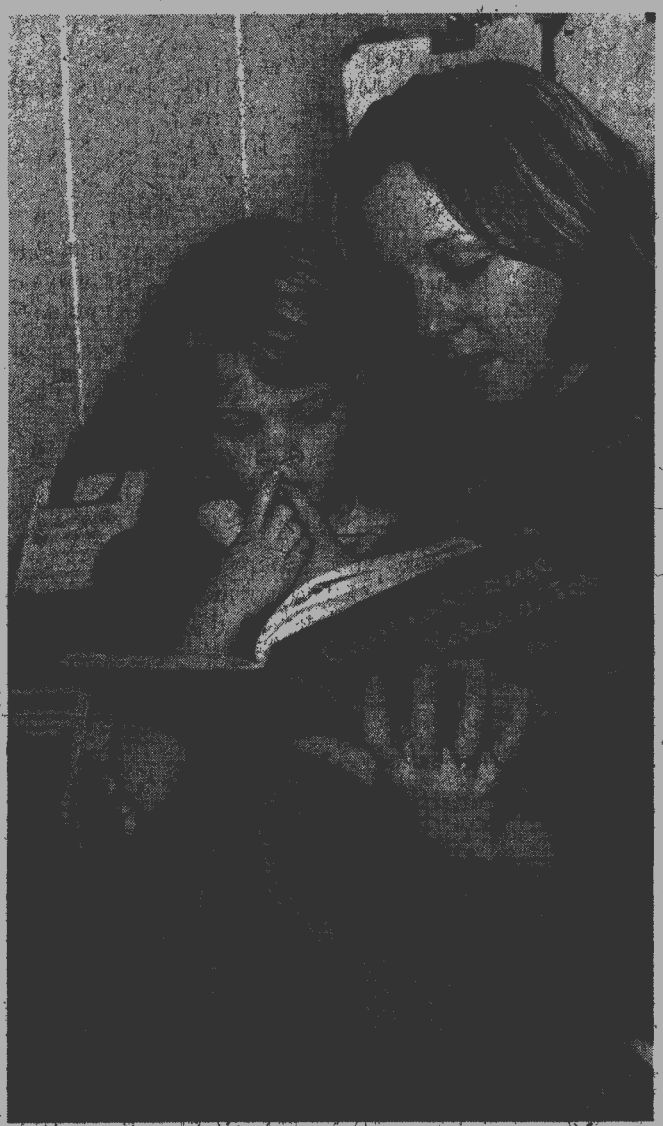
A cumulative grade point ratio of 2.00 is required for granting of the Associate Degree.

A candidate for the degree shall fill out an application for the Associate Degree at the Registration and Records office. Ordinarily such application shall be made not later than the beginning of the semester or summer session in which the student expects to complete the work.

A student who does not apply for the degree when first eligible may make application up to two years after the required work is completed.

Work taken beginning in June, 1970, may be credited toward the degree.

Eligibility for the degree will be checked by the Registrar's Office and degrees will be approved by the Vice Chancellor for Academic Affairs and by the Chancellor.



The Graduate College

Winthrop C. Difford, Dean

Graduate work was implemented at the University of Wisconsin-Stevens Point in the summer of 1960. It began as a cooperative program with the nine then State Colleges and the University of Wisconsin, becoming a full-time academic year program in the fall of 1966.

Specific requirements for degrees are established by each department which offers a graduate degree.

The graduate program has been granted full accreditation by the North Central Association of Colleges and Secondary Schools.

The Graduate Council is the Executive Committee of the Graduate Faculty. It is composed of the Vice Chancellor for Academic Affairs or his representative, the Director of Graduate Studies or his representative, the Chairman of the Graduate Faculty, and 12 other members elected from the Graduate Faculty. The Graduate Council has authority to recommend and to determine, subject to review by the Graduate Faculty, policies pertaining to the graduate program of the university.

The Graduate Faculty shall approve new graduate degree programs, approve candidates for graduate degrees, and establish policies governing graduate work, which shall be administered by the Director of Graduate Studies.

Assistantships are awarded on a competitive basis through departments to persons admitted to the Graduate College. Applicants must be eligible for full status admission as a graduate student, and must be recommended by the chairman of a department. Departments normally screen applications in the spring for fall appointment. Under current Regents' rules, assistants cannot assume classroom teaching responsibilities, but are required to give approximately 17 hours of service per week to their departments and to register for nine credits of graduate work. An application for an assistantship may be obtained by contacting the department chairman's office.

Admission and Registration

Admission to the Graduate College is granted by one of the following officials:

1. For the **Master of Arts in Teaching** and the **Master of Science in Teaching** degrees: Winthrop Difford, Dean of the Graduate College.
2. For the **Master of Music Education** degree: Julius Erlenbach, Coordinator of the Graduate Program, Department of Music.
3. For the **Master of Science** degree **Communicative Disorders:** Dennis Nash, Coordinator of the Graduate Program, School of Communicative Disorders.
4. For the **Master of Science** degrees **Home Economics Education;—Nutrition and Food Science:**

Agnes Jones, Assistant Dean of the School of Home Economics.

5. For the **Master of Science** degree—**Natural Resources:** Daniel Trainer, Dean of the College of Natural Resources.

Inquiries about graduate programs and requests for application blanks may be directed to the persons listed above. Further instructions about procedures will be provided by them.

Transcripts must be provided for undergraduate and graduate work taken at other institutions. Such transcripts must be mailed directly to the admitting official, listed above, by the institution at which the work was done. Graduates at UW-SP need not furnish transcripts of the work done here; but transcripts of post-graduate and graduate work taken elsewhere are required even though the work may not be applicable toward the next degree.

The following **admission requirements** must be met:

1. A baccalaureate degree from an accredited institution.
2. Satisfactory mental and physical health.
3. Acceptance by the department or college in which graduate specialization is undertaken.
4. For the MST degree, certification for teaching in Wisconsin or another state.
5. Such other requirements as may be prescribed by the Graduate Council. These may include standardized testing.

Persons who have not been admitted to the Graduate College as "regular" graduate students, or who do not meet the requirements for admission, may take graduate courses as "special" graduate students, provided they present a Study List signed by an authorized adviser.

New students are advised to file applications and begin planning their programs three months prior to the term for which they are registering. The Department Chairmen, or advisers assigned by them, will assist the students in planning their programs.

Students will follow registration procedures as developed by the Registrar and published in the time table. Registration procedures for off-campus classes are outlined in instructions published by the Director of Extended Services.

The university reserves the right to limit class size, or to cancel classes when the number of registrations is too small to warrant offering the course.

The maximum study load for a graduate student is 15 semester hours in each semester during the academic year.

Transfer of Credit

Students who have made satisfactory records in graduate courses in other graduate schools may be granted credit for those courses within the following limits:

(a) Nine credits may be accepted from other institutions (extension credit included in this total must not exceed six credits).
(b) Credits in courses in which the grade earned was less than B will not be accepted.
(c) Credits in correspondence courses will not be accepted.

In all cases the credits submitted for transfer must be earned at an accredited institution and be acceptable as graduate credit at that institution. Furthermore, the credit must be applicable to the student's proposed program. Credits submitted for transfer must be approved by the chairman of the student's major department and by the admitting officer listed under Admissions, above.

Academic Standards

All students are expected to maintain a B average to remain in the program. Students admitted in full status who fail to earn a B average will be placed on probation. Failure to raise the overall average to B or better during the next nine credits will drop the student from the program.

Any graduate student may appeal a decision regarding admission or retention in the program by submitting a letter to the Graduate Council requesting reconsideration.

A grade of incomplete must be removed before the end of the next semester or summer session in which the student is registered, if not, it automatically becomes a failure (thesis courses excepted).

For the purpose of raising his grade point ratio, a student may not take more than six credits beyond the 30-credit minimum requirement for the degree.

Admission to Candidacy for the Master's Degree

Admission to the Graduate College does not automatically admit a student to candidacy for a specific degree program. To be eligible for **candidacy** in the Master's degree program, the following additional provisions must be met:

1. He must have earned not less than nine credits of graduate work in residence at UW-SP.
2. Deficiencies, if any, must have been removed, and all subject matter prerequisites in the area of specialization must have been completed.
3. He must have a B average in all graduate work.
4. Procedures for admission to candidacy for the degree will vary among the several programs. Inquiries should be directed to the admitting officer listed under **Admissions**, above.

Application for the Master's Degree

Candidates for degrees must fill out an APPLICATION FOR GRADUATION at the Registration and Records office not later than the beginning of the semester or summer session in which they expect to complete their work. No degree will be granted unless the candidate

receives the approval of the Graduate Faculty during such semester or summer session.

General Requirements for All Master's Degrees

1. **A minimum of 30 credits** in graduate courses is required, of which at least 15 must be earned in residence at the University of Wisconsin-Stevens Point.
2. **A minimum of one-half** of the total number of credits must be taken in courses open to graduate students only (courses numbered 700 or over). (Exception: No minimum is required for the MS in Natural Resources.) In addition, for the MAT and MST, one-half of the credits in the area of specialization must be taken in courses open to graduate students only (courses numbered 700 or above.).
3. **At least a B average** must be achieved in all work taken to satisfy the degree requirements. A grade of C will be accepted in no more than eight of the 30 credits required (nine of the 44, for the MAT).
4. **Completion of a thesis** is optional. The student's choice of adviser and of a thesis topic must be approved by his department. The completed thesis must be approved by the thesis adviser and by a thesis committee of at least two other members of the Graduate Faculty appointed by the department. The thesis adviser shall be the chairman of the committee. Any member of the Graduate Faculty may serve on the committee. The Director of Graduate Studies serves as an ex-officio member of all thesis committees. A bound copy of the thesis must be filed in the library at least 10 days before graduation.
5. **A comprehensive examination** is required of all students, and is administered in April, November, and early July each year. It is based on the student's course work. When a thesis is offered in partial fulfillment of degree requirements, the comprehensive exam may be, at least in part, an **oral defense of the thesis.**
6. **All credit** accepted toward a degree, including transfer credit, must have been **earned within a seven-year period.** No extensions will be granted except for unusual health conditions, fulfillment of military obligations, or such other extenuating circumstances as the Graduate Council may recognize.

Specific requirements for the various degrees are listed in the sections immediately following:

The Master of Arts in Teaching (MAT) Degree

I. The general requirements for the master's degree must be met, as specified above.

II. In addition to the minimum of 30 credits in graduate courses, the MAT degree requires 14 credits in the Professional Sequence.

A. Area of Specialization—18 to 21 credits in one of the following:

1. Biology.
2. Communication (may include electives in Drama).
3. English.
4. History.

B. Professional Education—nine to 12 credits:

Education 702 (three credits), Education 760 (three credits); and three to six credits from Education 583, 701, 721, 751.

C. Professional Sequence—14 credits:

Education 765 (eight credits) and Education 763, 764 (six credits).

Additional credits may be required to correct deficiencies and/or to meet certification requirements. Teachers in any of the **science** areas must have a course in conservation.

III. Thesis option—select either A. or B. (or C. for Social Studies only):

A. A thesis, carrying two to six credits, for research in an area of specialization. (See item 4. under general requirements.)

B. A research paper, carrying no credit, will be required if a thesis is not elected. Growing out of the MAT Seminar, Secondary (Education 760), this paper must be approved by the seminar instructor, and filed in the department of the area of specialization.

The Master of Music Education (MMEd) Degree

(Instrumental, Choral, and Suzuki (Talent Education) emphases)

I. The general requirements for the master's degrees must be met, as specified above.

II. The minimum of 30 credits in graduate courses is distributed as follows:

A. Major Applied Music—four credits.

B. Music Theory—six credits.

A placement examination is required. Students found not qualfied will take Music 711, and one other graduate course in music theory. Qualified students will take Music 712, and one other graduate course in music theory.

C. Music Literature/History—six credits.

A placement examination is required. Students found not qualified will take Music 521, and one other graduate course in music literature/history. Qualified students may select any graduate courses in music literature/history, except Music 521.

D. Music Education—six credits.

Music Education 786, 787.

E. Thesis option—select one of the following:

1. Thesis—four credits. (See item 4, under general requirements.) Electives—four credits.

2. Seminar paper, no credit, with oral examination by a faculty committee. Electives—eight credits.

III. **Performance examination.**

A jury examination in performance is required as a part of a general evaluation of the student's work. This examination may be taken at any time after completion of the requirement in the applied major field.

IV. **Teacher certification**—candidates for the MMEd degree must meet state requirements for teacher certification.

The Master of Science (MS) Degree—Communicative Disorders

A limited number of students are admitted to programs in Speech and Language Pathology and in Audiology. Admission to the degree program requires an undergraduate major in Communicative Disorders or its equivalent, a commitment to full-time studies, and a recommendation for acceptance by the Graduate Advisory Committee of the School of Communicative Disorders. Interested students should contact the Coordinator of Graduate Studies, School of Communicative Disorders for appropriate admission and letter of recommendation forms.

I. **The general requirements** for the master's degrees must be met, as specified above.

II. The following **core course work** is required for the areas of specialization indicated:

A. **Audiology:** Communicative Disorders 710, 711, 750, 751, 752, 753, 754, 755, 765, 767.

B. **Speech and Language Pathology:** Communicative Disorders 710, 711, 725, 729, 730, 732, 733, 734, 735, 736, 740, 745, 767.

C. Up to six credits of electives in Communicative Disorders may be substituted for required core coursework listed in A. and B., above, with the approval of the Coordinator of Graduate Studies (ComD). Coursework taken outside the School of Communicative Disorders must be approved by the Coordinator and is taken in addition to the required core coursework.

III. Completion of at least 150 clock hours of graduate level practicum: Communicative Disorders 795, three credits in each semester or summer session. These credits are required in addition to the core course work listed above.

The Master of Science (MS) Degree—Home Economics Education

Since students in Home Economics Education must meet state certification requirements, the applicant's undergraduate program and quality of work must be approved by the Home Economics Education staff. Any deficiencies must be completed before applying for candidacy.

I. **The general requirements** for the master's degrees must be met, as specified above.

II. **The minimum of 30 credits** in graduate courses is distributed as follows.

A. **Home Economics Education**—nine to 12 credits:

1. Home Economics 796, 799 **(Thesis)**. (See item 4 under general requirements.)
2. Home Economics Education 595, 596, 791, 792, 793, 798 (required).

B. **Education**—three to nine credits.

C. **Home Economics** and related fields—12 to 18 credits, selected from one, or two, or three of the following areas:

1. **Clothing and Textiles:** Home Economics 522, 524, 529, 533, 721, 729.
2. **Child Development and Family Relationships:** Home Economics 667, 765, 769.
3. **Food, Nutrition, Institution Management:** Home Economics 543, 547, 548, 555, 557, 577, 583, 646, 649, 650, 656, 748, 749, 753.
4. **Consumer Education and Management:** Home Economics 771, 779.
5. **Housing and Interiors:** Home Economics 511, 581, 612, 613, 616, 617, 712, 719.
6. **Other:** Home Economics 591, 690, 700, 796.

The Master of Science (MS) Degree—Natural Resources

The Master of Science degree—Natural Resources encompasses the disciplines of forestry, water resources, wildlife and fisheries, soil science, and resource management. Emphasis in the graduate program is directed toward environmental problems and their solution.

Students seeking the MS degree need not have an undergraduate major in one of the Natural Resource specialties. The number of deficiencies which will have to be removed will depend on the content of the undergraduate curriculum; a student with a major in social sciences or humanities will have more deficiencies than one in the sciences.

For admission students should apply directly to the Dean, College of Natural Resources to obtain an application form. Transcripts of previous university work and two letters of recommendation will be required. Applicants may enroll with permission from the Dean, as Special Students, take graduate-level courses and receive graduate credit for them.

The student is not a degree candidate unless a faculty member consents to be his or her adviser. A student becomes a degree candidate or a graduate student when a

faculty member agrees to be the adviser and then helps the student plan a course of study and choose his or her graduate committee. A student may get an adviser initially when admitted or after one or more semesters of attendance in classes as a Special Student.

I. **The general requirements** for the master's degree must be met, as specified above.

II. **The minimum of 30 credits** in graduate courses is distributed as follows: (Selection of courses must be approved by the adviser, by the student's graduate committee, and by the college graduate committee).

A. **No more than 12 credits** may be taken in any one discipline **except** for courses listed under Natural Resources in the section above. (e.g., Natural Resources 674, Natural Resources 790.)

B. **Courses must be taken in at least three** disciplines (e.g., Forestry, Wildlife, Biology, Education).

C. **Thesis option** (Plan A)—recommended for most graduate students:

1. Thesis—two to six credits.
2. Seminar—two credits.

D. **Non-thesis option** (Plan B)—available only with the approval of the student's graduate committee and his adviser:

1. Independent Study—three credits (library research, management plan, etc.)
2. Seminar—two credits.

NOTES:

1. Students deemed qualified to enter the graduate program in the College of Natural Resources are accepted either as: a) Special Students (not degree candidates) because a lack of a major professor, or b) Graduate Students (degree candidates) with a major professor.

2. a. Special students select courses with the advice of the Assistant Dean of the College of Natural Resources. They receive graduate credit for all graduate courses in which they enroll and perform satisfactorily. They may continue to seek a major professor in their field of interest. If accepted by a major professor, they become degree candidates.

   b. Graduate students select a graduate committee and program with the advice of their major professor. They fill out a form entitled "Graduate Program Contract" and have it signed, i.e. approved, by each member of their committee and by the chairman of the College of Natural Resources graduate committee.

The Master of Science (MS) Degree—Nutrition and Food Science (School of Home Economics)

The master's degree program is built on a bachelor's degree in food and nutrition. The quality of work and the distribution of courses at the undergraduate level will be approved by the appropriate Home Economics staff. A student with deficiencies in background will be required to take additional courses.

I. **The general requirements** for the master's degrees must be met, as specified above.

II. **The minimum of 30 credits** in graduate courses is distributed as follows:

Two plans are available. **Plan A** requires 8-12 credits in core courses, 9-12 credits in food and nutrition courses, and 6-13 credits of electives. **Plan B** requires 6 credits in core courses, 9-15 credits in food and nutrition courses, and 9-15 credits of electives.

A. **Core courses:** Home Economics 749, 799; Home Economics Education 798.

B. **Food and Nutrition courses:** Home Economics 543, 547, 548, 555, 557, 577, 646, 649, 650, 656, 690, 748, 753, 796.

The Master of Science in Teaching (MST) Degree

I. **The general requirements** for the master's degrees must be met, as specified above.

II. **The minimum of 30 credits** in graduate courses is distributed as follows:

A. **Professional Education**—six to nine credits.

B. **Liberal Arts**—six to nine credits from outside the area of specialization.

C. **Area of Specialization**—the remaining credits selected from one of the following:

Biology; Communication (may include electives in Drama); Elementary Education; English; History.

Department of Public Instruction certification for **Reading Teacher** and **Reading Specialist** may be accomplished by completion of four courses (Reading Teacher) or six courses (Reading Specialist) in Reading (Education 741, and 746-750, taken in sequence). Certification for grades K-12 is available within a variety of degree or non-degree program options.)

Students may deviate from this distribution, keeping within the spirit and intent of the MST program. Approval of the adviser, department chairman, and Dean of the Graduate College is required.

III. **Thesis option.** Select either A. or B.:

A. **A thesis,** carrying two to six credits for research in an area of specialization. (See item 4, under general requirements.)

B. **A research paper,** carrying no credit, will be required if a thesis is not elected. Growing out of the **Seminar: Problems in Teaching,** this paper must be approved by the seminar instructor, and filed in the department of specialization.

Courses of Instruction

John Blaise Ellery, Vice Chancellor for Academic Affairs; **Carol Marion,** Assistant to the Vice Chancellor for Academic Affairs.

Burdette W. Eagon, Dean of Educational Services and Innovative Programs.

Departments of Instruction

College of Fine Arts, William J. Hanford, Dean.

Chairmen: **Art,** Henry M. Runke; **Communication,** Myrvin F. Christopherson; **Music,** Donald E. Greene; **Theatre Arts,** Seldon Faulkner.

College of Letters and Science, S. Joseph Woodka, Dean; William A. Johnson, H. Howard Thoyre, Assistant Deans.

Chairmen: **Biology,** Virgil A. Thiesfeld; **Chemistry,** Robert H. Weaver; **Economics and Business,** Lawrence A. Weiser; **English,** Nancy N. Moore; **Foreign Languages and Comparative Literature,** Mark R. Seiler; **Geography,** Delmar C. Multhauf; **History,** Justus F. Paul; **Mathematics,** Bruce Staal; **Philosophy,** John P. Zawadsky; **Physics and Astronomy,** Francis L. Schmitz; **Political Science,** Mark Cates; **Psychology,** L. Wayne Lerand; **Sociology, and Anthropology,** John E. Moffatt.

College of Natural Resources, Daniel O. Trainer, Dean; James G. Newman, Assistant to the Dean; **Paper Science,** Michael J. Kocurek, chairman.

College of Professional Studies, Arthur L. Fritschel, Dean; Vera Rimnac, Assistant to the Dean.

School of Communicative Disorders, Gerald F. Johnson (-1976), Robert F. Balas (1976-), Assistant Dean.

School of Education, Thomas E. McCaig, Assistant Dean.

School of Health, Physical Education, Recreation, and Athletics, Robert O. Bowen, Assistant Dean.

School of Home Economics, Agnes A. Jones, Assistant Dean.

Medical Technology, Dakshinamurthy Chitharanjan, Director.

Military Science (Army ROTC), Arthur M. Harris, Chairman.

Course Numbers

Courses numbered below 100 do not carry college-level credit.

Courses numbered 100-199 are offered primarily at the freshman level. They are open to all students who have the prerequisites stated in the course descriptions. If no prerequisite is stated, the course is open to all students without restriction.

Courses numbered 200-299 are offered primarily at the sophomore level. Each of them requires a prerequisite, which is normally "sophomore standing." However, some other prerequisite may be stated in the course description.

1. If the prerequisite is sophomore standing, the course is open to any student who has earned 26 credits (exclusive of required Physical Education).
2. If some prerequisite other than sophomore standing is stated, such prerequisite must be met, and any student who meets it may take the course, regardless of the number of credits he has earned.
3. If no prerequisite is stated, it is understood that the prerequisite is sophomore standing.

Courses numbered 300-399 are offered primarily at the junior level. They require junior standing and whatever prerequisites are stated in the course descriptions. They are open to students who have earned 56 credits (exclusive of required Physical Education) and who have the prerequisites stated. In exceptional cases and for justifiable cause, the chairman of the department may give permission for a student with fewer than 56 credits to register for these courses, if he meets all other prerequisites. Such permission must be given in writing before the student registers for the course(s).

Courses numbered 400-499 are offered primarily at the senior level. They require senior standing and whatever prerequisites are stated in the course descriptions. They are open only to students who have earned 86 credits (exclusive of required Physical Education) and who have the prerequisites stated. In exceptional cases and for justifiable cause, the chairman of the department may give permission for a student with fewer than 86 credits to register for these courses, if he meets all other prerequisites. Such permission must be given in writing before the student registers for the course(s).

Any student who registers for courses contrary to these regulations will not receive credit for such courses.

To receive a degree, a student must earn at least 40 credits in courses numbered 300-499.

Graduate Courses

Courses numbered 300/500 - 399/599 may be taken either at the 300-level for undergraduate credit, or the 500-level for graduate credit.

Courses numbered 400/600 - 499/699 may be taken either at the 400-level for undergraduate credit, or at the 600-level for graduate credit.

Courses numbered 700/799 are offered only at the graduate level.

Students may take courses numbered 500-799 only with the prior approval of the Dean of the Graduate College.

Pass-Fail Grading Program

Certain undergraduate courses (or certain sections of undergraduate courses) are available on a "Pass-Fail" basis. Such courses or sections are designated in the time table. For the regulations governing this program see the section of the catalog entitled ACADEMIC WORK.

Abbreviations

Fr, So, Jr, Sr, Grad (st)—freshman, sophomore, junior, senior, graduate (standing)

cr—number of semester hours (and credits granted on satisfactory completion) per semester

Prereq—Prerequisite(s)

con reg—concurrent registration

cons instr—consent of instructor

equiv—equivalent

hrs—hours

SS—summer session

lec—lecture

lab—laboratory

disc—discussion

AMERICAN CIVILIZATION

Joel Mickelson, adviser.

A. **A major in American Civilization** consists of 45 credits divided among the four major areas: American History; American Literature; American Fine Arts, Communication, and Philosophy; and American Social Sciences. It is intended to provide a view of American Civilization as a recognizable entity—enabling the student to better understand his own culture and its relation to other cultures. Each student will be able to pursue personal interests in American culture by a concentrated selection of courses.

1. The major requires 26-29 credits of basic studies in American Life: English 213, 214 (American Literature); Geography 226 (North America); History 211, 212 (United States History); Music 101 (American Music); Political Science 101 (American National Government); Sociology 300 (The American Community); and American Civilization 300 (American Life), three or six credits.

2. Also required are nine credits of courses numbered 300 or above in a civilization other than that of the United States: courses from an approved list covering the history, literature, fine arts, philosophy, and social science of England, France, Germany, Russia, Latin America, the Far East, etc.

3. To complete the required 45 credits, sufficient additional credits of electives in courses numbered 300 or above should be selected from an approved list of courses in the four areas of American Civilization.

4. For teacher certification, students are required to make either of the following applications of Plans 1 and 3 as listed under the requirements for work in Secondary Education.

   Plan 1—Students earning a major and minor in two of the contributing disciplines may at the same time earn a major in American Civilization.
   Plan 3—Students earning the broad field major in social science can at the same time earn a major in American Civilization.

B. **A Minor in American Civilization** consists of American Civilization 300 (three credit limit) and an additional 23 credits chosen from an approved list of courses in the four areas of American Civilization, the additional courses to be selected from at least three of the four areas with a minimum of nine credits in courses numbered 300 or above.

101. American Personality and the Creative Arts. 3 cr. An interdisciplinary approach to American national personality as revealed by analyses of forms of American artistic expression: architecture, drama, fiction, music, painting, and poetry; the introductory course in American Civilization, demonstrating methods and philosophy of study.

102. Social Conscience in American Culture. 3 cr. The influence of concern for social betterment in American life, thought, and creative expression; materials drawn from the humanities, with emphasis on contemporary significance. A sub-title will be added to the title each time the course is offered. The course may be repeated any number of times but the same sub-title may not be repeated.

300/500. American Life. 3 cr. The integrating course in American Civilization for juniors and seniors, emphasizing an interdisciplinary study of American life in terms of concentration on a specific theme or period. A subtitle will be added to the title each time the course is offered. The course may be repeated any number of times but the same title cannot be repeated. (Examples: American Life in the 1930's; The 1940's and 50's; Minorities in American Life.)

399. Special Work. 1 to 6 cr. Upper class students majoring or minoring in American Civilization may, by agreement with the American Civilization adviser, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

701. Contemporary American Culture. 3 cr. An interdisciplinary approach to American life, thought, and creative expression since World War II; materials integrated from history, literature, and and music.

ANTHROPOLOGY

Courses in Anthropology are taught by members of the department of Sociology and Anthropology, which also administers the major and minors in Sociology and Anthropology.

For the description of the major and minors and for course listings in Anthropology, see the section headed **Sociology and Anthropology** later in the catalog.

ART (College of Fine Arts)

Henry Runke, chairman.

A. **A major in Art** consists of 54 credits in Art, including 101, 102, 103, 221, 231, 234, 241, 251, 261, 271, 282, 283, and 490.

   For teacher certification, Art Education 332 and 331; Education 380, 381, and 10 credits of 398; Psychology 200 and 260 are also required. (A minor is not required with a 54 credit major.)

B. **A minor in Art** consists of 22 credits including:

1. Art 101, 102, 103.
2. Four of these: Art 106, 221, 231, 234, 236, 241, 251, 261, 271, 345, 347, (or second and third semester courses of these), 399.
3. Art 282 or 283, or 381.

C. **A minor in Art History** consists of 22 credits including:

1. Art 101, 102.
2. Art 282, 283.
3. Four of these: Art 382, 383, 384, 385, 386, 387, 388; and 399Z (3 cr maximum) when appropriate.

In certain cases, substitutions may be permitted by the chairman of the department.

Supplies for studio classes will be furnished to students in amounts equivalent to meeting minimum course requirements. Students who wish to accomplish more than the minimum requirements or to substitute alternate more expensive materials must pay the difference in cost. Some supplies of this type will be available for purchase in the studio from the instructor in charge on a non-profit basis.

The Art department, after consultation with the student, reserves the right to hold one piece of work in each studio area for display purposes and as part of the permanent collection of the department.

Upper class Art majors and minors who are approaching graduation are invited to use the Edna Carlsten gallery facilities to mount a culminating show of their work. Shows can be mounted on an individual or multi-person basis. Gallery space and reservations can be arranged with the gallery director.

See also course listing under **Art Education** (next section).

101. Design: 2 dimensional. 3 cr. Fundamental design principles in the art process, including art structure, color theory, and principles of arrangement, utilizing a variety of materials. Students may not receive credit for both Art 101 and Home Ec. 101.

102. Design: 3-dimensional. 3 cr. Fundamental design principles in the art process, in structure and arrangement utilizing a variety of materials.

103. Drawing. 3 cr. Basic drawing utilizing a variety of subject matter, media, and approaches with emphasis on visual perception and awareness. Prereq: 101 or 102.

104. Drawing. 3 cr. Advanced problems in drawing, emphasizing development of concepts. Prereq: 103.

106. Layout and Lettering. 2 or 3 cr. Fundamentals of lettering in various alphabets; problems in poster, sign, and advertising layout in a variety of media.

203. Drawing. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 104 or cons instr.

206. Layout and Lettering. 2 or 3 cr. Course to be determined between student an instructor on the basis of previous work. Prereq: 106 or cons instr.

221. Printmaking. 3 cr. Black and white, and color, employing basic graphics media and techniques. Prereq: 103.

231. Painting: Watercolor. 3 cr. Tranparent and opaque water color. Prereq: 103.

234. Oil Painting. 3 cr. Techniques in figure, still life, and landscape. Prereq: 103. Fee $3.00.

236. Life Drawing. 3 cr. Drawing the human figure with attention to anatomy, utilizing a variety of media. Prereq: 103. Fee: $9.00.

241. Crafts. 3 cr. Introduction to the production of craft items with emphasis on contemporary approaches to the uses of metal, wood, fibers, leather, plastics, stained glass. Prereq: 101, 102, 103.

243. Woven Textiles. 3 cr. Design principles in 2- and 3-dimensions; use of armature, frame, and harness looms; natural and synthetic fibers. Prereq: 103; or Home Ec 101 and 223; or cons instr.

251. Sculpture. 3 cr. Introduction to materials and techniques. Prereq: 103.

261. Ceramics. 3 cr. Introduction to material and techniques; methods of construction, glazing, firing, and kiln management. Prereq: 103.

271. Art Metal. 3 cr. Basic materials and techniques. Prereq: 103.

282. History of Ancient and Medieval Art. 3 cr. Survey of architecture, sculpture, and painting including Egypt, Greece, Rome, and Medieval Europe. Prereq: So st.

283. History of Renaissance and Modern Art. 3 cr. Survey of architecture, sculpture and painting in the western world from the 15th century to the present. Prereq: So st.

321. Printmaking. 3 cr. Advanced problems in the graphics media. Prereq: 221.

322. Printmaking. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 321 or cons instr.

331. Painting: Watercolor. 3 cr. Advanced problems in watercolor media. Prereq: 231.

332. Painting: Watercolor. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 334 or cons instr.

334. Oil Painting. 3 cr. Advanced problems in the oil medium and other contemporary media. Prereq: 232.

335. Oil Painting. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 334 or cons instr.

336. Life Drawing. 3 cr. Continuation of study of the human figure with emphasis on experimental work. Prereq: 236.

337. Life Drawing. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 336 or cons instr.

341. Crafts. 3 cr. Advanced work in design and production of craft pieces usually specializing in one media. Prereq: 241.

342. Crafts. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 341 or cons instr.

343. Woven Textiles. 3 cr. Design principles in 2- and 3-dimensions; use of armature, frame, and harness looms; natural and synthetic fibers. Prereq: 101, 102, 103; or Home Ec 101 and 233 or con reg.

344. Woven Textiles. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 343 or cons instr.

345. Printed Textiles. 3 cr. Hand printed 2- and 3-dimensional textiles; direct area dyeing, resist dyeing, silk screen, and block printing. Prereq: 101, 102, 103; or Home Ec 101 and 233, or con reg.

346. Printed Textiles. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 345 or cons instr.

347. Crafts of the American Indians. 2 or 3 cr. A laboratory investigation into the material culture of the Indians of North America with particular emphasis on the traditional crafts of the Woodland Cultures; experience in such crafts as weaving, lapidary, basketry, quill embroidery, ceramics, and other media available directly from natural resources; field trips.

348. Crafts of the American Indians. 2 or 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 347 or cons instr.

351. Sculpture. 3 cr. Advanced problems, including a greater variety of materials and advanced techniques. Prereq: 251.

352. Sculpture. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 351 or cons instr.

361. Ceramics. 3 cr. Advanced problems and techniques. Prereq: 261.

362. Ceramics. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 361 or cons instr.

371. Art Metal. 3 cr. Advanced problems. Prereq: 271.

372. Art Metal. 3 cr. Course to be determined between student and instructor on the basis of previous work. Prereq: 371 or cons instr.

381. History of the Visual Arts. 3 cr. Major periods, styles, artists, and problems of architecture, sculpture, and painting. Not open to Art majors to fulfill Art department history requirements or to students who have had Art 282 or 283.

382. History of Latin American Art. 3 cr. Survey of the visual arts of Latin America from prehistoric to contemporary times. Prereq: 282 or 283 or 381.

383. History of the 19th and 20th Century European Painting. 3 cr. Survey of the development of modern European painting. Prereq: 282 or 283 or 381.

384. History of Painting in the United States. 3 cr. Survey from the colonial period to the present. Prereq: 282 or 283 or 381.

385. History of Sculpture in the United States. 3 cr. Survey of native sculpture, sculptors, and movements in sculpture from the colonial period to the present. Prereq: 262 or 283 or 381.

386. History of Modern Architecture. 3 cr. Survey of the development of modern and American architecture of the 19th and 20th centuries. Prereq: 282 or 283 or 381.

387. History of Classical Art. 3 cr. Survey of the visual arts of Greece and Rome with special emphasis on architecture and sculpture. Prereq: 282 or 283 or 381.

388. Sub-Saharan African Arts. 3 cr. Survey of the visual tribal arts of black Africa with emphasis on architecture and sculpture.

399. Special Work. 1 to 3 cr. each. Upper class students majoring or minoring in Art may, by agreement with the chairman and an appropriate member of the Art department, arrange for special advanced work, for which credit may be allowed on the basis of the scope of the work intended.

399A—Design. 399B—Drawing; 399C—Printmaking; 399D—Painting; 399F—Crafts; 399G—Sculpture; 399H—Ceramics; 399J—Art Metal; 399K—Art History; 399Z—(Subtitle will be supplied).

490. Seminar. 2 cr. Research into problems and developments in the field of Art. Open only to Art majors.

701. Historical and Philosophical Concepts of Art. 3 cr. Philosophical and aesthetic aspects of Art in both its historical and contemporary phases; the arts in the life of the individual; the function of arts in society. For students with little or no background in Art.

702. Historical and Philosophical Concepts of Art: Renaissance and Modern. 3 cr. Philosophical and aesthetic aspects of Art in the life of the individual and its function in society. For students with little or no background in Art. Need not be taken in sequence to 701.

796. Special Work-Art History. 1 to 3 cr. Planned study designed to enrich and supplement the student's preparation and individual interests. Regularly scheduled conferences with cooperating faculty member. Prereq: 701 or 702.

ART EDUCATION

322. (Formerly Education 322) **Techniques in the Elementary School: Art.** 2 cr. Methods, materials, and philosophy for the teaching of art.

331. (Formerly Education 331) **Techniques in Secondary Education: Art.** 2 cr. Aims, methods, techniques, planning, organization, testing, etc.

340. Curriculum in Art. 2 cr. Seminar in planning and developing an individual or group art curriculum for grades K-12. Prereq: Ed. 398 or cons instr.

ASIAN STUDIES (College of Letters and Science)

Hugh Walker, adviser.

A. **Minor in Asian Studies** consists of 24 credits:

1. **Basic Courses**-12 credits selected from the following: **Asian Studies** 101 (Introduction); **Comparative Literature** 250 (Asian); **Geography** 327 (Asia); **History** 215 (East Asia to 1800); 216 (East Asia Since 1800); **Philosophy** 105 (India and China).

2. **Specialized Courses**-12 credits selected from the following specialized Asian content courses (area or disciplinary emphasis to be determined in consultation with the Asian Studies adviser):

   Anthropology 337 (Peoples of Asia); **Asian Studies** 399 (Special Work); **Comparative Literature** 251 (Asian Fiction), 252 (Asian Drama), 253 (Asian Poetry); **Geography** 331 (China); **History** 345 (China to 1644), 346 (China Since 1644), 347 (Japan to 1854), 348 (Japan Since 1854), 349 (Korea to 1800), 350 (Korea Since 1800), 351 (Vietnam Since 1800); **Music** 428 (Pacific, Near East, Asia); **Philosophy** 335 (Hinduism, Buddhism), 336 (Contemporary Indian Thought), 337 (Indian Yoga), 338 (Chinese); **Political Science** 370 (South Asia), 396 (Militant Non-Violence); **Religious Studies** 100 (Eastern Religions); **Sociology** 375 (Social Structure and Change in Northeast Asia).

3. Asian language study is recommended.

101. Introduction to Asian Studies. 3 cr. Traditional and contemporary Asia, emphasizing its unity and diversity, from an interdisciplinary approach; geographical, historical, philosophical, religious, governmental, social anthropological, linguistic, literary, artistic, and cultural aspects of Asian life.

399. Special Work. 1 to 3 cr. Upper class students in the Asian Studies minor may, by agreement with the Asian Studies adviser, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to special project.

ASTRONOMY (College of Letters and Science)

Courses in Astronomy are taught by members of the department of Physics and Astronomy.

NOTES:

(1) A student may not take both Astronomy 100 and 105 for credit.

(2) A student who has taken Astronomy 105 and 106 may not take 100 or 311 for credit.

100. Unveiling the Universe. 3 cr. An encounter with man's ideas concerning the physical universe, from earth to intergalactic space. Two hours lec, two hours lab per week. This course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirements.

105. The Solar System. 4 cr. Early concepts, recent developments, and modern theories of its origin; emphasis on modern methods of obtaining information. Three hrs lec, three hrs lab per week. Prereq: Two units of high school math, including algebra and plane geometry. (Lab manual required.)

106. Stars, Nebulae, and Galaxies. 4 cr. Studies of the universe, with emphasis on stars, nebulae, quasars, pulsars, and galaxies; theories of origin and evolution of the universe; physical concepts supporting astronomical facts. Three hrs lec and three hrs lab per week. Prereq: 105, or cons of instr.

311. Introduction to Astronomy. 3 cr. Descriptive approach to astronomy through study of the solar system, stars, star clusters, nebulae, and galaxies; evening meetings required for observation; use made of telescopes and planetarium. Not open to students who have had 105 and 106.

370/570. Astronomy for Teachers. 4 cr. An introduction, with emphasis on the Earth, Moon, Sun, and the total solar system, stars, star systems, and recent discoveries; emphasis on teaching. Prereq: Experience in, or preparation for, teaching science.

371/571. Laboratory in Planetarium Studies. 2 cr. Planetarium studies, laboratory exercises, night sky observations, geometric optics, atomic physics, spectrum analysis, celestial sphere exercises, the Moon, Saturn and its rings, the Sun and sun spots, stellar classification, and curriculum materials for grades K-8. Four hrs lab per week, night observations. Prereq: Experience in, or preparation for, teaching science.

BIOLOGY (College of Letters and Science)

Virgil Thiesfeld, chairman.

A. **A major in Biology** consists of the following:

1. A minimum of 34 credits in biology as follows:
   a. Biology 130, 160, 205, 210, and 490.
   b. One of the following: Biology 281, or 314, or 351, or 381.
   c. An additional plant course selected from the following: Biology 244, 330, 331, 332, 335, 337, 338, 342, 346, 351, 355.
   d. An additional animal course selected from the following: Biology 281, 360, 362, 364, 367, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 381, 385, 388.
   e. Elective credits.
2. Collateral courses:
   a. Chemistry 105 and 106, or 115 and 116.
   b. Mathematics 107, or 110, or 224, or 355.

Geology 339 and Water 481 and 483 are acceptable as part of the biology major.

To be accepted as a major, to be retained as a major, and to be approved for graduation, the student must have a minimum grade point ratio of 2.00 in **all** courses taken within the Biology major (this includes collateral courses) regardless of declaration of academic bankruptcy. The department chairman may allow exemptions to the above on a conditional basis.

B. **A minor in Biology** consists of a minimum of 22 credits:

1. Biology 130 and 160.
2. Any two of the following categories:
   a. Biology 205.
   b. Biology 210.
   c. Biology 281 or 314 or 351 or 381.
3. Elective credits in Biology.

To be approved for graduation with a minor in Biology, the student must have a minimum grade point ratio of 2.00 in **all** courses taken within the Biology minor regardless of a declaration of academic bankruptcy.

Areas of study include the courses specified for the major, plus the following suggestions:

Bio-Business—Botanical: 333, 337, 346, 351, 367; additional helpful courses: 335, 342; Business 210, 330, 370; Chemistry 220 or 225 or 260; Economics 201; Education 306; Geography 110; Home Economics 107; Natural Resources 373; Soils 260, 364.

Botany: 330 or 331; 333 or 335; 342; 351; 360 or 367 or 372.

Zoology: Two of 281, 314, 381; 342 or alternate botany course; 360; 370 or 371 or 372.

Natural History: 322, 342, 360, 367, 372; courses from outdoor education, geology, and natural resources.

Education: 281 or 381; 320 or 333; 330 or 342; 351, 372.

Ecology: 333 or 335, 342; 351 or 381; 355 and/or 385; 360 or 362; 367; 372; 399; 405; Math. 355; plus courses from geography, geology, and soils.

Aquatic Biology: 333 or 335; 338; 347; 314 or 351 or 381; 360 or 362 or 367; 372 or 374 or 375; limnology and fisheries; Math 355; Physics 103, 104; water resources.

Microbiology: 314; 333; 334; 335; 337; 338; 362; 363; Chemistry 225, 226, 228, 365.

Museum Techniques: See description of the museum techniques minor.

Pre-professional: All areas listed also require Biology 160 and 281, English, humanities, psychology, sociology, speech.

Pre-Medical: Biol 210, 370 or 371; Chem 115, 116, 225, 226, 228, 248; Physics 103, 104; Math 107, 224; additional helpful courses: Biol 333, 373; Chem 365.

Pre-Veterinary: Biol 210, 370 or 371; Chem 115, 116, 225, 226, 228, 248; Physics 103, 104; Math 107, 224; Econ; additional helpful courses: Biol 333, 373; Chem 365.

Pre-Dentistry: Biol 210, 370; Chem 115, 116, 225, 226, 228, 248; Physics 103, 104; Math 107, 224; additional helpful courses: Biol 333, 373; Chem 365.

Pre-Optometry: Chem 115, 116; Physics 103, 104; Math 107, 224.

Pre-Mortuary: One year Chem; Math 107; Bus 210.

100. Biological Principles and the Human Environment. 3 cr. A survey of biology with special emphasis on present and future

relationships of humans to their environment. Two hrs lec, three hrs lab per week. This course will apply to part B of the Natural Science requirement for the Bachelor of Music and the Bachelor of Science degrees.

101. General Biology. 5 cr. Biological principles; survey of a wide variety of plant and animal life. Three hrs lec, four hrs lab per week. Credit for this course cannot be counted for graduation or the major if Biol 130 and 160 (or equiv) are counted.

109. Nature Study. 2 cr. General relationships of plant and animal life (to humans) with special attention to nature study teaching and its correlation in the elementary grades.

130. Introduction to Plant Biology. 5 cr. General biological principles with emphasis on growth, reproduction, structure and functions of plants; morphological studies of typical plants. Three hrs lec, four hrs lab per week.

140. Edible and Poisonous Plants. 2 cr. Identification of edible and poisonous plants, especially local wild species of higher plants; nutritional values and toxic components. One hr lec, two hrs lab per week. Does not apply toward Natural Science requirement for a degree.

160. Introduction to Animal Biology. 5 cr. Anatomy, physiology, adaptation, and classification of animals; morphology and anatomy of various types of animals. Three hrs lec, three hrs lab per week. Additional two-hour test sections four times during the semester.

204. Introduction to Ecology. 3 cr. Basic ecological principles. Not open to students majoring or minoring in Biology or Natural Resources. Credit may not be earned in both 204 and 205. Prereq: So st.

205. General Ecology. 3 cr. Interrelationships of plants and animals; ecosystem concepts; organization and distribution of biotic communities; application of ecological principles to human affairs. Prereq: 101; or 130 and 160. Credit may not be earned in both 204 and 205.

206. Ecological Methods. 1 cr. Application of ecological methods in field and laboratory analyses of ecosystems. Three hrs lab per week. Prereq: con reg in 205; or 205 and cons instr.

210. Principles of Genetics. 3 cr. General principles of heredity and variation of plants and animals, including humans. Prereq: So st.

244. Trees and Shrubs. 3 cr. Identification of the woody plants, native and cultivated, in summer and winter conditions; their use in landscaping and wildlife plantings and methods of vegetative propagation. One hr lec, four hrs lab per week. Prereq: 101 or 130.

275. Introductory Bird Study. 2 cr. Identification, life histories, and external morphology of the common birds of Wisconsin. One hr lec, two hrs lab per week. Not open to students majoring or minoring in Biology or Natural Resources. Prereq: So st.

281. Animal Physiology. 4 cr. A general course dealing with body functions. Three hrs lec, three hours lab per week. Prereq: 160; or 101 and Chem. 101.

309/509. Field Biology. 3 cr. Field trips; collections, preparation, and identification of plants and animals. One hr lec, four hrs lab per week. Not to be counted as credit if 342 and/or 379 are also taken. Prereq: 101, or 130 and 160.

310/510. Experimental Genetics. 2 cr. Experimental techniques used in cellular, organismic, and population genetics. Four hrs lab per week. Prereq: 210 or con reg.

311/511. Organic Evolution. 3 cr. Origin and evolution of the Bios. Prereq: 101; or 130 and 160.

314/514. Cell Biology. 4 cr. Structure of the cell and function of its component organelles; methods for study of the cell and the cellular and molecular bases of cytogenetics. Two hrs lec, four hrs lab per week. Prereq: 130, 160; and Chem 106 or 116.

318. Human Genetics and Eugenics. 3 cr. Principles of heredity and variation with some emphasis on social and ethical implications. Not open to students majoring or minoring in biology. Credit may not be earned in both 210 and 318.

320/520. Biological Technique. Preparation of plant and animal tissues, organs, and entire organisms for microscopic and macroscopic study. Two hrs lec, four hrs lab per week. Prereq: 101, or 130 and 160.

322/522. Museum Methods. Preparation, utilization, and care of natural history materials for research and exhibition; preparation of educational programs for museums, nature centers, and schools; for teachers and those interested in museums or nature center professions. Six hrs lab per week. Prereq: Cons instr.

326/526. Electron Microscope Techniques. 3 cr. Methods of fixation, embedding, microtomy, and staining of plant and animal tissues for electron microscope examination; operation of the electron microscope and basic photographic darkroom techniques. One hr lec, six hrs lab per week. Prereq: Chem 106 or 116; and Biol 314, or 320, or 373, or cons instr.

330/530. Plant Morphology. 4 cr. Form and structure of plants and plant parts, both vegetative and reproductive. Two hrs lec, four hrs lab per week. Prereq: 130.

331/531. Plant Anatomy. 4 cr. Internal structures of vascular plants, with special emphasis on development, function, and evolutionary history. Two hrs lec, four hrs lab per week. Prereq: 101 or 130.

332. Paleobotany. 3 cr. Survey of fossil record of plants, with emphasis on morphology and evolutionary trends in major plant groups; Chronological successions and geographic distribution of past floras. Two hrs lec, two hrs lab per week. Prereq: 101 or 130.

333/533. General Bacteriology. 4 cr. Morphology, physiology, classification, and cultivation of bacteria, yeasts, and molds, with consideration of applied phases of bacteriology. Two hrs lec, four hrs lab per week. Prereq: 101, or 130, or 160. Preparation in chemistry is highly desirable.

334/534. Clinical Microbiology. 2 cr. Isolation and identification of human pathogenic microorganisms and the relationships of these organisms to diseases. One hr lec, four hrs lab per week for two-thirds of the semester. Prereq: 333.

335/535. Mycology. 4 cr. The taxonomy, morphology, physiology, and ecology of fungi; the role of fungi in disease, industry, decomposition, food production, and biological research. Two hrs lec, four hrs lab per week. Prereq: 130 or cons instr.

337/537. Plant Pathology. 3 cr. Causes, symptoms, spread, and control of plant diseases. Two hrs lec, two hrs lab per week. Prereq: 130.

338/538. Algology. 3 cr. Taxonomy, morphology, and ecology of algae with emphasis on local species. Two hrs lec, two hrs lab per week. Prereq: 130.

339. Bryology and Lichenology. 2 cr. Taxonomy, morphology, and ecology of bryophytes and lichens with emphasis on local

species. One hr lec, three hrs lab per week. Prereq: 101 or 130.

342/542. Vascular Plant Taxonomy. 3 or 4 cr. A survey of the major groups with emphasis on identification, classification, and phylogeny of flowering plants. Two hrs lec and two or four hrs lab per week. Prereq: 101 or 130.

345/545. Agrostology. 2 cr. Structure, identification, classification, and evolution of grasses and grass-like plants. One hr lec, two hrs lab per week. Prereq: 101 or 130.

346/546. Selected Economic Plants. 3 cr. Propagation, culture, improvement, and storage of flowers, fruits, ornamentals, and vegetables. Two hrs lec, two hrs lab per week. Prereq: 130.

347/547. Aquatic Vascular Plants. 2 cr. Taxonomy and ecology of aquatic vascular plants with emphasis on local species of freshwater angiosperms. One hr lec, two hrs lab per week. Prereq: 101 or 130.

351/551. Plant Physiology. 4 cr. Plant growth and development, water relations, nutrition, and metabolism. Two hrs lec, four hrs lab per week. Prereq: 130, and Chem 106 or 116.

355/555. Plant Ecology. 3 cr. Plants and their relationship to ecosystems; structure of plant communities; microclimatic analysis. Two hrs lec, three hrs lab per week; field trips. Prereq: 205 or cons instr.

356/556. Principles of Plant Community Distribution. 1 cr. Ecological survey of world vegetation, relating community form and composition to prevailing climate, soils, and past environmental change. Prereq: 355/555 or con reg.

360/560. Invertebrate Zoology. 4 cr. Structure, function, classification, and life history of each of the major groups of invertebrate animals (exclusive of the insects and parasitic invertebrates). Two hrs lec, four hrs lab per week. Prereq: 101 or 160.

362/562. Animal Parasitology. 4 cr. Structure, classification, and life histories of animal parasites. Two hrs lec, four hrs lab per week. Prereq: 101 or 160.

363/563. Clinical Parasitology. 1 cr. Morphology, life history, diagnosis, and control of the common animal parasites affecting man. One hr lec, four hrs lab per week for one-third of the semester. Prereq: 160. Not open to students with credit or con reg in 362.

364/564. Protozoology. 4 cr. Biology of free-living and parasitic protozoa; systematics, morphology, morphogenesis, physiology, genetics and ecology. Two hrs lec, four hrs lab per week. Prereq: 160. A year of chemistry is highly desirable.

367/567. General Entomology. 4 cr. Structure, classification, and natural history of insects, with practice in collecting, mounting, and identification. Two hrs lec, four hrs lab per week. Prereq: 101 or 160.

370/570. Comparative Vertebrate Anatomy. 4 cr. Structure and evolutionary relationships of vertebrates. Two hrs lec, four hrs lab per week. Prereq: 160.

371/571. Embryology. 4 cr. Early embryology of vertebrates and the development of organ systems. Two hrs lec, four hrs lab per week. Prereq: 160.

372/572. Biology of the Vertebrates. 4 cr. Classification, phylogeny, special adaptations, and natural history of the vertebrates. Two hrs lec, four hrs lab per week. Prereq: 160.

373/573. Histology. 4 cr. The microanatomy and related function of vertebrate (primarily mammalian) organs, tissues, and cells. Two hrs lec, four hrs lab per week. Prereq: 160; Chem 105 and 106, or 115 and 116. Biol 281 is strongly recommended but not required.

374/574. Ichthyology. 4 cr. Classification and natural history of fishes, with emphasis on food, game, and forage fishes found in Wisconsin. Two hrs lec, four hrs lab per week. Prereq: 101 or 160.

375/575. Life Histories of Fishes. 3 cr. Reproduction, behavior, growth, habitat, food, parasites, associates, and senescence of fishes. Two hrs lec, two hrs lab per week. Prereq: 101 or 160 or cons instr.

376/576. Herpetology. 3 cr. Reptiles and amphibians; research methods and identification of species found in North America. Two hrs lec, three hrs lab per week. Prereq: 101 or 160.

377/577. Ornithology. 3 cr. Avian taxonomy, morphology, life histories, ecology, and research methods, with emphasis on identification of orders of birds of the world, and of local species. Two hrs lec, three hrs lab per week. Prereq: 101 or 160.

378/578. Mammalogy. 3 cr. Taxonomy, zoogeography, life history, and ecology of mammals; field work. Two hrs lec, two hrs lab per week.

379/579. Field Zoology. 3 cr. Field trips; collection, preparation, and identification of animals. One hr lec, four hrs lab per week. Prereq: 101 or 160.

381/581. Comparative Animal Physiology. 4 cr. A comparative study of physiological adaptations of aquatic and terrestrial animals. Three hrs lec, three hrs lab per week. Prereq: 160 and Chem 106 or 116.

383/583. Human Reproduction. 3 cr. Developmental, physiological, and anatomical components of human reproduction. Prereq: 100 or 101 or 160 or cons instr.

385/585. Animal Ecology. 3 cr. Distribution and abundance of animals; habitat relationships; properties, dynamics, and natural regulations of animal populations; intraspecific and interspecific reactions. Two hrs lec, three hrs lab per week. Prereq: 205 or cons instr; a course in statistics is recommended but not required.

388/588. Animal Behavior. 3 cr. A comparative approach to the study of animal behavior; description, classification, analysis, and evolution of behavioral patterns of vertebrates, with emphasis on social behavior and underlying mechanisms. Two hrs lec, three hrs lab per week; individual term project. Prereq: 160.

399/599. Independent Studies. 1 or 2 cr. Upper class students may arrange for advanced work (including field and laboratory work where appropriate) not covered in regular courses. Categories of work include 1) Research, 2) Collection and Identification of Plants or Animals, 3) Advanced Readings, and 4) Biological Methods. Prereq: Consent of appropriate faculty member and of the chairman.

405/605. Selected Topics in Ecology. 3 cr. Major concepts and problems in an area of ecology. Three hrs lec; or two hrs lec and three hours lab per week. Prereq: 205.

425/625. Problems in Quantitative Biology. 2 cr. Selected problems in quantitative biology and independent projects involving analysis of data obtained in the student's field of interest. One hr lec, three hrs lab per week. Prereq: 130 and 160; Math 110 recommended.

490/690. Seminar. 1 cr. Studies and discussions of biological problems.

705. Advanced Ecology. 3 cr. Population and community ecology and measurements of the effect of environment on organisms. Two hrs lec, three hrs lab per week. Prereq: 205 or equiv.

710. Advanced Genetics. 4 cr. Genetic analysis of selected organisms; transmission, function, and mutation of genes; radiation and genes; quantitative inheritance and population genetics. Two hrs lec, four hrs lab per week. Prereq: 210 or equiv.

711. Physiological Mechanisms. 4 cr. Respiration, photosynthesis, nitrogen metabolism and pertinent metabolic pathways as related to current knowledge of cell structure and growth. Three hrs lec, two hrs lab per week. Prereq: 551 or cons instr.

726. Problem Analysis. 2 cr. A specialist will direct investigations of principles and mechanics within the area of his specialty. Lectures will alternate with reports from the participants. This course may be repeated as often as the topic area changes. Prereq: cons instr.

728. Integrated Biological Concepts. 3 cr. Designed to integrate biology and relate it to other natural sciences, social sciences, and humanities by the exploration of major biological concepts. Includes laboratory and field work. Open to experienced teachers who have had an introductory course in biological science and who are not specializing in a biological science.

790. Graduate Seminar. 1 cr. Studies and discussions of biological problems.

796. Independent Study. 1 to 3 cr. Planned reading designed to enrich and supplement the student's preparation and mechanics within the area of his specialty. This course may be repeated as often as the topic changes. Prereq: cons instr.

799. Thesis. 2 to 6 cr.

BUSINESS AND BUSINESS ADMINISTRATION

(College of Letters and Science)

Courses in Business are taught by members of the Department of Economics and Business, which also administers the major in Business Administration.

A major in Business Administration consists of (a) 48 credits in Business and Economics, and (b) seven credits of required collateral courses. A student completing this major will at the same time fulfill the requirements of a minor in Economics.

A. The 48 credits in Business and Economics shall include:

   1. Forty-two credits as follows: Business 210, 211, 310, 330, 340 or Economics 315, and Business 370 or 380; Economics 200, 201, 311 or 365, 330, 341, 345 or Psychology 270, Economics 360 and 453.

   Six credits from the following: Business 261, 320, 350; Economics 361.

B. The required collateral courses are English 250 and one of the following: Mathematics 110, 118, or 224.

A minimum grade point ratio of 2.00 in courses taken within the major is a requirement for acceptance of the student as a major at the start of his junior year. The minimum grade point ratio of 2.00 in courses in the major is also a requirement for the student's retention as a major during his junior and senior years and for department approval of the major for graduation. The department chairman may allow exceptions to this standard on a conditional basis.

Courses in Business:

210. Financial Accounting. 3 cr. Principles, concepts, and procedures of financial accounting (for investors, creditors, and other interested parties) essential to the proper preparation, understanding, and interpretation of accounting information; emphasis on the usefulness of accounting data for control and evaluation of financial activity. Four hrs per week. Prereq: So st.

211. Managerial Accounting. 3 cr. The usefulness of accounting to management, with attention to the role of managerial accounting in the decision-control processes of business enterprises; cost systems, budgeting, cost distribution, capital budgeting, and profit-volume analysis. Four hrs per week. Prereq: 210.

261. Principles of Insurance. 3 cr. For the non-specialist: the history of insurance, basic definitions and terminology, the fields of insurance and types of carriers, the insurance contract, the planning and purchase of insurance. Prereq: Econ 200 or cons instr.

310. Intermediate Accounting. 3 cr. Development and application of accounting principles; procedures relating to cash, receivables, inventories, investments, and tangible fixed assets. Prereq: 211.

311. Cost Accounting. 3 cr. Principles of accounting for cost in manufacturing enterprises, including overhead costs, job order and process cost systems, standard cost procedures, and distribution of cost principles and procedures. Four hrs per week. Prereq: 211.

313. Income Tax Accounting. 3 cr. Federal and Wisconsin income tax laws and their applications to individuals, partnerships, fiduciaries, and corporations; F.I.C.A. taxes; practical problems, including the preparation of tax returns. Prereq: 211.

315. Advanced Accounting I. 3 cr. Accounting principles and procedures relating to intangible fixed assets, liabilities, stockholder's equity, and financial statement analysis. Prereq: 310.

316. Advanced Accounting II. 3 cr. Advanced financial accounting applied to specialized fields, including partnerships, installment and consignment sales, home office and branch accounting, mergers and consolidations. Prereq: 315.

317. Management Information Systems. 3 cr. Principles and problems of systems design; identification, evaluation, and modification of information flows; organizational considerations; internal control procedures; systems for the operating functions of business; total information systems. Prereq: 310; and 320 or equiv.

318. Auditing. 3 cr. General principles of auditing, including the preparation of working papers and various kinds of reports incorporating electronic data processing controls. Prereq: 310; and 320 or equiv.

319. Accounting Theory. 3 cr. Analysis of contemporary issues in accounting, and examination of basic principles underlying accounting. Prereq: 316.

320. Data Processing. 3 cr. Computer systems and their application to business problems; machine indoctrination, coding, computer logic, programming, and specialized techniques allied with integrated data processing. Prereq: 210 or cons instr.

330. Marketing. 3 cr. Analysis of institutions, functions, and problems in marketing; planning and procedures related to the

distribution of goods: costs, price determination, and trends. Prereq: Econ 201.

340. Business Law I. 3 cr. History of legal development, contracts, agency, sale of goods, insurance.

341. Business Law II. 3 cr. Commercial paper, real estate and personal property, partnerships, corporations, bankruptcy. Prereq: 340 or cons instr.

350. Investments. 3 cr. Construction and management of investment portfolios in order to meet the needs of personal and institutional investors; selection of securities in order to balance income, risk, and capital growth. Prereq: Econ 341.

370. Personnel Relations. 3 cr. Principles, policies, and practices applicable to personnel problems in dealing with staffing, training, wages, labor relations, communications. Prereq: Econ 200.

380. Principles of Management. 3 cr. Theory of management, managerial functions, departmentalization, staffing, direction, planning, and control. Prereq: Econ 200.

499. Special Work. Upper class students majoring in Business Administration may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

BUSINESS EDUCATION (College of Professional Studies)

Robert Hille, et. al.

A. **The comprehensive major in Business Education** consists of:

1. Business Education 101, 102, 103, 104, 105, 304, 305, 306, and 307.
2. Collateral courses including: Business 210, 211, 310, 320, 340, and 380; Economics 200, 201, and 330; Mathematics 118.

B. **The comprehensive major in business Education, Secretarial,** consists of the courses listed under A, above, with the following exceptions:

1. Omit Business 210, 211, and 310.
2. Add Business Education 303.
3. Add five credits of Business or Economics courses.

C. **The comprehensive major in Business Education, Accounting,** consists of the courses listed under A, above, with the following exceptions:

1. Omit Business Education 103, 104, 105, and 305.
2. Add Business Education 303.
3. Add eight credits of Business or Economics courses.

D. **The major in Business Education,** with a minor in a field outside of Business Education, consists of:

1. The courses listed under A above, with the omission of Business Education 306 and Business 320.
2. Completion of a minor in some other subject.

101. Beginning Typewriting. 2 cr. The mechanism of the typewriter, its technique of operation and the development of basic skill.

102. Advanced Typewriting. 2 cr. Development of typewriting proficiency. Prereq: 101, or exemption on proficiency.

103. Beginning Shorthand. 3 cr. Introduction to shorthand; reading and dictation practice.

104. Intermediate Shorthand. 3 cr. Continuation of reading and dictation practice; development of speed in writing shorthand from dictation, and typewritten transcription. Prereq: 103, or exemption on proficiency.

105. Advanced Shorthand. 3 cr. Shorthand speed building, transcription of mailable letters, refinement of secretarial skills. Prereq: 104, or exemption on proficiency.

303. Production Typewriting. 3 cr. Advanced typewriting problems and practices; machine transcription. Prereq: 101 and 102, or equiv.

304. Office Procedure and Machines. 3 cr. Principles of office organization, filing systems, business machines. Prereq: 102 and 104, or equiv.

305. Secretarial Techniques. 3 cr. Shorthand, typewriting, and English in the transcription of letters; duties, responsibilities, and personal qualities of the secretary; human relations in the business office. Prereq: 102 and 104, or equiv.

306. Secretarial Practices. 3 cr. On-the-job work experience and training in industrial situations. Prereq: 102 and 304, or equiv.

307. Business Communication. 3 cr. Methods and procedures in business letter writing; introduction to report writing.

499. Special Work. Upper class students majoring in Business Education may, by agreement with a member of the Business Education staff, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

CHEMICAL ENGINEERING

Several curricula for students planning to transfer to a course in Chemical Engineering have been approved by the faculty. For information, consult the chairman of the Chemistry Department.

CHEMISTRY (College of Letters and Science)

Robert Weaver, Chairman.

A. **A major in Chemistry** (Letters and Science) may be earned in either of two ways:

1. A minimum of 34 credits, including Chemistry 225 (see Note 1), 226, 228, 248, 335, 336, 395, 496; and at least eight credits chosen from 329, 338, 365, 375, 425, 445, 446, 455, 458, including 338 or 445 or 446.

   Collateral requirements include Mathematics 110, 111, 212; Physics 110, 211, 212.

2. For those desiring professional certification by the American Chemical Society, a minimum of 41 credits, including Chemistry 225 (see Note 1), 226, 228, 248, 329, 335, 336, 395, 446, 455, 496; and at least six credits chosen from 338, 375, 399, 425, 445, 458. (One chemistry course in this group must have laboratory work associated with it. One advanced course in another science or mathematics may be substituted for one of the chemistry courses in this group with the approval of the chairman.)

   Collateral requirements include Mathematics 110, 111, 212; Physics 110, 211, 212. A reading knowledge of a foreign language, especially German, is strongly recommended.

B. A major in Chemistry for teacher certification consists of a minimum of 28 credits, including Chemistry 225, 226, 228, 248, and 10 credits in courses numbered 300 or over; normally these 10 credits will consist of 335, 336, 338, 391, and 492. (See Note 2, below.)

Collateral requirements include Mathematics 110, 111, 212; Physics 110, 211, 212.

A minimum grade point ratio of 2.00 in courses taken within the major (A and B, above) is a requirement for acceptance of the student as a major at the start of his junior year. The minimum grade point ratio of 2.00 in courses in the major is also a requirement for the student's retention as a major during his junior and senior years and departmental approval of the major for graduation. These requirements apply regardless of a declaration of academic bankruptcy. Exceptions concerning academic bankruptcy may be granted by the department.

A maximum of one grade below C in Chemistry courses numbered 300 or above may be applied to the major.

Students not meeting these standards may petition the chairman of the department for consideration.

C. A minor in Chemistry consists of 22 credits, including Chemistry 225 (see Note 1), 226, 228, 248, and at least four additional credits selected from courses numbered 300 or over, but excluding 399.

A minimum grade point ratio of 2.00 in Chemistry courses is required for departmental approval of the minor, regardless of a declaration of academic bankruptcy. Exceptions concerning academic bankruptcy may be granted by the department.

Notes:

1. For students majoring in chemistry the normal prerequisite for Chemistry 225 is Chemistry 115 and 116. With the consent of the chairman of the department, 105 and 106 may be substituted for 115 and 116.
2. By special permission of the chairman, Chemistry 330 may, in some cases, be substituted for 335-336-338. However, the minimum of 10 credits of chemistry courses numbered 300 or over, exclusive of 399, must still be met.
3. Students may not receive credit for more than one of the following: Chemistry 101, 103, 105.
4. Several of the chemistry courses listed below are designed as service courses or for majors other than chemistry, and they do not count toward the chemistry major. In the case of such courses numbered 300 and over, the course description includes this restriction.
5. A grade of F in certain freshman chemistry courses may be replaced by a subsequent grade in another freshman course as follows (See "Repetition of Courses" in the previous section of the catalog entitled ACADEMIC WORK.):
   a. An F in Chemistry 115 can be replaced by a subsequent grade in 103 or 105.
   b. An F in Chemistry 105 can be replaced by a subsequent grade in 101 or 103.
6. A student shall not receive credit toward graduation for a course after having completed a more advanced or similar course in the same area. The following restrictions hold:

If a student has completed	he is NOT eligible for
a. Chemistry 101	Chemistry 103
b. Chemistry 103	Chemistry 101
c. Chemistry 105	Chemistry 101, 103
d. Chemistry 115	Chemistry 101, 103, 105, 106
e. Chemistry 225	Chemistry 220
f. Chemistry 335	Chemistry 330
g. Chemistry 361	Chemistry 260, 365
h. Chemistry 365	Chemistry 260, 361
i. Chemistry 445	Chemistry 240
j. Chemistry 446	Chemistry 240

7. A student whose program requires one year of introductory chemistry with laboratory should take Chemistry 114 concurrently with 115.

100. Appreciation of Chemistry. 3 cr. Selected principles of chemistry, emphasizing the relation between chemistry and modern society. Two hrs lec, two hrs lab per week. This course will apply to part B of the Natural Science requirement for the Bachelor of Music or Bachelor of Science degree.

101. Basic Chemistry. 5 cr. Basic chemical concepts of atomic structure, bonding, stoichiometry, and descriptive chemistry as applied to both inorganic and organic compounds. Three hrs lec, one hr disc, three hrs lab per week. (See Notes 3, 5, and 6.)

103. Basic Chemistry. 3 cr. Basic chemical concepts of atomic structure, bonding, stoichiometry, and descriptive chemistry as applied to both inorganic and organic compounds. Two hrs lec, three hrs lab per week. Prereq: One year of high school chem; one year of high school algebra or equiv, or Math 103. (See Notes 3, 5, and 6.)

105. Fundamental Chemistry. 5 cr. For students who desire one year of college chemistry; fundamental principles, theories, and problems of chemistry; the descriptive chemistry of metallic and non-metallic elements, chemical equilibrium, organic and nuclear chemistry, and qualitative analysis. Three hrs lec, one hr disc, and three hrs lab per week. Prereq: Two acceptable units of high school math, or Math 104. (See Notes 1, 3, 5, and 6.)

106. Fundamental Chemistry. 5 cr. A continuation of 105. Prereq: 105. (See Notes 1 and 6.)

114. General Chemistry Laboratory. 1 cr. For students enrolled in 115 who desire introductory lab work; particularly for those with little or no lab experience. Three hrs lab per week. Prereq: Con reg in 115. (See Note 7.)

115. General and Quantitative Chemistry. 4 cr. Laws and principles of chemistry; atomic structure, formulas, and equations, stoichiometry and chemical equilibria. Three hrs lec, one hr disc per week. Prereq: One year of high school chem; three years of high school math or Math 105. High school courses must have a grade of C or better to be accepted as prerequisites. (See Notes 1, 5, 6, and 7.)

116. General and Quantitative Chemistry. 4 cr. A continuation of 115. Two hrs lec, one hr disc, three hrs lab per week. Prereq: 115. (See Note 1.)

220. Survey of Organic Chemistry. 4 cr. A systematic survey of the compounds of carbon for students needing only one semester of organic chem. Three hrs lec, three hrs lab per week. Prereq: 106 or 116. (See Note 6.)

225. Organic Chemistry. 3 cr. An integrated study of the compounds of carbon. Prereq: 116; or 106 and consent of the chairman. (See Notes 1 and 6.)

226. Organic Chemistry. 3 cr. A continuation of 225. Prereq: 225.

228. Organic Chemistry Laboratory I. 2 cr. Preparation and analysis of organic compounds; introductory qualitative analysis. Six hours lab per week. Prereq: 226 or con reg.

240. Techniques of Analytical Chemistry. 4 cr. Introduction to the methods used in chemical analysis, including instrumental and separation techniques. Two hrs lec, six hrs lab per week. Prereq: 106 or 116. (See Note 6.)

248. Quantitative Analysis Laboratory. 2 cr. Precision laboratory measurement in chemical analysis. Six hrs lab per week. Prereq: 116; or 106 and consent of the chairman.

260. Elementary Biochemistry. 4 cr. Introduction to the structure and cellular reactions of the primary constituents of living cells; for students with limited preparation in organic chemistry. Three hrs lec, three hrs lab per week. Prereq: 106 or 116, or cons instr. (See Note 6.)

329. Organic Chemistry Laboratory II. 2 cr. Extension of 228. Six hrs lab per week. Prereq: 226 and 228.

330. Brief Course in Physical Chemistry. 4 cr. Introduction to physical chemistry with emphasis on the "classical" areas including kinetics, thermodynamics, and colloidal phenomena. Three hrs lec, three hrs lab per week. For students wanting only one semester of physical chemistry; not to be counted toward the major in chemistry. Prereq: 220 or 228, and 240 or 248; Math 212 or 224, or con reg in either; Physics 104 or 211, or con reg in either; or cons instr. (See Notes 2 and 6.)

335/535. Physical Chemistry. 3 cr. Atomic and molecular structure, thermodynamics, kinetics. Prereq: 226, and 395 or con reg; Math 212; Physics 212; or cons instr.

336/536. Physical Chemistry. 3 cr. Continuation of 335. Prereq: 335.

338/538. Physical Chemistry Laboratory. 2 cr. Laboratory work illustrating the principles of physical chemistry. Six hrs lab per week. Prereq: 248, 335, and 336 or con reg in 336.

361. Physiological Chemistry. 5 cr. Basic principles of biochemistry as they apply to human biology with laboratory emphasis on the application of biochemical techniques to clinical chemistry. Three hrs lec, six hrs lab per week. Not to be counted toward the major in chemistry. Prereq: 240 or 248; 226 and 228, or 220; Biology 281 or 381. (See Note 6.)

365/565. Biochemistry. 5 cr. The chemistry of the components of living cells, and the nature and mechanism of cellular reactions. Three hrs lec, six hrs lab per week. Prereq: 226, 228, and 248. (See Note 6.)

372. Wood Chemistry. Deleted. See Paper Science 372.

375. Polymer Science. 3 cr. The chemistry and physics of polymers, including synthesis, characterization, and mechanical properties. Two hrs lec, three hrs lab per week. Prereq: 226, and 336 or con reg.

391. Seminar for Chemistry Majors in Teacher Education. 1 cr. Current topics in chemical education, chemical education literature, demonstrations, typical high school laboratory program, and textbook evaluations. Prereq: 226 and 228, or cons instr.

395. Seminar I. 1 cr. The use of the chemical and scientific literature; introduction to the concept of the seminar; student participation in studies and discussions of current developments in chemistry. Prereq: 226.

399. Special Work. Juniors and seniors majoring or minoring in Chemistry may, with the consent of the chairman arrange for special research projects, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

425. Advanced Organic Chemistry. 3 cr. Theoretical and physical organic chemistry including reaction mechanisms, quantum mechanical applications, and advanced stereochemistry. Prereq: 336.

445. Advanced Analytical Chemistry. 3 cr. Theory and application of complex chemical equilibria and selected methods of analytical separations. One hr lec, six hrs lab per week. Prereq: 248; and 336 or con reg. (See Note 6.)

446. Instrumental Analysis. 4 cr. Instrumental methods of analysis including optical, electrical, and radiochemical methods. Two hrs lec, six hrs lab per week. Prereq: 248; and 336 or con reg. (See Note 6.)

455. Advanced Inorganic Chemistry. 3 cr. Nuclear chemistry, atomic and molecular structure, coordination compounds, inorganic reaction mechanisms, nonaqueous solvents, descriptive inorganic chemistry. Prereq: 336 or con reg.

458. Inorganic Chemistry Laboratory. 1 or 2 cr. Advanced preparative techniques; characterization of inorganic compounds, inorganic relation kinetics; application of radio-isotopes to chemical problems. Three or six hrs lab per week. Prereq: 248; and 455 or con reg. If the course has been taken for one credit it may be repeated for one credit.

492. Seminar for Chemistry Majors in Teacher Education. 1 cr. Continuation of 391. Prereq: 391 or cons instr.

496. Seminar II. 1 cr. Student participation in studies and discussions of current developments in chemistry. Prereq: 336, 395; or cons instr.

CHILD DEVELOPMENT

See **Early Childhood Education.**

CHINESE

Courses in **Chinese** are listed under **FOREIGN LANGUAGES.**

COACHING

A **minor in Coaching** is offered in the School of Health, Physical Education, Recreation and Athletics. It is described under the heading **Physical Education.**

COLLOQUIUM (College of Letters and Science)

The purpose of the Colloquium is to help students acquaint themselves with great ideas developed by mankind and to evaluate the theories and practices of the twentieth century in the light of human learning of the past three thousand years. It is a course for reading and discussion.

The separate courses need not be taken in numerical sequence. Each course includes books from the ancient to the current and is sufficiently flexible to provide for the needs and interests of the students who register.

Credit in these courses may, with the consent of the chairman of the departments, be used to satisfy some of the requirements in the departments of History, Social Science, English, and Philosophy.

301, 302, 303, 304. Colloquium on Important Books. Each 2 cr. Group reading and discussion of some of the writings of eight different authors from the Greek era to the present. Prereq: cons instr.

COMMUNICATION (College of Fine Arts)

Myrvin Christopherson, chairman.

A. **A major in Communication in the College of Fine Arts** consists of a minimum of 32 credits in Communication courses, 14 of which must be in courses numbered 300 or above. The following courses are required: Communication 105, 107, 210, 211, 217, and 219. Communication 101 and more than four credits of Communication activities may not be included among courses used to complete the major.

B. **A major in Communication for teacher certification** consists of a minimum of 36 credits in Communication courses, 14 of which must be in courses numbered 300 or above. The following courses are required: Communication 105, 107, 210, 211, 217, 219, 317, and 318. Communication 101 and more than four credits of Communication activities courses may not be included among courses used to complete the major. (This major satisfies certification requirements in the academic area designated Speech by the Wisconsin Department of Public Instruction.)

C. **A minor in Communication in the College of Fine Arts** consists of 21 credits including Communication 105, 107, 219; and one of the following: 210, 211, or 217. Communication 101 and more than two credits of Communication activities courses may not be used to complete the minor.

D. **A minor in Communication for teacher certification** consists of 21 credits including Communication 105, 107, 210; 211 or 217; 219; and 317 or 318. Communication 101 and more than two credits of Communication activities courses may not be used to complete the minor. (This minor satisfies certification requirements in the academic area designated **Speech** by the Wisconsin Department of Public Instruction.)

NOTE: Department policy requires that all communication majors have an assigned adviser chosen from among the communication faculty and receive the adviser's approval of courses prior to registration each semester. New majors and minors should report to the department chairman for assignment to an adviser.

See also course listing under **Communication Education** (next section).

101. Fundamentals of Oral Communication. 2 or 3 cr. Introduction to and application of those principles which lead to an understanding of and facility with practical discourse.

105. Man and Communication. 3 cr. A survey of communication theories and practices with special emphasis on developments in the twentieth century.

106. Organizational Leadership. 2 cr. Problems and procedures of organizational operation focusing on: parliamentary procedure; the management of meetings; leadership; methods of resolving problems common to campus, community, and related organizations. Primarily intended for leaders of campus organizations. See also Comm 306.

107. Nature of Practical Argument. 3 cr. Logical structure of ordinary argumentative acts, its application in communicative practices and theory.

121. Evolution of American Media. 3 cr. The growth, regulation, and ramifications of communication media in this country.

126. Communication Activities: Debate-Forensics. 1 cr. Directed experience in debate and forensics, by special arrangement with the instructor. May be repeated.

127. Communication Activities: Media. 1 cr. Directed experience in film, radio, TV, newspaper, and yearbook production, by special arrangement with the instructor. May be repeated.

210. Introduction to Mass Communication. 3 cr. Investigation of and experience with communication processes within the context of mass media and mass audience. Prereq: So st.

211. Introduction to Interpersonal Communication. 3 cr. Investigation of and experience with communication conducted within small groups. Prereq: So st.

217. Introduction to Organizational Communication. 3 cr. Investigation of and experience with communication within institutionalized channels. Prereq: So st.

219. Art of Criticism. 3 cr. An introduction to the nature and practice of criticism as applied to communicative acts, with special emphasis on the description and evaluation of messages. Prereq: So st.

301/501. News and Public Affairs. 3 cr. The informational forms of mass communication and factors which constrain these forms and their functions.

302/502. Popular Arts. 3 cr. The entertainment and promotional forms of mass communication and the factors constraining these forms and their functions.

306. Organizational Leadership. 2 cr. Same as Comm 106. Primarily intended for campus leaders in their junior and senior years. Appropriate requirements will be implemented to distinguish between the 100 and 300 levels. Students may not receive credit for both 106 and 306.

311/511. Communication as Dialogue. 3 cr. Analysis of communication based directly and primarily on genuine regard for the other, as is found in close personal relationships. Prereq: 211.

312/512. Communication in Social Interaction. 3 cr. Analysis of conventionally shaped personal communication. Prereq: 211.

317/517. Directing High School Forensics and Debate. 2 cr. Prereq: 126 or 326.

318/518. Directing High School Mass Communication Activities. 2 cr. Problems and methods of supervising high school radio, TV, film, newspaper, and yearbook activities. Prereq: 127 or 327.

326. Communication Activities: Debate-Forensics. 1 cr. Directed experience in debate and forensics, by special arrangement with the instructor. May be repeated.

327. Communication Activities: Media. 1 cr. Directed experience in film, radio, TV, newspaper, and yearbook production by special arrangement with the instructor. May be repeated.

330/530. Promotional Communication Laboratory. 3 cr. Training in the methods used by individuals and institutions to relate to their respective publics, with variable focus on such topics as advertising, public relations, and image building. Focus will be specified each time the lab is offerred. May be repeated. Prereq: cons instr.

331/531. Print Laboratory. 3 cr. Training in the forms of print communication with variable focus in writing, layout, and design. Focus will be specified each time the lab is scheduled; may be repeated. Prereq: cons instr.

357/557 Speech for the Deaf and Hearing Impaired. 3 cr. Multisensory approach for the teaching of speech; articulation, voice, sentence rhythm; ear training utilizing residual hearing, kinesthesis, visual skills, and speech intelligibility.

358/558. Methods of Teaching the Deaf and Hearing Impaired. 3 cr. Methods in group and individual situations; formulation of performance objectives, developing question-asking skills, sequencing instruction, classroom evaluation, classroom management, self-assessment of teacher competencies, and selected teaching problems.

365/565. Introduction to Language Learning Disabilities. 3 cr. Definition, symptomatology, and classification of disordered spoken and written language, including methods of assessment. Prereq: 266.

366/566. Programs and Methods for Language Learning Disabilities. 3 cr. Basic procedures for the treatment of disordered language development, emphasis on comparative methodology and individual and group management practices. Prereq: 266.

369/569. Curricula for the Deaf and Hearing Impaired. 3 cr. The purpose and nature of curricula common to the education of the hearing impaired, adaptations of the regular curricula, and aspects of curricula unique to education of the hearing impaired.

395. Advanced Practicum. 1 or 2 cr. Advanced clinical experience in assessment and treatment with speech-, language- or hearing-impaired persons in the Center for Communicative Disorders. A minimum of three credits will be required. Prereq: Consent of the Center's Director.

407/607. Principles of Speech and Hearing Science. 3 cr. Principles of acoustics, physics, and electronics applied to speech perception and production, including techniques and equipment for the assessment of communication from laboratory models. Prereq: cons instr.

480/680. Disorders of Voice and Fluency. 3 cr. Methods of assessment and treatment of disorders of voice and fluency. Prereq: cons instr.

499. Special Work. Upper class students majoring in Communicative Disorders may, by agreement with the Assistant Dean of the School of Communicative Disorders, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

710. Seminar in Communicative Disorders. 3 cr. Specific inquiry into the clinical processes; heritage and literature of the profession. Prereq: cons instr.

711. Speech and Hearing Science. 3 cr. Review of pertinent research in psychological, acoustical, anatomical, and physiological characteristics of normal speech and hearing; laboratory techniques for evaluating these factors. A minimum of two hrs lab per week will be expected. Prereq: 407/607, or cons instr.

712. Advanced Speech and Hearing Science. 3 cr. Advanced laboratory techniques for assessing physiological speech and acoustical characteristics of normal and pathological speech and hearing systems. Individual laboratory exercises are required and independent investigations encouraged. A minimum of two hrs lab per week will be expected. Prereq: 711, or cons instr.

715, 716, 717. Gross Anatomy of the Head and Neck. 1 cr. each. An indepth study of the anatomy and structural relationships of the mechanism for human communication, through laboratory dissection procedures. To be taken in a three-semester series, one (1) credit per semester. Prereq: cons instr.

725. Advanced Study in Stuttering. 3 cr. Research, theories, and therapies regarding stuttering behavior in children and adults. Prereq: cons instr.

729. The Neurophysical Bases of Normal and Pathological Speech and Language. 2 cr. Normal and pathological speech and language in relation to the function of the central nervous system and related neuromuscular systems. Prereq: cons instr.

730. Treatment of Neuromuscular Disorders of Speech. 2 cr. Etiologies, symptomatology, and special learning problems in cerebral palsy; evaluation and clinical management of dysarthrias with emphasis on cerebral palsy; consideration of the variety of services available to the cerebral palsied. Prereq: cons instr.

732. Language Theories. 3 cr. The nature of language learning and acquisition from several theoretical viewpoints related to dynamic psycholinguistic aspects of language behavior. Prereq: cons instr.

733. Language Therapy I. 3 cr. Respective therapeutic goals, materials, and methods for fostering the development of communicative skills of children with developmental aphasia, psychosis, and related disorders of language. Prereq: cons instr.

734. Language Therapy II. 3 cr. Respective therapeutic goals, materials, and methods for fostering the development of communicative skills of children with mental retardation, cultural language deprivation and deficiency, dyslexia, dysgraphia, dyscalculia, and related disorders of language. Prereq: cons instr.

735. Advanced Studies in Voice Pathology. 3 cr. Pathologies and dysfunctions producing organic and functional voice disorders; consideration of both medical and voice rehabilitation. Prereq: cons instr.

736. Advanced Study of Language Learning Disabilities. 3 cr. Motoric, perceptual, conceptual, and symbolic processes subserving language development in its spoken and written form; emphasis on cognitive processes relating to the language and learning disabled child. Prereq: cons instr.

740. Aphasia and Related Language Disorders. 3 cr. The nature of adult language disorders; principles of assessment and management. Prereq: cons instr.

745. Advanced Methods in Articulatory Pathology. 3 cr. An analysis of the diagnosis and treatment of articulatory pathology; emphasis on measurements in articulatory assessment and therapeutic planning. Prereq: cons instr.

749. Total Communication. 3 cr. Theory, rationale, and the research pertaining to total communication; performance skills in the total communication approach. Prereq: cons instr.

750. Aural Rehabilitation. 3 cr. Theories, principles, and research related to speech reading and auditory training for the hearing impaired. Prereq: cons instr.

751. Clinical Audiology I. 3 cr. Differential diagnosis of auditory disorders including pure tone air conduction, bone conduction, masking, speech audiometry, and pediatric audiometry. Prereq: cons instr.

752. Theories of Hearing. 4 cr. Anatomical, psychoacoustic, and bioacoustic aspects of hearing; the nature of auditory perceptual behavior and the effects of auditory stimulation; student investigations are required. Prereq: cons instr.

753. Clinical Audiology II. 3 cr. Continuation of 751, with emphasis on site of lesion diagnostic tests including PGSR, EEG, Impedance Audiometry, functional tests and related assessment techniques. Prereq: cons instr.

754. Hearing Aids I. 2 cr. Amplification from the standpoint of electroacoustic systems. Prereq: cons instr.

755. Pathologies of the Auditory Mechanism. 2 cr. Pathologies of the ear and their effect on auditory function; the reflection of pathologies in audiometric data; medical therapeutics. Prereq: cons instr.

765. Hearing Aids II. 2 cr. Hearing aid selection procedures, modification techniques, maintenance and distribution. Prereq: cons instr.

766. Problems of the Deaf and Hearing Impaired. 2 cr. Contemporary problems and an analysis of the research pertaining to the deaf and hearing impaired. Prereq: cons instr.

767. Differential Diagnosis of the Communicatively Impaired. 3 cr. Methods and techniques in differentiation of deafness, mental retardation, emotional disorders, and perceptual difficulties. Prereq: cons instr.

768. Counseling and Guidance of the Deaf and Hearing Impaired. 2 cr. Management of the deaf and hearing impaired in relationship to their educational, vocational, social, and emotional adjustments within the home, school and community. Prereq: cons instr.

769, Operant Analysis and Techniques in Teaching the Deaf. 3 cr. Behavior analysis and prescriptive teaching strategies for the instruction of deaf children; a review of current practice and literature with emphasis on the disruptive deaf child. Prereq: cons instr.

770. Advanced Methods of the Oral-Aural Approach in Teaching the Deaf. 3 cr. Theoretical basis, rationale, and research relating to the oral-aural approach; advanced competencies in the oral-aural approach; emphasis on the use of instrumentation for the development and correction of oral skills of the deaf and hearing impaired. Prereq: cons instr.

771. Methods of Teaching the Multi-handicapped Deaf. 3 cr. Secondary handicapping conditions of mental retardation and blindness in relation to the deaf; development of specific competencies in teaching multi-handicapped deaf children. Prereq: cons instr.

772. Administration of Programs for the Deaf. 2 cr. Problems associated with administering both day and residential programs for the deaf. Prereq: cons instr.

780. Communicative Disorders in Children. 3 cr. Communicative disabilities in children, including etiology, identification, and management of the child. Primarily designed for teachers and school administrators. Not open to majors in Communicative Disorders or those with credit in 580.

795. Graduate Practicum. 1 to 3 cr. Advanced clinical experience in diagnosis, testing, and therapy with speech and/or hearing defective persons in the Center for Communicative Disorders. At least 45 hours of clinical practice will be required for each credit. Prereq: cons instr.

796. Independent Study. 1 to 3 cr. Planned study to enrich the student's preparation. Prereq: cons instr.

797. Workshop. 3 to 6 cr. Designed to expand the course content of the graduate program; individual and/or group projects required. May be repeated for credit as the course content changes. (Identification Audiometry, Pediatric Audiometry, Geriatric Audiometry, Acoustic Problems in Community, Industry, and the Military, Hearing Aids); (Mental Retardation, Pre-School Language, language acquisition: current theory, research, and practice); (Stuttering in Children, Stuttering in Adults, Cleft Palate, Laryngectomy, Research in Communicative Disorders, Medical Lectures in Communicative Disorders, Public School Speech and Hearing Services). Prereq: cons instr.

799. Thesis. 2 to 6 cr.

COMMUNICATIVE DISORDERS EDUCATION

329. (Formerly Education 329) **Techniques in Elementary and Secondary Education: Speech Correction.** 3 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in elementary and high school teaching.

COMPARATIVE LITERATURE (College of Letters and Science)

The minor in Comparative Literature is administered by the department of Foreign Languages and Comparative Literature.

A minor in Comparative Literature consists of the following:

1. Comparative Literature 101 and 102—six credits.
2. Six credits in advanced literature courses in which the student must do the reading in a language other than his native language.
3. Comparative Literature 399.
4. Additional courses in Comparative Literature and English to total 21 credits, as follows:
   a. At least 12 credits in Comparative Literature courses.
   b. Additional credits selected form English 310, 312, 319, 361, 362, 372, 380.

101. Masterpieces of the Western World. 3 cr. A comparative study of themes and literary traditions in the literature of the Western World from Homer to Montaigne.

102. Masterpieces of the Western World. 3 cr. A comparative study of themes and literary traditions in the literature of the Western World from Milton to Mann.

231. Survey of Dramatic Literature: Tragedy. 3 cr. A comparative study of the styles, theories, and traditions of tragedy in the literature of the world; emphasis on the classic heritage. Prereq: cons instr.

232. Survey of Dramatic Literature: Comedy. 3 cr. A comparative study of the styles, theories, and traditions of comedy in the literature of the world. Prereq: So st or cons instr.

240. Literature of the Bible. 3 cr. A comparative analysis of the Bible as literature. Prereq: So st.

250. Asian Literature. 3 cr. A comparative analysis of selected readings in narrative, dramatic, philosophic, and lyric literature of China, India, and Japan. Prereq: So st.

251. The Fiction of Asia. 3 cr. A comparative study of selected themes and forms in Oriental fiction. Prereq: So st.

252. The Drama of Asia. 3 cr. A comparative study of selected works of Oriental drama. Prereq: So st.

253. The Poetry of Asia. 3 cr. A comparative analysis of selected poetry of India, China, and Japan. Prereq: So st.

300. Classical Poetry. 3 cr. A comparative analysis of selected readings from the poetry of Homer, Sappho, Pindar, Anacreon, Theocritus, Lucretius, Catullus, Vergil, and Horace.

301. Classical Prose. 3 cr. A comparative analysis of selected reading from the prose of Plato, Aristotle, Livy, Cicero, Plutarch, Tacitus, Petronius, Seutonius, and Marcus Aurelius.

302. Medieval Literature in Translation. 3 cr. A comparative analysis of selected readings from English, French, German, and Spanish medieval literature: epics, lyric poetry, and drama. The area of concentration will be specified each time the course is offered.

303. Literature of the Renaissance. 3 cr. A comparative analysis of selections from the works of such writers as Petrach, Erasmus, Castiglione, Machiavelli, Rabelais, Cellini, Montaigne, and Cervantes.

317. The Novel before 1850. 3 cr. A comparative analysis of selections from the works of such writers as Cervantes, Lyly, Nash, Voltaire, Goethe, Hoffman, Balzac, Stendahl, Gogol, and Mansoni, with major emphasis on evolution of form and theme.

324. Literature and the Arts. 3 cr. A comparative study of literature and its relationship to one or more art forms (film, sculpture, painting, music, etc.) to determine esthetic purpose and the relationships between them. The course will have a subtitle each time it is offered.

350. Special Problems. 2 or 3 cr. Special focus on one of the following: a non-English writer; a comparative study of two writers; a literary group or genre; the relationship between literature and other arts; a recurrent theme in literature. A subtitle indicating the focus will be added each time the course is offered; any needed foreign language preparation will be indicated. Prereq: language preparation by the student for the problem to be handled.

399. Special Work. Upper class students minoring in Comparative Literature may, by agreement with their adviser, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. Prereq: cons instr, and approval of the Chairman of the department of Foreign Languages and Comparative Literature.

COMPUTER SCIENCE (College of Letters and Science)

Courses, and the minor, in Computer Science are administered by the department of Mathematics.

A minor in Computer Science consists of 22 credits including Computer Science 106 (which may be waived for students with knowledge of FORTRAN), 107, 210, 230, and 302. The remaining credits are to be selected from the following courses: Computer Science 315, 321, 390, and 499; Mathematics 360.

Students seeking certification to teach Computer Science in the secondary school are also required to take Computer Science Education 334. (See statements about "Teacher Certification" in the section "College of Professional Studies.")

See also course listing under **Computer Science Education** (next section).

106. Introduction to Computers. 2 cr. Computers, their history and applications; representation of information; flow charting and elementary FORTRAN programming; use of software. Prereq: Eligibility for Math 107 or con reg in Math 105.

107. Computer Programming. 3 cr. Programming techniques utilizing FORTRAN IV; algorithms; program design for larger problems; debugging and testing; documentation; program optimization. Prereq: 106 or consent of the chairman of the Mathematics department.

210. Information Processing with Large Data Base. 3 cr. Organization of information processing systems; records and files; storage techniques; data editing; report generation; testing and debugging; COBOL taught and used as the main programming language. Prereq: 107.

230. Computer Organization and Assembler Language. 3 cr. Structure and language of computers; representation of instructions and data; instruction interpretation; direct and indirect addressing; program linkage; application of assembler language programming. Prereq: 107 or consent of the chairman of the Mathematics department.

302. Data Structures. 3 cr. Basic structures used for representing information in the computer, and techniques for operating on them: arrays, stacks, ques and deques, general linear lists, trees, graphs, symbol tables, and multi-linked structures. Prereq: 210 and 230.

315. Introduction to System Design. 3 cr. Theory of systems and study of activities which must be considered during the development and implementation of systems projects; selected projects to emphasize the breadth of system design and analysis. Prereq: 302.

321. Models and Simulation. 3 cr. Types of construction of models; simulation of models; random number generation; design of simulation experiments; feasibility of implementation and model validation; selected applications. Prereq: 302.

390/590. Special Topics in Computer Science 3 cr. Topic will be announced in the Time Table. Prereq: Consent of the chairman of the Mathematics department.

499. Special Work. Upper class students in Computer Science may, by agreement with the chairman of the Mathematics Department, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

COMPUTER SCIENCE EDUCATION

334. Techniques in Secondary Education: Computer Science. 2 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching.

COOPERATIVE EDUCATION

Dennis Tierney, Coordinator.

Students participating in the Cooperative Education Program will devote from one to five periods (either semesters or summer sessions) in full-time or part-time training experiences in work related to their academic major or career goals.

Co-op students are required to register for those periods, but they receive no academic credit. Registration means that a record of the work experience will be entered on the permanent record of participating students, and that they have the status of full-time students during the work period.

001. First Work Period. 0 cr. Prereq: Approval by the Coordinator's office and by the chairman of the student's major department; acceptance by the employing organization.

002. Second Work Period. 0 cr. Prereq: Satisfactory completion of 001; approval by the Coordinator's office and by the

chairman of the student's major department; acceptance by the employing organization.

003. Third Work Period. 0 cr. Prereq: Satisfactory completion of 002; approval by the Coordinator's office and by the chairman of the student's major department; acceptance by the employing organization.

004. Fourth Work Period. 0 cr. Prereq: Satisfactory completion of 003; approval by the Coordinator's office and by the chairman of the student's major department; acceptance by the employing organization.

005. Fifth Work Period. 0 cr. Prereq: Satisfactory completion of 004; approval by the Coordinator's office and by the chairman of the student's major department; acceptance by the employing organization.

DANCE (College of Fine Arts)

Courses in Dance are taught by members of the department of Theatre Arts, which also administers the minor in Dance. Courses in Dance may also meet requirements in Drama and in Physical Education. See the appropriate entries under Drama and Physical Education. Any student who wishes to minor in Dance **must** have an adviser in the department of Theatre Arts.

A. **A minor in Dance (modern dance emphasis)** consists of Dance 101, 105, 302, and at least four credits in 309; eight credits selected from Dance 103, 104, 218, 219, 303, and 304; and four credits selected from Dance 301, 410, Dance Education 220 and 420. (Total: 24 credits)

B. **A minor in Dance (ballet emphasis)** consists of Dance 101, 103, 302, and at least four credits of 309; eight credits selected from Dance 105, 106, 205, 206, 305, and 306; and four credits selected from Dance 301, 410, Dance Education 220 and 420. (Total: 24 credits.)

C. **A minor in Dance for Teacher Certification** consists of 26 credits:

1. Dance 101, 216, 302, at least four credits of 309; Dance 103 (for students choosing the ballet option), or Dance 105 (for students choosing the modern dance option); Dance Education 217, 220, 420.
2. Eight credits selected from **one** of the following options:
   a. Modern Dance: Dance 103, 104, 218, 219, 303, and 304.
   b. Ballet: Dance 105, 106, 205, 206, 305, and 306.

Any Dance course selected in lieu of Physical Education 101 must be counted as a required Physical Education course in meeting requirements for a degree, and can **not** be counted in the other 120 credits required.

Students minoring in Dance must complete 120 credits for graduation **plus** sufficient credits to meet the general Physical Education requirement.

See also course listing under **Dance Education** (next section).

101. History and Appreciation of Dance. 3 cr. Cultural history of dance, theory and philosophy of dance, and laboratory experience in dance technique. Two hours lec, one and one-half hours lab per week.

103. Beginning Modern Dance I. 2 cr. Modern dance technique, composition, and improvisation. Three hours per week. One credit of 103 may be used toward the Phy Ed requirement.

104. Beginning Modern Dance II. 2 cr. Continuation of 103. Three hours per week. One credit of 104 may be used toward the Phy Ed requirement. Prereq: 103, or cons instr.

105. Beginning Ballet I. 2 cr. Basic barre exercises and floor work. Three hours per week. One credit of 105 may be used toward the Phy Ed requirement.

106. Beginning Ballet II. 2 cr. Continuation of 105, with the addition of floor progressions and combinations. Three hours per week. One credit of 106 may be used toward the Phy Ed requirement. Prereq: 105, or cons instr.

108. Folk and Square Dance. 1 cr. Beginning international folk dance. Two hours per week. May be used toward the Phy Ed requirement.

110. Social Dance. 1 cr. Beginning ballroom dance. Two hours per week. May be used toward the Phy Ed requirement.

205. Intermediate Ballet I. 2 cr. Continuing instruction in barre and center floor combinations. Four hours per week. May be repeated once, with consent of instructor, for a total of four credits. One credit of 205 may be used toward the Phy Ed requirement. Prereq: 106, or cons instr.

206. Intermediate Ballett II. 2 cr. Continuation of 205. May be repeated once, with consent of instructor, for a total of four credits. One credit of 206 may be used toward the Phy Ed requirement. Prereq: 205, or cons instr.

211. Specialty Dance and Stage Movement. 2 cr. Theatrical dance forms and period styles of movement. Three hours per week. Open only to Dance minors and Drama majors and minors, or by consent of instructor. One credit of 211 may be used toward the Phy Ed requirement.

216. Fundamentals of Rhythm and Dance. 1 cr. Rhythmic structure of music and movement basic to dance forms. Two hours per week. Prereq: So st.

218. Intermediate Modern Dance I. 2 cr. Modern dance technique, composition and improvisation. Four hours per week. May be repeated once, with consent of instructor, for a total of four credits. One credit of 218 may be used toward the Phy Ed requirement. Prereq: 104, or cons instr.

219. Intermediate Modern Dance II. 2 cr. Continuation of 218. Four hours per week. May be repeated once, with consent of instructor, for a total of four credits. One credit of 219 may be used toward the Phy Ed requirement. Prereq: 218, or cons instr.

227. Dance Workshop. 1 to 6 cr. The area of concentration will appear as a subtitle each time the course is offered. Prereq: So st; open to freshmen by cons instr and chairman of the department of Theatre Arts.

301. Pantomime. 3 cr. Pantomime technique, composition, and improvisation. Four hours per week. Prereq: 206 or 219, or Drama 272, or cons instr.

302. Dance Composition I. 3 cr. Experience in creative manipulation of the basic elements of movement into brief choreographed forms. Four hours per week. Prereq: cons instr; sophomores may enroll with special permission of instructor and chairman.

303. Advanced Modern Dance I. 2 cr. Modern dance technique, composition, and improvisation. Four hours per week. May be repeated twice, with consent of instructor for a total of six credits. One credit of 303 may be used toward the Phy Ed requirement. Prereq: cons instr.

304. Advanced Modern Dance II. 2 cr. Continuation of 303. Four hours per week. May be repeated twice, with consent of

instructor, for a total of six credits. One credit of 304 may be used toward the Phy Ed requirement. Prereq: cons instr.

305. Advanced Ballet I. 2 cr. Advanced ballet techniques and combinations. May be repeated twice, with consent of instructor, for a total of six credits. One credit of 305 may be used toward the Phy Ed requirement. Prereq: cons instr.

306. Advanced Ballet II. 2 cr. Continuation of 305. May be repeated twice, with consent of instructor, for a total of six credits. One credit of 306 may be used toward the Phy Ed requirement. Prereq: cons instr.

309. Dance Theatre. 2 cr. Performance experience in ballet and modern dance. Four hours per week. May be repeated twice, with consent of instructor, for a total of six credits. One credit of 309 may be used toward the Phy Ed requirement. Prereq: Audition with instructor; open to sophomores by consent of instructor and chairman.

399. Special Work. 1 to 6 cr. Students may, by agreement with the instructor and the Chairman of the department of Theatre Arts, arrange for special out-of-class work on individual or group projects, for which credit may be given on the basis of one credit for every week, or its equivalent, devoted exclusively to the project. Subtitle will be listed each time the course is offered.

410. Dance Production. 3 cr. Practical experience in all aspects of the theatrical production of dance. Three hours per week. Prereq: cons instr; open to juniors by special permission of instructor and chairman of the department of Theatre Arts.

DANCE EDUCATION

217. Methods of Teaching Recreational Dance. 1 cr. Techniques of teaching social and folk dance. Two hours per week. Prereq: Dance 216.

220. Dance in the Elementary School. 1 cr. Dance forms basic to a balanced elementary school physical education program. Two hours per week. Prereq: So st.

327. Dance Workshop. 1 to 6 cr. The area of concentration will appear as a subtitle each time the course is offered. Prereq: cons instr.

420. Dance Practicum. 2 cr. Controlled experience in teaching dance. Three hours per week. Prereq: cons instr; open to juniors with special permission of instructor and chairman of the department of Theatre Arts.

DIETETICS

See **Home Economics.**

DRAMA (College of Fine Arts)

Courses in Drama are taught by members of the department of Theatre Arts, which also administers the majors and minors in Drama. Any student who wishes to major or minor in Drama must have an adviser in the department of Theatre Arts.

A. **A Major in Drama** consists of 46 credits as listed below. This major satisfies certification requirements in the academic area designated **Drama** by the Wisconsin Department of Public Instruction.

1. Three credits from Drama 130, 230, 330, or 430; Drama 171; Drama 140 or 240; Drama 374, 375.
2. Twelve to 15 credits from the following areas: Aesthetics of Theatre, Drama Theory and Criticism, Dramatic Literature, History of the Theatre, Playwriting: Drama 213, 215, 251, 252, 255, 317, 318, 327, 328, 399 in this area, 410, 412, 462, 484, 490. Appropriate courses from other departments may be substituted with the consent of the Chairman of Theatre Arts.
3. Eighteen to 21 credits from the following areas: General, Acting, Directing, Technical Theatre, Oral Interpretation, Drama Education: Drama 126, 129, 132, 149, 172, 226, 230*, 240†, 249, 270, 271, 272, 326, 330†, 349, 370, 376, 383, 396, 399 in this area, 426, 429, 430*, 449, 475, 476, 490. A minimum of four and a maximum of eight of the credits in this part of the major shall be in Theatre Practicum. These courses are numbered Drama 126, Drama 226, Drama 326, and Drama 426. Each major is required to take one credit of Theatre Practicum each semester that the student is a declared Drama or Drama Education major. For a complete description of the course look under Drama 126.

   *This course may be used in this area of the major if Drama 130 was used to satisfy the requirement in (2) above.

   †This course may be used in this area of the major if Drama 140 was used to satisfy the requirement in (2) above.

B. **A minor in Drama** consists of 22 credits, including Drama 130, 230, 330, or 430; Drama 171; Drama 140 or 240; and Drama 374 and 375; and nine elective credits chosen with courses from both Groups 2 and 3, as listed under the major. Students seeking teacher certification and electing this (non-certifiable) minor in Drama will be required to have Drama 382. All declared minors in Drama, Drama Education, and Dance, are required to enroll in Theatre Practicum (Drama 126/226/326/426) for one credit each semester for a maximum of four credits, participating in a different aspect of production for each enrollment.

C. **Minor in Drama** with Emphasis on Dance consists of 22 credits, including Drama 130, 230, 330, or 430; Drama 171; Drama 140 or 240; Drama 375 (three credits in dance composition may substitute for Drama 375); and ten credits chosen from Group 2 and/or Group 3, as listed under the major, of which at least six credits must be in the area of dance/movement.

See also course listing under **Drama Education** (next section).

105. Appreciation and History of Theatre. 3 cr. Development of theatre including the modern media of television and motion pictures; emphasis on preparation for intelligent criticism as a member of an audience.

126. Theatre Practicum (Production Operations and Activities). 1 cr. Practical work in dramatics by special arrangement with the instructor, in these areas: acting; directing; scene construction/painting/rigging; scenery running crew; lights; sound; costume construction; costume running crew; make-up; stage management and assistant directing; props; box office, publicity, house management; costume, lighting, or scene design activities; individual activities (e.g. by off-campus student teachers). May be repeated for a maximum of two credits.

129. Drama Workshop. 1 to 6 cr. Intensive laboratory experience. The workshop's area of concentration will appear as a subtitle each time the course is offered.

130. Introduction to Interpretive Reading. 3 cr. Fundamentals of oral interpretation.

132. Voice and Diction. 2 cr. Improvement of the speaking voice, analysis and correction of poor speech patterns, and the study of syllabification and work emphasis to convey meaning more clearly.

140. Stagecraft I. 3 cr. Basic stagecraft: the stage and its equipment; standard tools and shop equipment; basic materials and techniques of simple scenery construction; basic electrics and theatre sound. Two hrs lec, two hrs lab per week, plus participation in University Theatre productions.

149. Theatre Graphics Laboratory. 2 cr. Problems in drafting, sketching, and rendering for the stage; elementary scenic model construction. Four hrs lab per week. Prereq: 140 or con reg, or cons instr.

171. Theories and Techniques of Acting I. 3 cr. Fundamentals of acting; character analysis; techniques and practice; relation of the role to the play as a whole. Four hrs per week.

172. Theories and Techniques of Acting II. 3 cr. Continuation of 171, with emphasis on character development. Four hrs per week. Prereq: 171 or cons instr.

212. Forensic Activities. 3 cr. Theory and practice for all public school forensic and dramatic activities; recommended for prospective teachers. Prereq: So st or cons instr.

213. Survey of Dramatic Literature: Tragedy. 3 cr. Styles, theories and literature of world drama emphasis on the classic heritage: representative plays studied in the context of their times. Prereq: So st.

215. Survey of Dramatic Literature: Comedy. 3 cr. Styles, theories, and literature of world drama; emphasis on the classic heritage; representative plays studied in the context of their times. Prereq: So st.

226. Theatre Practicum: Production Operations and Activities. 1 cr. See the description for 126. May be repeated for a maximum of two credits. Prereq: So. st.

230. Reader's Theater. 3 cr. Principles and techniques of the oral interpretation of plays. Prereq: So st, or cons instr.

240. Stagecraft II. 3 cr. Advanced stagecraft and continuation of 140, emphasizing more complex production techniques, special materials, and production flow planning. Two hrs lec, two hrs lab per week, plus participation in University Theatre productions. Prereq: 140 or cons instr.

242 and **243** have been replaced by **249, 349,** and **449.**

249. Technical Theatre I. 3 cr. Introduction to the production craft of the theatre, offered under several subtitles; may be taken once for credit under each. Prereq: 140 or 240 or cons instr.

Scene Design. Two hrs lec, two hrs lab per week.
Costume Design. Two hrs lec, three hrs lab per week.
Lighting Design. Two hrs lec, two hrs lab per week.
Scene Painting. One hour lec, four hrs lab per week.

251. History of Theatre: Beginning through Renaissance. 3 cr. Development of the arts and techniques of the theatre from the beginning through the Renaissance. Prereq: So st.

252. History of Theatre: Restoration through Twentieth Century. 3 cr. Development of the arts and techniques of the theatre from the Renaissance to the present. Prereq: So st.

255. Introduction to Stage Costume. 3 cr. Development and fundamental principles of the art of costuming for the stage in their relation to theory and practice. Two hrs lec, two hrs lab per week. Prereq: So st.

270. Stage Make-up. 2 cr. Purpose and techniques of application of theatrical make-up; the use of make-up in the various theatrical media; emphasis on stage use. One hr lec, two hrs lab per week. Prereq: 171, or cons instr.

271. Advanced Acting I. 3 cr. Intensive study in the art of acting; emphasis on production, styles of acting, development of techniques, rehearsal problems. Four hrs per week. Prereq: 171 and 172, or 171 and cons instr.

272. Advanced Acting II. 3 cr. Continuation of 271. Four hrs per week. Prereq: 271.

315/517. European Drama I. 3 cr. Intensive study of the European Drama and Theatre; representative plays; theatre trends.

318/518. European Drama II. 3 cr. Continuation of 317. Prereq: 317, or cons instr.

326. Theatre Practicum: Production Operations and Activities. 1 cr. See the description for 126. May be repeated for a maximum of two credits. Prereq: Jr st.

327/527. Fundamentals of Playwriting. 3 cr. Basic elements of the playwriting process; idea, structure, theme, plot, characterization, dialogue, language; project writing and class criticism.

328/528. Advanced Playwriting. 3 cr. Continuation of 327, with emphasis on project writing and performance. Prereq: 327, or cons instr.

329. Drama Workshop: Theatre as a Popular Art. 3 or 6 cr. Popular theatre from the viewpoint of the audience, the artists, and producing groups (including theatre, TV drama, and film), through visits and tours to theatre rehearsals, TV studios, and motion picture locations; activities to be supplemented with seminar appearances by actors, writers, designers, producers, directors, and other theatre artists actively engaged in theatre as a Popular Art. Performance attendance and evaluation required, with different levels of involvement at the different credit levels. Offered only as part of the UWSP Overseas Studies Program. Does not count toward the major or minor in Drama; may be applied toward the Humanities requirement for the degree. Prereq: Jr st, or cons instr.

330. Chamber Theatre 3 cr. Principles and techniques of presenting non-theatrical material in theatrical form through oral interpretation. Prereq: Jr st, or cons instr.

340 has been replaced by **249, 349,** and **449.**

349. Technical Theatre II. 3 cr. Continuation of 249. Advanced work in the production crafts of the theatre, offered under several subtitles; may be taken once for credit under each.

Scene Design. Two hrs lec, two hrs lab per week. Prereq: 149 and 249 (Scene); or cons instr.
Costume Design. One hr lec, four hrs lab per week. Prereq: 149 and 249 (Costume); or cons instr.
Lighting Design. Two hrs lec, two hrs lab per week. Prereq: 249 (Lighting); or cons instr.
Theatre Sound One hr lec, two hrs lab per week. Prereq: 140 or 240 or cons instr.

370. Advanced Stage Make-up. 2 cr. Continuation of 270. Prereq: 171 and 270; or cons instr.

374. Script Analysis. 1 cr. Production analysis of a script for the director, actor, or designer. Prereq: Con reg in 375 and a minimum of three credits of dramatic literature; or cons instr.

375/575. Beginning Directing I. 3 cr. Theory of directing; exercises in blocking and performance of scenes. Four hrs per

week. Prereq: 171. (140 or 240 is recommended.)

376/576. Beginning Directing II. 3 cr. Practice in directing scenes and one-act plays; development of skills in directing. Four hrs per week. Prereq: 374 and 375, or cons instr.

383/583. Creative Dramatics. 3 cr. Philosophy and techniques of creative drama with emphasis on its relation to creative education in general.

396. Theatre Management and Promotion. 3 cr. Organizing, financing, and selling theatrical operation; managerial organization, budget, scheduling, box office, public relations, promotion, program preparation; aspects of management promotion for community, university, secondary school, and private theatres. Prereq: Completion of core courses in Drama and at least six credits in Dramatic Literature, or cons instr.

399. Special Work. 1 to 6 cr. Upper class students majoring or minoring in Drama may, by agreement with the chairman, arrange for special work on individual or group projects, for which credit may be given on the basis of one credit for every week, or its equivalent, devoted exclusively to the project.

410/610. Masters of the Theatre. 2 cr. Intensive study of one or more playwrights and/or designers and/or directors and/or actors. The subject will be determined by the instructor offering the course. A subtitle will be added each time the course is offered indicating the subject(s). (May be taken more than once for credit as subject matter changes.) Prereq: Sr st, or Jr st and cons instr.

412/612. Contemporary Theatre. 3 cr. The American and European theatre of the last few years; representative plays from the works of contemporary dramatists as well as analysis of current theatre trends. Prereq: Sr st, or Jr st and cons instr.

426. Theatre Practicum: Production Operations and Activities. 1 cr. See the description for 126. May be repeated for a maximum of two credits. Prereq: Sr st.

429/629. Drama Workshop. 1 to 6 cr. Designed to provide the student with intensive laboratory experience. The workshop's area of concentration will appear as a subtitle each time the course is offered. Prereq: Sr st, or Jr st and cons instr.

430/630. Classic Forms of Interpretation. 2 or 3 cr. Principles and techniques of interpreting classic forms of literature; choric reading choir. The third credit may be taken at the student's option to participate in a choric reading choir. Prereq: Sr st, or Jr st and cons instr.

449. Technical Theatre III. 3 cr. A continuation of 349. Special projects and techniques of handling advanced technical theatre problems, offered under several subtitles; may be taken once for credit under each.

Scene Design: Two hrs lec, two hrs lab per week. Prereq: 249 (Costume and Lighting); and 349 (Scene); or cons instr.
Costume Design. One hr lec, four hrs lab per week. Prereq: 349 (Costume) or cons instr.
Lighting Design. Two hrs lec, two hrs lab per week. Prereq: 149, and 249 (Scene), and 349 (Lighting; or cons instr.
Technical Production. Three hrs lec per week. Prereq: 240, and 249 (Scene and Lighting); cons instr.
Miscellaneous Technical Problems. Two hrs lec, two hrs lab per week. Prereq: Nine credits in technical theatre courses and cons instr.

462/662. Dramatic Criticism. 3 cr. Criticism of forms and styles based on major ancient and modern theories, including play analysis and production evaluation. Prereq: Sr st, or Jr st and cons instr.

475/675. Advanced Directing I. 3 cr. Problems of directing with emphasis on full-length plays, including styles, forms, and production coordination. Four hrs per week. Prereq: 374 and 376, or cons instr.

476/676. Advanced Directing II. 3 cr. Continuation of 475. Four hrs per week. Prereq: 374 and 475.

484/684. Children's Theatre. 2 cr. Selection, direction, and production of plays for children's audiences. Prereq: Sr st, or Jr st and cons instr.

490/690. Seminar in Theatre. 3 cr. Research and discussion of specialized areas of theatre and drama. A subtitle indicating the subject(s) will be added each time the course is offered; may be taken more than once for credit as subject matter changes. Prereq: Sr st, or Jr st and cons instr.

702. Foundations of Dramatic Art. 3 cr. An intensive study of theatre as an art and as a cultural force. An aesthetic and historical consideration of dramatic literature and the interpretive arts of the stage, motion picture, radio, and television.

725. Problems in Play Production. 3 cr. A lecture-laboratory course in the directing and mounting of productions.

770. Seminar. 3 cr. Selected studies and advanced theory in drama and interpretation. Subtitle indicating the subjects will be added each time the course is offered; may be taken more than once for credit as subject matter changes.

785. Creative Drama for Children. 3 cr. Survey of story materials; development of diction and body movements; characterization and improvisation.

796. Independent Study. 1 to 3 cr. Designed to enrich and supplement the student's preparation in his area of specialization; regularly scheduled conferences with a staff supervisor.

799. Thesis 2 to 6 cr.

DRAMA EDUCATION

382. Teaching Drama in the Secondary School. 3 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching.

EARLY CHILDHOOD EDUCATION

Arthur Fritschel, in charge.

The major in Early Childhood Education is an interdisciplinary major administered by the Dean of the College of Professional Studies. It consists of:

A. **Core courses** to total 43 to 46 credits, as follows:
   1. Education and Psychology, 22 credits: Education 242, 301, 381, and 10 credits of 398; Psychology 200.
   2. Home Economics, or options as indicated, 12 credits: Home Economics 101, or Art 101; Home Economics 261 or Psychology 260; Home Economics 351 or 253; Home Economics 361 or Education 241.
   3. Required support courses—select nine credits in the Home Economics option, or 12 credits in the Elementary Education option: Communicative Disorders 266 (3 cr), 280 (3 cr); Education 351 (3 cr), 353 (3 cr); Physical Education 231 (3 cr)—This course will also fulfill **two** credits of the general Physical Education requirement for a degree.

Select either B or C:

B. Home Economics option, 21 credits: Home Economics 104, 105, 211, 364, 366, 371, 467; Physical Education 252.

Vocational certification is optional. If elected, the following additional work is required—Home Economics Education 394 (2 or 3 cr), 395 (2 cr), and 793 or Education 383 (3 cr).

The Provisional certificate requires 2,000 hours of work experience; and the Standard certificate requires three years of successful teaching and 4,000 hours of work experience.

C. Elementary Education option, 20 to 27 credits:

1. Education 349, five credits.
2. Elective options—select either a. or b.:
   a. Completion of a minor in one of the following: Art, Biology, Dance, Drama, Learning Disabilities, Music, Psychology, or Sociology and Anthropology.
   b. Completion of a concentration of 15 credits in one of the minors listed in paragraph a. above; or completion of a concentration of 15 credits distributed among two of the fields listed in paragraph a., above, with no more than nine credits in any one field.

NOTE: The major in Early Childhood Education meets Wisconsin Teacher Certification requirements for Nursery-Kindergarten, but not for grades 1 through 8. Students seeking certification for grades 1-8 must major in Elementary Education.

EAST CENTRAL EUROPEAN STUDIES

See **Russian and East Central European Studies.**

ECONOMICS AND BUSINESS (College of Letters and Science)

See also **Business and Business Administraton.**

Lawrence A. Weiser, chairman.

A. A major in Economics consists of 34 credits:

1. Required courses: Economics 200, 201, 330, 350, 360.
2. Controlled electives: Nine credits from the following courses: Economics 311, 315, 316, 341, 345, 361, 365, 381.
3. Electives: Six credits of additional Economics courses. Sociology 260 may be counted toward the major.
4. Required collateral course: Mathematics 110, or 118, or 224.

A minimum grade point ratio of 2.00 in courses taken within the major is a requirement for acceptance of the student as a major at the start of his junior year. The minimum grade point ratio of 2.00 in courses in the major is also a requirement for the student's retention as a major during his junior and senior years and for department approval of the major for graduation. The department chairman may allow exceptions to this standard on a conditional basis.

B. A Minor in Economics consists of at least 20 credits, including Economics 200, 201, and 330.

NOTE: Four additional credits in Economics to total at least 34 are required for teacher certification with a major in Economics; and two additional credits in Economics to total at least 22 are required for teacher certification with a minor in Economics.

If the student is primarily interested in using economics for employment in business or government it is recommended that he take at least one year of accounting. If the student is considering graduate study in economics, it is recommended that he take collateral courses in mathematics.

100. Introduction to Economics. 3 cr. A survey of contemporary economic concepts and problems including their historical development; analysis of individual and aggregate economic issues such as unemployment, inflation, energy, taxation, and monopoly. This course may be used in partial fulfillment of the Social Science general-degree requirement, but cannot be substituted for Economics 200 or 201 in satisfaction of the Business Administraton major nor be counted toward an Economics major or minor.

200. General Economics I. 3 cr. Character and scope of economics; the elements of supply and demand; the measurement and determination of national income; macroeconomics; money and banking; poverty, and income maintenance. Prereq: So st.

201. General Economics II. 3 cr. Monopolistic competition and price theory; microeconomics, theory of distribution, public finance, international trade, and the balance of payments. Prereq: 200.

203S. Principles of Economics. 4 cr. Institutions, problems, and policies in the American economy with emphasis on principles; selected microeconomic and macroeconomic topics. Open only to those enrolled in Economics Education Institute. (SS only).

204. Environmental Economics. 3 cr. The economics of environmental control; externalities, public goods, social costs, and their effects in the market system; related problems such as urban development and economic growth. Prereq: So st.

311/511. Public Finance. 3 cr. Theories, practices, and problems of taxation; proposed tax reforms; fiscal policy. Prereq: 201, or cons instr.

312. Public Utilities. 3 cr. Development of public utilities in the United States; theoretical and institutional basis of public utility regulation; development of regulatory agencies; public versus private ownership. Prereq: 200.

315/515. Business and Government. 3 cr. Rationale for a government role in the economy; government control of business; evaluation of market solutions versus government control. Prereq: 201.

316. Transportation Economics. 3 cr. The importance, development, and characteristics of the national system; contemporary pricing, investment, and regulatory issues. Prereq: 201 or cons instr.

323. Consumer and Cooperative Economics. 3 cr. Economics for the consumer; debt, insurance, investing, taxation, estate planning, consumerism and the role of cooperatives.

328. Social Insurance. 2 cr. Social security, unemployment insurance, workman's compensation, health insurance, private retirement plans, public assistance, welfare programs. Prereq: 200 or cons instr.

330. Statistical Methods. 3 cr. Sources of statistical data, tabulation, charting, averages, dispersion, sampling and probability, index numbers, trends, seasonal variations, economic cycles, correlation. Prereq: 200.

341. Corporation Finance. 3 cr. Business units, especially corporate, in present day enterprise; financial principles applicable to their operation. Prereq: 201 and Bus 211, or cons instr.

345. Labor Problems. 3 cr. Employer-employee relationships; characteristics of labor markets; types of labor organizations and employer organizations; industrial disputes and the devices for effecting settlements; collective bargaining and labor legislation.

346/546. Collective Bargaining. 2 or 3 cr. Organizing and negotiating, content of collective bargaining, bargaining in public and private employment, the law of collective bargaining. Prereq: 345 or cons instr.

350. Microeconomic Theory. 3 cr. Contemporary macroeconomic theory, including consumption, production, pricing, and resources allocation. Prereq: 201.

360. Money and Banking. 3 cr. Monetary and banking principles and practice; employment and price-level analysis; interest-rate theory; international finance in the banking system. Prereq: 200.

361. Macroeconomic Theory. 3 cr. Determination of levels of national income, output, employment, and prices; national income accounting; theory and measurement of aggregate consumption and investment; government stabilization policy. Prereq: 201.

362. Economic Development. 3 cr. The stages of economic growth; study of economic conditions and policy in the underdeveloped and intermediately developed national economies. Prereq: 201.

365. International Economics. 3 cr. Foreign trade, theory and measurement of export and import patterns; foreign exchange markets, balance of payments, tariffs, and the contemporary international monetary system. Prereq: 201.

367/567. Comparative Economic Systems. 3 cr. Analysis and appraisal of the structure and function of diverse economic systems, such as capitalism, socialism, communism, and their modifications. Prereq: 200.

381. History of Economic Thought. 3 cr. Economic thought from the mercantilists to recent writers. Prereq: 201.

433. Econometrics. 3 cr. Quantitative methods as they apply to economic relationships; regression and correlation, statistical inference, economic models, and applications to economic theory. Prereq: 201, 330; Math 107, or 110, or 224.

453. Managerial Economics. 3 cr. Application of price theory and economic theory of the firm to business management decisions; use of microeconomics and macroeconomics in forecasting for business policy. Prereq: 201.

499. Special Work. Upper class students majoring or minoring in Economics may, by agreement with the chairman of the department, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

704. The American Economy. 3 cr. The make-up of the American economy, its principal institutions, its principal functions; student analysis of some of the principal problems within the American economy. For students not specializing in Economics.

756. Current Economic Problems. 3 cr. National and international economic policies in the light of commonly accepted social goals, such as efficient use of resources, stability of income and employment, equitable distribution of income, decentralization of power, personal security, freedom of choice, and peaceful and mutually beneficial international relations.

EDUCATION (College of Professional Studies)

Thomas McCaig, Assistant Dean and Head of the School of Education.

The major in **Early Childhood Education** is described under that heading.

See also course listings under **Art Education, Business Education, Communication Education, Communicative Disorders Education, Computer Science Education, Dance Education, Drama Education, Early Childhood Education, English Education, Foreign Language Education, Home Economics Education, Instructional Resources, Mathematics Education, and Music Education.**

All course descriptions are general; content, field trips, and resources may vary according to advances in the discipline, availability and accessibility of resources, and the needs of the students in each course and section.

#Indicates that admission to the Professional Education Program or to the School of Education is a prerequisite for the course.

**Indicates courses which are concerned with individually guided education— multi-unit schools, elementary-secondary (IGE-MUS-E-S).

001. Driver Education for Beginners. 0 cr. Concurrent with Education 378 for classroom discussion and activity; behind-the-wheel training in a dual control automobile with a student instructor-in-training, under the supervision of the instructor.

100. Introduction to Education. 2 cr. Exploring education and teaching in contemporary society, including new approaches and innovations, and futuristic trends; lectures, seminars, and field experience. Open to all students. Required for concurrent or subsequent admission to the Professional Education Program.

145. Introduction to Early Childhood Education. 2 cr. Curricula, purposes and organization of programs in early childhood education. Includes field trips and observations.

177. Beginning Safety Education. 3 cr. Organization, administration, and teaching of safety in home, highway, water, athletic, recreational, and industrial areas.

220. Pre- and Elementary-School Safety. 2 cr. Methods, materials, and techniques as applied to pre- and elementary-school teaching of safety, with program content suitable on a progressive basis for each grade level; integrated and separate discipline approaches; topics in a safe school environment, legal aspects, safety patrols, transportation for the Safety specialist. Prereq: 177.

241. Creative Activities for Young Children. 3 cr. The philosophy and role of the creative activities (music, drama, dance, literature, and art) in early childhood-kindergarten education. Emphasis on the creative activity as it relates to developmental stages. At least one hr lab per week. Prereq: So st.

242. Early Childhood Education Curriculum. 4 cr. Study of curriculum and materials in early childhood-kindergarten education; emphasis on reading readiness, language arts, social studies, science, and mathematics. Two hrs lab per week. Prereq: So st.

#301. Techniques in Kindergarten Education. 2 cr. Techniques used in kindergarten teaching; observation included.

#304. Techniques in Language Arts in the Elementary and Middle Schools. 2 cr. Principles, aims, methods, and techniques in English, handwriting, spelling, listening and writing. Prereq: 381 or cons instr.

305. The Special Student in Driver Education. 2 cr. Methods, techniques, scheduling, psychological approach to teaching the special student in driver education; selection and purchase of equipment for the handicapped. Prereq: 177, 378, 379.

306. Industrial and Institutional Safety. 2 cr. Overview of occupational accident prevention programs; techniques of measurement, cost of accidents, locating and identifying accident sources, problems of correcting difficult hazards, award programs, and psychology of accident prevention in various types of industries and institutions. Prereq: 177.

#308. Developmental Reading in Elementary and Middle School. 3 cr. Materials and methods of instruction in the field of reading; readings, basic instructional approaches, research, and readiness in the field of reading instruction. Prereq: 381 or cons instr.

311. Techniques for Intermediate and Upper Grades: Mathematics, Social Studies, Science. 4 cr. Principles, aims, methods, and techniques. Three hrs lec; observation and lab hrs to be arranged.

****312/512. Workshop in Education: Multi-Unit Schools—IGE.** 2 or 3 cr. Analysis of multi-unit schools, team teaching, and individually guided education; theory and practice; major focus on development of multi-unit schools in Wisconsin.

****313/513. The Individually Guided Education Multi-Unit School.** 3 cr. Introduction to the comprehensive system of planning and organization in the individually guided education, multi-unit school, including the individually guided programming model, rationale for decision making, formulating terminal and enroute behaviors; an overview of the multi-unit organization and implementation; team building procedures, roles, and responsibilities, and teacher-advisee concept.

320. Techniques in the Elementary School: Guidance. 3 cr. Policies and practices of organized guidance in the elementary school; personal, social, and educational adjustment problems and needs. Prereq: 383 and teaching experience.

321. Techniques in the Elementary School: Speech. 3 cr. Methods, materials and philosophy for the teaching of speech in the elementary school; curricular correlation.

#324. Techniques in the Elementary School: Social Studies.** 2 cr. Principles, aims, methods, and techniques. One hr lec; two hrs observation, lab and/or clinical experience per week.

#325. Techniques in the Elementary School: Science.** 2 cr. Principles, aims, methods, and techniques. One hr lec; two hrs observation, lab and/or clinical experience per week.

326. Corrective Reading. 3 cr. Preventive and corrective measures in the teaching of reading in grades one through eight; diagnosis of causes and the application of corrective techniques. Prereq: 308 or cons instr.

The former **329** is now **Communicative Disorders 329.**

#330-340. Techniques in Secondary Education. 2 cr in each of the following courses. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching. The course is offered in the following categories:

330. Accounting.
The former **332** is now **English Education 332.**
The former **333** is now **Foreign Language Education 333.**
335. Mathematics.
337. Science.
338. Shorthand and Typewriting.
339. Social Studies.

349. Fieldwork in Early Childhood Education. 5 cr. Clinical and laboratory experiences in schools; home and school in culturally differing areas. Prereq: 242 or con reg.

350/550. Organization and Administration of Outdoor Education. 3 cr. Objectives, scope, and administrative aspects of outdoor education in the curriculum, including the role of school forests, day camps, school gardens, community resources, and other outdoor educational techniques.

****351/551. The Exceptional Child.** 3 cr. Characteristics and educational needs of children who are mentally retarded, gifted, emotionally disturbed, or who have visual, hearing, speech, or motor handicaps; an introductory course for those preparing to teach exceptional children, and designed to aid the regular classroom teacher in recognizing and interpreting the significance of developmental deviations. Prereq: Psych 200.

352/552. Workshop in Mental Health. 4 cr. For classroom teachers interested in improving their teaching skills through a better understanding of the role of good mental health in the learning situation; the areas covered will include learning theory, mental health education, emotional growth, and special school and community services for the emotionally handicapped.

****353/553. Nature and Needs of Children with Learning Disabilities.** 3 cr. Major emphasis and points of view in theory and practice concerning the identification and remediation of children with learning disabilities. Prereq: 351 or con reg or cons instr.

354/554. Mainstreaming the Exceptional Student. 3 cr. Principles and procedures in mainstreaming the student with exceptional needs into regular classrooms, including practicum in implementing individualized programs. Prereq: 351/551 or cons instr.

360/560. Workshop in Elementary Education. 2, 3, or 4 cr. Problems of teaching in various curricular fields in the elementary school. A subtitle will be added to describe the area considered each time the course is offered.

****363/563. Diagnostic Procedure in Special Learning Disabilities.** 3 cr. Theory and practice of testing and evaluating for specific learning disabilities and in the basic interpretation of significant findings. Prereq: 353/553 and SLD candidacy.

364. Methods and Materials for Children with Special Learning Disabilities. 3 cr. Teaching methods described, demonstrated, and evaluated. Prereq: 363/563 and SLD candidacy.

365/565. Seminar in Education of Children with Special Learning Disabilities. 3 cr. An analytical approach that emphasizes adapting methods and materials to individual profiles and abilities; activities and content of the course adapted to the needs of the students. Prereq: 353, 363, and 364.

366/566. Early Identification and Diagnosis of Children with Exceptional Educational Needs. 3 cr. Procedures in screening and diagnosing specific educational needs of young children. Prereq: 301 or 349, and 351; or cons instr.

#Admission to the Professional Education Program or to the School of Education is a prerequisite for this course.
**IGE-MUS

367/567. Early Educational Programming for Children with Exceptional Needs. 3 cr. Description and evaluation of exemplary models and strategies in teaching young children with special educational needs; writing and implementation of individualized programs for these children. Prereq: 366 or cons instr.

370-373/570-573. Workshop in Education. 1 to 3 cr. Problems of teaching in the elementary and secondary schools. A subtitle will be added each time the course is offered. Prerequisites may be stated for each subtitle.

371/571. Aerospace.

372. Conservation. Prereq: Open only to students majoring or minoring in Natural Resources Management; or Nat Res 370.

373. Foreign Language.

****374/574. Workshop in Education: Group Dynamics within the Secondary School.** 2 or 3 cr. Group dynamics and leadership skills within small and large classes; theory and techniques in promoting optimal involvement and learning; major focus on the comparison of teacher roles within large and small groups.

378. Driver Education. 3 cr. Organization, administration, and teaching of Driver Education and Training; requires the instruction of a new driver with the dual-control training car outside regular class hours.

379. Advanced Driver and Safety Education. 3 cr. For personnel in safety and driver education; designed to develop concepts related to traffic safety, traffic law and enforcement, engineering, school transportation, research, teaching methods by using simulated and multiple car plan, and area program administration. Prereq: 377 and 378.

380. Principles of Education. 2 cr. History and philosophy of public education and their effect on the role of the school in our society; the relationship, of the teacher to the pupil, the school, the community and the profession. Prereq: 100 or con reg.

#381. Educational Psychology.** 3 cr. Psychological bases of educational procedures and practices; the educational implications of the characteristics of physical and mental growth, emotional behavior, motivation, learning, individual differences, and human relations; an integrating course taken concurrently with student teaching. Prereq: Psych 200.

382. Philosophy of Education. 3 cr. Educational philosophies underlying the various methods of teaching and of organizing subject matter; the relation of political and social philosophies to national systems of education, to different plans of school organization, and to various types of schools.

****383/583. Tests and Measurements.** 3 cr. A brief history of the testing movement; functions of tests, methods by which they are applied, scored, and results tabulated; construction of objective tests and improvements of teacher-made tests.

384/584. Computers, Systems, and Education. 3 cr. Effects of computers, systems analysis and system science on educational method, and on school organization, administration, and curriculum; introduction to computer-assisted instruction; educational simulation; limitations of computer oriented methods of instruction.

385/585. Teaching the Early Adolescent. 3 cr. Characteristics of early adolescents and instructional strategies appropriate to their needs.

386/586. Reading in the Secondary School. 3 cr. Materials and techniques of teaching developmental reading in the secondary school.

387/587. Corrective Reading in the Secondary School. 3 cr. Procedures for analysis and correction of students' reading problems for the teacher in the subject-matter areas. Prereq: 386.

****388/588. Interpersonal Relations.** 3 cr. The developmental effects of different types of relationships between students and teachers, the relationship between types of interactions and student self concept, and methods of improving interpersonal relations.

389/589. Issues in Vocational and Technical Education. 2 or 3 cr. The administration and organization of vocational and adult education on the national, state, and local level.

390/590. Seminar. 1 to 3 cr. Studies and discussions of current problems in education. A subtitle will be added when specific areas are treated.

****391. Teaching Minorities in the Classroom.** 3 cr. Minority groups in respect to differences in race, color, religion, economics, ethnic background, or sex, aimed at improving self-concept, social position, and success in school. (When only one group is studied, it will be identified in a subtitle.) May be repeated once, with a different focus, for a total of six credits.

392/592. Behavioral Aspects of Accident Prevention. 3 cr. The relationship between physiological, psychological, and sociological factors which influence safe behavior and modification of unsafe behavior; problems, causes of accidents, and the application of the principles of psychology in the development of safe traffic behavior. Prereq: 377, 378, and 379; Psych 315 highly recommended.

393/593. Alcohol and Other Drugs: Implications for Traffic Safety. 3 cr. The study of the physiological, psychological, and sociological problems of alcohol, drug use and abuse, as they relate to traffic safety; methods of instruction for the high school student. Prereq: 377, 378, and 379; Psych 315 highly recommended.

#398. Student Teaching.** Credit as arranged. Observation and teaching under the guidance of cooperating teachers; emphasis on guided teaching experiences in actual classroom situations. A subtitle will be added to the title to indicate the field in which the student teaching was done.

399. Special Work. Upper class students in the School of Education may, by agreement with the Assistant Dean of the School of Education, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

701. Philosophical Foundations of Education. 3 cr. Critical issues in education; their ideological and social bases. Prereq: Teacher certification or cons instr.

****702. Psychological Foundations of Education.** 3 cr. Psychological background relative to human abilities and behavior; individual differences; human relations; learning and evaluation with implications for teaching. Prereq: teacher certification, enrollment in MAT program or cons instr.

****703. Theories of Learning.** 3 cr. Classical and contemporary theories of learning; critical analysis of learning theories with implications for classroom learning situations.

705. Basic Statistical Methods in Education. 3 cr. Fundamentals of statistical analysis with application in education and other

#Admission to the Professional Education Program or to the School of Education is a prerequisssite for this course.

**1GE-MUS

fields according to needs of students; critical ratios and the test for paired, pooled, and unpooled samples; straight line and curvilinear regression for simple and multiple correlation of variables; introduction to the use of probability, simple and two-way analysis, chi square, and other non-parametric statistics. Prereq: 383/583, or 751; and cons instr.

706. Experimental and Statistical Methods in Education Research. 3 cr. Applicability, limitation of experimental method in education; simplified probability, classical, Bayesian, parametric and non-parametric statistics; use of calculator and computers; experimental designs; literature reviews.

711. Experimental and Statistical Methods in Education Research. 3 cr. Applicability, limitation of experimental method in education; simplified probability, classical, Bayesian, parametric and non-parametric statistics; use of calculator and computers; experimental designs; literature reviews.

712. Seminar Problems in Teaching, Secondary. 3 cr. Definition of problems and issues, critical examination of the research literature, review of trends in curricula and methods, and planning of experimental investigations; open to experienced secondary school teachers with certification.

713. Seminar: Problems in Teaching, Music. 4 cr. Definition of problems and issues, critical examination of the research literature, review of trends in curricula and methods, and planning of experimental investigation; open to experienced music teachers with certification.

720. Research Studies in Elementary Education. 3 cr. A survey of research in reading, science, social studies, language arts, math, music, art, administration, policy development and curriculum organization.

****721. Fundamentals of Curriculum.** 3 cr. Fundamental ideas in developing curriculum; emphasis on the human aspects in curriculum design.

****722. Elementary School Curriculum.** 3 cr. Basic concept of curriculum; the relationship of foundation areas to the problems of curriculum development; modern trends in developing educational programs for children.

****731. Mathematics in the Elementary School.** 2 or 3 cr. The teaching of modern arithmetic with emphasis on curriculum content as well as method.

****732. Language Arts in the Elementary School.** 3 cr. A survey and critical appraisal of programs, basic practices and trends; emphasis on oral and written expression including spelling and hand writing; specific study of individual problems.

****733. Science in the Elementary School.** 3 cr. A survey of the philosophy and nature of a science, new elementary science curricula, innovative and experimental programs in elementary school science, and research in science education in the elementary school.

****734. Social Studies in the Elementary Schools.** 3 cr. Curriculum trends and approaches; new content, materials, innovations; and needed research in the field.

735. Leadership in Curriculum Change. 3 cr. Study of specific curriculums, including instructional strategies and models of instruction, and the development of leadership skills in the development, implementation, and supervision of the specific curriculum(s).

****736. Individually Guided Motivation.** 2 or 3 cr. Principles and procedures within the design system of Individually Guided Motivation (IGM), including rationale, implementation, and development of the following motivational procedures: (a) adult-child conference principles and procedures to encourage independent reading; (b) goal setting in subject areas; (c) guidelines and criteria for effective training of tutors; (d) teacher-group conferences, developing guidelines and implementation procedures for value clarification. Third credit will provide clinical experiences with children in the above four areas.

****737. IGE: Instructional Programming.** 3 cr. Review of the instructional programming component; writing criterion referenced objectives; development of instructional activity in varying levels of the taxonomy; teacher resource files; instructional modules; IGE assessment instruments.

****738. IGE: Leadership Roles and Responsibilities.** 1 cr modules. Interpreting and synthesizing IGE roles and responsibilities necessary for effective performance of the multi-unit school, in the following elective modules:

(a) **The IGE Principal:** Administrative changes and responsibilities as the principal relates to the learning community, the program improvement council, the system wide policy committee, the league of cooperating schools, the state and national IGE organizations.

(b) **IGE Learning Community:** Identification of skills and role perception of the learning community, teacher and learning community, leader; "We agree" sessions, team building skills, consensus decision making, inter- and intra-organizational communication, cooperative planning, and assessment procedures.

(c) **IGE Intern/Student Teacher:** Roles and responsibilities required for effecitve performance in the learning community team; how to plan, implement, and assess learnings in the IGE school.

(d) **IGE Aide:** Analysis of the role of the aide, practioner-oriented toward improving understanding and performance with the learning community.

(e) **IGE: Middle School/Junior High Development:** Review of the research data and development models for the application of IGE processes and structures.

(f) **IGE: Secondary School Development:** Review of the research data and developmental models for the application of IGE processes and structures.

****741. Improvement in Reading.** 3 cr. The various trends and programs in developmental reading, the reading curriculum and the related research. Prereq: 308.

****746. Diagnosis and Evaluation of Reading Abilities.** 3 cr. Formal and informal evaluation instruments in reading; course experiences in testing to identify remedial readers, construction of a diagnostic profile, and written interpretations of test results. Prereq: 308, 741.

****747. Remedial Reading.** 3 cr. Materials and techniques of remedial reading; for classroom teachers, reading specialists, and administrators of reading programs who are responsible for instruction, curriculum development and leadership in this area. Prereq: 308, 741, 746.

****748. Remedial Reading Practicum.** 3 cr. Clinical appraisal of remedial reading problems, interpretation of the findings, and the development and execution of corrective measures. During

#Admission too the Professional Education Program or to the School of Education is a prerequisite for this course.
**IGE-MUS

the instruction of a remedial reader each student will conduct continuous analysis and evaluation leading to a final report describing the nature of the reader, the techniques and materials used for reading improvement, and with recommendations for post-clinical reading instruction. Prereq: 308, 741, 746, 747.

****749. Seminar in Reading.** 3 cr. The nature and treatment of problems in reading instruction. Prereq: cons instr.

****750. Supervision and Administration of Reading Programs.** 3 cr. Organization, administration, supervision, and improvement of school wide reading programs. Prereq: cons instr.

751. Advanced Tests and Measurements. 2 or 3 cr. Testing batteries and systems, factor analytic studies, regression prediction, traditional and modern theories, educational change.

****756. Guidance in the Elementary Schools.** 3 cr. Instruments and techniques used in guidance such as observation, concepts of individual appraisal, and methods in group procedures.

****758. Education for Cooperative Teachers.** 3 cr. The student teaching program as one phase of the total undergraduate education program, with emphasis upon orienting student teachers and guiding them in planning, teaching, and evaluating learning activities; for in-service teachers who are or wish to be cooperating teachers.

****760. M.A.T. Seminar: Secondary.** 3 cr. Reflection, analysis, hypothesizing, synthesis and evaluation of concurrent experiences, dynamics of teaching-learning process, and professional behavior; related research; designs for possible research; curriculum modification; restricted to students in MAT program.

****763. Secondary Instruction I. Methodology and Techniques.** 3 cr. Instructional strategies; multi-media materials and approaches; classroom management. Prereq: Acceptance in the MAT program or cons instr.

****764. Secondary Instruction II. Special Problems and Materials.** 3 cr. Methods, and materials in area of specialization. Prereq: acceptance in the MAT program or cons instr.

****765. Professional Experience: Secondary.** 8 cr. Student is assigned to a selected team of at least two teachers, a school administrator, and a member of the University Graduate Faculty, for teaching in the area of specialization and related experiences; restricted to students in the MAT program.

****770. The Adviser's Function—Student Activities Program.** 1 cr. The role of student activities with particular emphasis on the function of the adviser.

771. Supervision of Instruction. 3 cr. A study of evolving concepts and strategies of supervision in schools; supervision as an essential function for curriculum development and the improvement of instruction; the role of supervision in facilitating educational change, giving it direction and increasing its effectiveness. Training in and application of systematic observation and data analysis systems.

780. Curriculum and Education Programming in Special Learning Disabilities. 3 cr. The curriculum, methods, and processes of instruction for learning disabled pupils. Prereq: 563 and SLD candidacy.

781. Professional Teaching and Practicum in Special Learning Disabilities. 5 cr. Professional practice in diagnosis, educational programming, and teaching in special learning disabilities under a certified SLD teacher. Prereq: 780, SLD candidacy, and all courses completed in SLD curriculum.

796. Independent Study. 1 to 3 cr. Planned study designed to enrich and supplement the students' preparation in his area of specialization; regularly scheduled conferences with a staff supervisor.

799. Thesis. 2 to 6 cr.

** IGE-MUS

ENGINEERING GRAPHICS

Mr. Lampert.

101. Engineering Graphics. 3 cr. Orthographic projection, sectional view conventions, theory of dimensioning, construction of auxiliary view, and applications to theoretical and practical problems, screw threads, engineering graphs; techniques of freehand and mechanical drafting. For students who have not had engineering drawing in high school.

102. Engineering Graphics and Descriptive Geometry. 3 cr. Analysis and solution of engineering problems involving points, lines, and planes in terms of advanced orthographic projection theory, with emphasis on independent thinking, pictorial representation, isometric projection, and vectors. Prereq: 101, or one year of engineering drawing in high school.

ENGLISH (College of Letters and Science)

Nancy N. Moore, chairperson.

A. **A major in English** consists of 32 credits beyond Freshman English, including English 200 and electives from the specified categories under E.1., below; 18 credits in courses numbered 300 and above must be included. The department has two types of majors: a **general** major and one for those **preparing to teach** at the secondary school level. Requirements for teacher certification are outlined under E.2., below.

B. **A minor in English** consists of 24 credits beyond Freshman English, including English 200 and electives from the specified categories under E.1., below; 12 credits in courses numbered 300 and above must be included. Requirements for teacher certification are outlined under E.2., below.

C. **A minor in Writing** consists of 24 credits beyond Freshman English, including English 200 and electives from the categories specified below; 12 credits in courses numbered 300 and above must be included.

Writing, 12 to 15 credits: English 250, 253, 254, 350, 351, 353, 354. Up to six credits in writing courses from other departments may be approved by the head of the department.

Language, three credits: English 240, 342, 344, 346.

Literature, three to six credits: English 103 to 170; 203 to 214, 280 to 336, 360 to 374, 376 to 380, 382 to 385.

D. **A major in English** with a minor in Writing requires 48 credits beyond Freshman English, including the specific requirements for the "general" major or the "teaching" major (See "A" above), as well as the specific requirements for the Writing minor (see "C" above). Fifteen credits of writing courses must be included.

NOTES:

(1) English 345, 355, 375, and 381 count toward the major/minor in English or the minor in Writing only for

those seeking teacher certification, or for those who need them as collateral requirements in other departments.

(2) English 274 and 275 will not count toward the major or minor unless the student demonstrates a need for them as a collateral requirement, such as for a minor in library science or a major in elementary education. They do not count toward the humanities requirement.

(3) An English major or minor must have a cumulative grade point ratio of 2.00 in the major/minor including prescribed collateral courses, in order to be eligible for departmental approval to graduate with the major/minor. The cumulative grade point ratio is based on the student's total academic record in English, disregarding a declaration of "academic bankruptcy."

(4) University regulations permit a sophomore to take a course at the 300-level with the approval of the chairperson of the department. Courses at the 200-level are open to English majors as second semester freshmen.

E.1. The major and minor in English require, in addition to English 200, electives from the following: (Note that some courses count in more than one category.)

Language, three credits: English 240, 342, 344, 346.

British literature, six credits: English 211, 212, 311, 323, 324, 325, 327, 330, 333, 334, 336, 367 (marked "Br" after course description); and 309, 383, and 385 when the topic is appropriate.

American Literature, six credits: English 213, 214, 280, 281, 313, 329, 360, 370, 371, 382 (marked "Am" after course description); and 309, 363, 383, and 385 when the topic is appropriate.

Masters, three credits: English 330, 333, 334, 336, 385.

Literature before 1850, three credits: English 211, 323, 324, 330, 333, 334, 336, 361; and 309, 311, and 385 when the topic is appropriate.

Unspecified electives: courses listed above or other English offerings, except as noted; or comparative literature. (Comparative Literature courses may be used if they are judged to be consistent with the aims of the department; consent must be obtained from the chairperson of the department prior to registration.)

E.2. The major and minor in English for **teacher certification** require in addition to E.1. above:

Writing, three credits: English 250, 253, 254, 350, 351, 353, or 355. (English 354 will **not** fulfill this requirement.)

The following courses are recommended: English 345, 355, 375, 381. For those preparing to teach, English 345 may substitute for the required language course under C.1. and E.1., English 355 may count as a writing course under C.1., and English 375 as literature under C.1.

NOTES FOR PROSPECTIVE SECONDARY SCHOOL TEACHER:

1) A reading course will be required for teacher certification after July 1, 1977. English 381 fulfills this requirement and is highly recommended for prospective teachers of English.

(2) The minor in Writing is not a certifiable teaching minor, but one which public school employers generally favor as a complement to the English major. Other complementary minors are: a foreign language, communication, theatre arts.

(3) The School of Education requires a grade point ratio of at least 2.25 in the major and minor fields for admission to student teaching, and 2.5 for internship.

NOTE: Freshman English credits can be earned only in this sequence: English 100 **or** 101; **then** 102. Credit will not be granted for **both** 100 and 101.

See also course listing under **English Education** (next section).

100. Developmental English. 3 cr. Instruction and practice in reading and writing. Required of and limited to students whose orientation test scores indicate a need for fundamental language skills. Three hours lec per week; additional lab work to be arranged. Credit will not be granted for both 100 and 101.

101. Freshman English. 3 cr. Improvement of skills in critical reading, logical reasoning, and effective writing; selected readings in fiction and non-fiction.

102. Freshman English. 3 cr. Development of language skills through more complex reading and writing assignments, including the effective handling of longer papers. Prereq: 100 or 101.

103. The Myth of . . . . 3 cr. (The topic will be announced for each offering.) The origin and development of a particular myth as it is embodied in folk tales and/or drama, film, novels (e.g. the myth of the Great Lover, the Doctor, the Jew, the Politician). Only 3 cr. of 103/203/303 may be applied toward the major or minor.

108. Reading the Drama. 0 or 3 cr. Oral reading and discussion of one play a week from the body of dramatic literature. The plays read will be chosen by the class. One three-hour meeting per week. May be taken for credit twice: once each as 108 and as 308. (See 308.)

157. Independent Writing. 1 cr. (Pass-Fail **ONLY**) An individualized program for writing improvement based on student needs and personal objectives, taught in conjunction with the Writing Laboratory. May be repeated twice, for a maximum of three cr among 157, 257, 357.

170. Folklore. 2 or 3 cr. Introduction to folklore in its literary forms with reference to the ballad, the folk tale, and folk sayings.

***200. Introduction to the Study of Literature.** 3 cr. A study of literature, emphasizing the development of the student's critical vocabulary, recognition of the various forms of literature, and rudimentary analysis of selected works.

***203. The Myth of . . . .** 3 cr. (The topic will be announced for each offering.) See description under 103.

***207. Introduction to the Novel.** 3 cr. Selected novels from various countries and periods; emphasis on close reading of each novel for analysis of formal stylistic qualities and of meaning; development of the student's ability to read novels critically and perceptively.

***211. English Literature.** (Br) 3 cr. Selections from English literature with emphasis on the major writers from Beowulf through Pre-Romantics, stressing insight into the works.

***212. English Literature.** (Br) 3 cr. Selections from English literature with emphasis on the major writers from the Romantics to the present, stressing insight into the works.

*All English courses in the 200 series require sophomore standing as a prerequisite, except that thhey are open to English majors in the second semester of their Freshman year.

***213. American Literature.** (Am) 3 cr. Selections from American literature with emphasis on the major writers from Emerson through Twain, stressing insight into the works.

***214. American Literature.** (Am) 3 cr. Selections from American literature with emphasis on the major writers from James to the present, stressing insight into the works.

***240. Introduction to Linguistics.** 3 cr. Fundamental concepts and methods of the scientific study of languages in their structural, historical and geographical aspects.

***250. Intermediate Composition.** 2 or 3 cr. Practice in descriptive, narrative, and expository projects with special emphasis on expository writing.

***253. Introduction to Creative Writing.** 3 cr. Training and practice for the beginning writer in the various forms of poetry and fiction; class discussion of student work.

***254. Editing and Publishing.** 3 cr. Writing, editing, and preparing materials for publication, including consideration of reader/editor appeal, ways to market manuscripts.

***257. Independent Writing.** 1 cr. (Pass-Fail **ONLY**) Same description as for 157.

***274. Literature for Early Childhood.** 3 cr. Emphasis on the reading, selection, and presentation of materials suitable for the preschool child. (See note 2 above.)

***275. Children's Literature.** 3 cr. Literature for children, with emphasis upon the reading, selection, and presentation of materials suitable for the various grades in an elementary school. Prereq: (See note 2 above.)

***280. American Indian Literature.** (Am) 3 cr. Literature about the American Indian from oral and written materials by Indian authors, and from materials by other American writers.

***281. Frontier Literature.** (Am) 3 cr. Literature dealing with those changing ideas stimulated by the frontier: the New Eden and Adamic concepts, the hero, Manifest Destiny, and varying attitudes toward the land in the works of such authors as Hawthorne, Cooper, Twain, Whitman, Owen Wister, Jeffers, Fitzgerald, and Jack Schaefer.

***282. Contemporary Literature.** 3 cr. Poetry, drama, and fiction since 1945, including works from a variety of cultures.

***283. Mythology in Literature.** 3 cr. The basic mythos of creation, the flood, man's fall, the Olympians and their Roman counterparts, and the stories of myth and history which form the basis of the literary expression of western culture; emphasis on the Graeco-Roman, Judeo-Christian, and Norse myths, as they appear in selected poetry, novels, and plays.

***285. Women in Literature.** 3 cr. Virgin, seductress, madonna, whore, lover, castrator, frail vessel, wonder woman, the other half, the second sex: who is she—Woman?; an examination of the literature to determine how women are depicted in Western cultural tradition, how images of women have developed and been perpetuated, and how they shape a woman's sense of who she is and a man's idea of what she should be.

***286. Speculative Fiction.** 3 cr. Science fiction, fantasy, and utopian literature, including such writers as Verne, Wells, Huxley, Capek, Tolkien, and Vonnegut. Credit will not be granted for both 286 and the former 284.

***287. Mystery Literature.** 3 cr. The masters and mistresses of mystery, from the ratiocination of C. Auguste Dupin and Sherlock Holmes to the urbane detection of Hercule Poirot and Peter Whimsey and the hardboiled cynicism of Sam Spade and Lew Archer.

***288. The Literature of Human Love and Sexuality.** 3 cr. The literature of love, using such representative works and authors from various cultures and times as Lysistrata, the Song of Solomon, Ovid, Chaucer, Donne, Swift, DeSade, D.H. Lawrence, and James Joyce.

303. The Myth of . . . . 3 cr. (The topic will be announced for each offering.) See description under 103.

308. Reading the Drama. 0 or 3 cr. Same as 108, offered for students eligible for courses numbered 300 or above. May be taken for credit twice: once each as 108 and as 308.

309. Forms and Modes in Literature. 3 cr. Selected works of several writers as examples of a form or mode, to be determined by the special interest of the faculty member offering the course. A subtitle indicating the form or mode (e.g. The Parable in Modern Literature) will be added each time the course is offered.

310. The Modern Short Story. 3 cr. Representative short stories of world literature with emphasis on literary structure, form and theme.

311/511. The English Novel. (Br) (Formerly 315 and 316) 3 cr. English novels from (a) early 1700's to 1880, including works from such authors as Defoe, Fielding, Sterne, Austen, Dickens, and George Eliot; or (b) 1880 to World War II—Hardy, Joyce, Conrad, Lawrence, and Woolf. May be taken once for each period.

312. Modern Drama. 2 or 3 cr. Representative dramas of world literature from Ibsen to the present; emphasis on literary structure, form, and theme.

313/513. The American Novel. (Am) (Formerly 317/517 and 318/518) 3 cr. American novels from (a) late 1700's to 1900 including works from such authors as Hawthorne, Melville, James, and Twain; or (b) 1900 to World War II—Crane, Dreiser, Hemingway, Fitzgerald, and Faulkner. May be taken once for each period.

314. Modern Poetry. 2 or 3 cr. A study of contemporary poetry.

The former **315** and **316** are now **311.**

The former **317/517** and **318/518** are now **313/513.**

319. The Novel Since 1850. 3 cr. Representative novels of world literature with emphasis on literary structure, form, and theme, including works from a variety of cultures.

The former **321, 322/522,** and **323/523** are now a revised **323/523.**

323/523. British Literature before 1790, excluding Drama. (Br) 3 cr. Development of English poetry and prose fiction from (a) 1485 to 1660 through study of such authors as More, Sidney, Marlowe, Spenser, Shakespeare, Donne, and Jonson; or (b) from 1660 to 1790—Dryden, Defoe, Swift, Pope, Sam Johnson, and Goldsmith. May be taken once for each period.

The former **324/524, 325/525, 326/526,** and **327/527** have been combined into the revised **324/524, 325/525,** and **327/527.**

*All English courses in the 200 series require sophomore standing as a prerequisite, except that they are open to English majors in the second semester of their Freshman year.

324/524. The Romantic Movement. (Br) 3 cr. The development of romanticism in English poetry and prose, its theory and creation, including a survey of the pre-Romantic Movement.

325/525. Victorian Literature. (Br) 3 cr. The work of such writers as Tennyson, Browning, Arnold, Carlyle, Newman, and Ruskin.

327/527. Victorian Literature in Transition. (Br) 3 cr. Development of the modern spirit in such writers as Hardy, Conrad, Ford, Shaw, Yeats, and the Aesthetes and Decadents.

329/529. The American Rennaisance. (Am) 3 cr. The American literary renaissance of the mid-nineteenth century with major emphasis on the works of Emerson, Thoreau, Hawthorne, Melville, and Whitman.

330/530. Chaucer. (Br) 3 cr. Works of Chaucer with major emphasis on the Canterbury Tales and their historical, social, linguistic background.

333. Shakespeare. (Br) 3 cr. The early plays.

334. Shakespeare. (Br) 3 cr. The tragedies and later plays.

336/536. Milton. (Br) 3 cr. Milton's poetry and selected prose: the growth of a writer in his historical milieu.

342/542. The Grammar of English. 3 cr. Form and function in modern English.

344/544. History of the English Language. 3 cr. Standards of sounds, inflection, and syntax of the language.

345/545. English Language for Teachers. 3 cr. Contemporary approaches to language change, analysis, history, usage, etc., with emphasis on the problems of the teacher.

346/546. Old English. 3 cr. Introduction to Old English language and literature.

357. Independent Writing. 1 cr. (Pass-Fail ONLY) Same description as for 157.

350. Expository Writing. 3 cr. An advanced course in the principles and practices of expository writing.

351. Writing Techniques (Poetry or Fiction.). 3 cr. Readings, written exercises, discussions, and at the option of the instructor, lectures in the techniques of poetry or fiction writing; selected writers read and analyzed from the practicing writer's point of view. May be taken once under each focus. Prereq: consent of instructor or of a committee of faculty writers.

353/553. Creative Writing (Poetry or Fiction). 3 cr. Training and practice in writing various forms of poetry or fiction; class discussion of student work. May be taken twice under each focus. Prereq: consent of instructor or of a committee of faculty writers.

354. Technical Writing. 3 cr. Practice in writing technical reports and articles connected with the student's area of specialization; does not fulfill the writing course requirement for the English major preparing to teach.

355/555. English Composition for Teachers. 3 cr. Investigation of the approach and content desirable for English composition courses; techniques for evaluating student writing, fostering sensitivity to language, concern for logical organization, and the reaction of content in expository prose.

360/560. Regional Literature. (Am) 3 cr. Literature by a small group of authors whose writing reflects the concerns of geographic areas. A subtitle will be added each time the course is offered. May be repeated under different subtitles.

361. World Literature. 3 cr. Representative selections of world literature from the earliest times to the seventeenth century.

362. World Literature. 3 cr. World literature from the seventeenth century to the present.

363. Nature Literature. 3 cr. Writings which emphasize the relationship of man to nature; visits with nature writers, and field trips to correlate readings with first-hand observation of the natural world.

367/567. English Renaissance Drama, Excluding Shakespeare. (Br) 3 cr. A critical study of representative Tudor and Stuart plays, with emphasis on form, theme, and dramatic conventions of the period.

370/570. The Afro-American in the Literature of the United States. (Am) 3 cr. A critical study of the image of the Afro-American and racial attitudes in American literature.

371/571. Afro-American Literature. (Am) 3 cr. A critical study of Afro-American literature and the image of America in Black American writing.

372. The New Literature of Africa. 3 cr. An exploration of Africa's self-expression and self-revelation in the growing body of poetry, fiction, and non-fiction by the contemporary African writers in the context of the African drive for independence and the dynamics of cultural change in Africa.

375/575. Literature for Adolescents. 3 cr. Selecting and reading of literature suitable for adolescents (See note 1, above.)

378/578. Contemporary Fiction. 3 cr. Contemporary fiction since World War II with emphasis on experimental narrative techniques and/or thematic relationships.

380/580. Literary Criticism. 2 or 3 cr. Principles of literary criticism based on the chief ancient and modern theories.

381/581. Reading for the Teacher of English. 3 cr. Fundamental reading concepts applied to English; psychological background of the reading process, means of assessing student abilities and reading materials, and the relationship of reading to writing and speech; techniques for developing positive student attitudes and skill in comprehending implied as well as explicit meanings.

382/582. Ethnic Literature of the United States. (Am) 3 cr. The concept of cultural pluralism and an exploration of literary works by Native-Americans, Afro-Americans, Chicanos and Hispanic-Americans, Asian-Americans, Jewish-Americans, and writers of European immigrant descent.

383. Themes in Literature. 3 cr. Works of several writers, selected from the manifestation of a theme or related themes, to be determined by the special interest of the staff member offering the course. A subtitle indicating the theme to be studied (e.g. The Jew in American Literature) will be added each time the course is offered.

385. Masters of Literature. 2 or 3 cr. A close, critical study of one or more masters of literature, to be determined by the special interest of the staff member offering the course. A subtitle indicating the author or authors studied will be added each time the course is offered.

395/595. Workshop in English. 1 to 3 cr. Study of contemporary scholarship in English. A subtitle indicating the topic will be added each time the workshop is offered. Prereq: Written cons chrpn. May be repeated for credit under different subtitles. The former 396/596 has been discontinued.

397. Practicum. 1 to 3 cr. Students may, by agreement with the chairperson and consent of the instructor, arrange for

supervised practical experience as tutors, teachers' aides, etc. Approximately 45 hrs of practice will be required for each credit. Subtitles will identify type of practicum.

399. Independent Study. Upper class students may, by agreement with the chairman, arrange for out-of-class work, for which credit may be allowed up to one credit for each week, or its equivalent, devoted exclusively to the project. Students with less than a grade point ratio of 3.00 in English courses are advised not to register for this course. Prereq: cons instr.

712. Modern Drama. 3 cr. The works of contemporary continental, British, and American playwrights.

714. Modern Poetry. 3 cr. British and American poetry from 1913 to the present.

715. The English Novel, I. 3 cr. The English novel from its eighteenth century beginnings to the Victorian writers Dickens, Thackeray, and Eliot.

716. The English Novel, II. 3 cr. Major development in the English novel from the 1860's to the present; representative novelists such as Trollope, Meredith, Hardy, Joyce, Lawrence, and Conrad.

717. American Novelists I. 2 or 3 cr. Writers such as Cooper, Hawthorne, Melville, Howells, Mark Twain, Henry James, and Crane.

718. American Novelists II. 2 or 3 cr. Writers such as Norris, Dreiser, Wharton, Cather, Glasgow, Lewis, Dos Passos, Steinbeck, Hemingway, and Faulkner.

722. Seventeenth Century English Literature. 3 cr. Metaphysical, cavalier, and Spenserian poetry exclusive of Milton, and a study of prose from Bacon to Walton.

723. English Neoclassic Literature. 3 cr. Figures as Dryden, Pope, Swift, and Johnson, and such literary modes as Restoration Drama, the periodical essay, and the novel.

724. Major Romantic Writers. 3 cr. The poetry and prose of Wordsworth, Coleridge, Byron, Shelley, and Keats.

725. Victorian Poetry. 3 cr. Major poets and important movements within the context of the nineteenth century.

726. Victorian Prose. 3 cr. Writers such as Carlyle, Arnold, Mill, Newman, Ruskin, Huxley, and Pater.

740. Language in Society. 3 cr. Historical growth and continuing development of the English language and its uses in society, including a study of current usage and principles for evaluating language in use.

750. Writing Non-fiction. 3 cr. Reading of modern essays to learn about different methods and styles combined with criticism of the student's own writings.

752. Workshop in Fiction. 3 cr. Advanced study in the techniques of fiction; discussion and criticism of work submitted by class members. Prereq: cons instr or cons chrpn.

753. Workshop in Poetry. 3 cr. Advanced study in the techniques of poetry; discussion and criticism of poems submitted by class members. Prereq: cons instr or cons chrpn.

755. Workshop in Criticism: Poetry and Fiction. 3 cr. Research and discussion on the problems and techniques of teaching creative writing emphasizing motivation and the function of criticism in the development of student writers.

760. Literature and the Human Experience. 3 cr. Literature as an instrument for man's understanding of his own experience.

762. American Transcendentalism. 3 cr. Sources, principal figures, and literary achievements of this movement.

767. American Poetry of the 18th and 19th Centuries. 3 cr. American poetry from Taylor to Dickinson.

770. Theory of Literature. 3 cr. The nature of literature, the elements of the literary process, and the nature and modes of narrative fiction.

772. Poetry: Forms, Functions, and Meanings. 3 cr. The forms and structures of poetry in English and the ways that poems convey meanings.

785. Selected Literary Master (s). 2 or 3 cr. The specific master(s) will be announced in the time table.

786. Selected Literary Topic (s). 2 or 3 cr. The specific topic(s) will be announced in the time table.

795. Thesis. 2 to 6 cr.

799. Directed Research. 2 or 3 cr. Supervised study under the direction of an instructor.

ENGLISH EDUCATION

332. (Formerly Education 332) **Techniques in Secondary Education: English.** 3 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching.

ENVIRONMENTAL LAW ENFORCEMENT

See **Natural Resources.**

ENVIRONMENTAL STUDIES (College of Letters and Science)

Richard Christofferson, adviser.

A **minor in Environmental Studies** consists of a minimum of 24 credits distributed as follows:

1. Required courses:

   Biology 204 (Introduction) or 205(General Ecology), 3 cr. (Majors and minors in Biol and Nat Res are not eligible for 204,) **Natural Resources** 370 (Res Mgmt for Environmental Quality), 3 cr. (Majors and minors in Nat Res are not eligible for 370; they may substitute one of the courses from 2, below.)

2. The remaining credits include three to nine credits in each of a., b., and c.:

   a. **Biology** 100 (Bio Principles and Human Environment,) 3 cr (not available to students who have completed 205); **Geography** 101 (Physical), 5 cr; or **Geology** 100 (Geol and Man), 3 cr; or 101 (Principles), 5 cr; **Geography** 340 (Env Degradtn-World), 3 cr; **Physics** 333 (Phys Approach to Env Sci), 3 cr.

   b. **Anthropology** 342 (Env Archeol), 350 (Cultural); **Economics** 204 (Environmental); **History** 366 (Resource Dvlpmt-US); **Political Science** 304 (Pol and Environment); **Sociology** 260 (Population Problems). Each 3 cr.

   c. **Art** 347 (Crafts Amer Indians), 2 or 3 cr; **Communication** 400 (Comm and Nat Res); **English** 363 (Nature Literature); **Natural Resources** 475 (Environmental Seminar); **Philosophy** 380 (Environmental Ethics). Each 3 cr.

EXPERIMENTAL FOOD AND NUTRITION

See **Home Economics.**

FOOD AND NUTRITION

See **Home Economics.**

FOOD SERVICE MANAGEMENT

See **Home Economics.**

FOREIGN LANGUAGES AND COMPARATIVE LITERATURE (College of Letters and Science)

Mark Seiler, chairman.

The Department of Foreign Languages and Comparative Literature offers courses in Chinese, French, German, Greek, Polish, Russian, and Spanish. Courses in Comparative Literature as well as the minor, are described under that title earlier in the catalog.

A major in a foreign language (French, German, Spanish) consists of 31 credits beyond the first year level. Students seeking teacher certification should take 313, 314, 317, 320, 331 (or for the Spanish major, 332), and 9-12 credits of literature in the appropriate language.

A minor in a foreign language (French, German, Russian, Spanish) consists of 21 credits beyond the first year level, with the following courses suggested: 313, 314, 320, 331 (or for the Spanish minor, 332), and 3 credits of literature in the appropriate language.

Students seeking **teacher certification** must take Foreign Language Education 333, which is offered in the fall semester ONLY.

To be accepted, retained, and approved for graduation with a major or minor in the Department of Foreign Languages and Comparative Literature, a student must maintain a grade point ratio of 2.00 in courses taken within the major or minor, regardless of declaration of academic banktruptcy.

Policy on Placement, advanced standing, and credit by examination.

All entering students who elect courses in French, German, Russian, or Spanish, and who have previously studied that language in high school are required to take a placement examination. On the basis of this examination they will be placed in the appropriate course. Students are urged to complete this placement examination before their assigned registration day; arrangements are made with the chairman of the department.

Freshmen and sophomores who have demonstrated proficiency in a foreign language may be placed in the appropriate 300- or 400-level foreign language course by the department.

The department is a participant in the University Advanced Standing Program. Under this program:

a. The department will grant up to eight credits for foreign language courses beyond the second year high school level completed in high school. The student must take a placement exam, and complete the courses into which he was placed with a grade of C or better to receive retroactive credit.

b. Credit will be granted to students who demonstrate proficiency in a language gained through non-academic means. The student must take a placement exam and complete the course into which he was placed with a grade of C or better to receive credit for prerequisite courses, which the student has not taken formally.

A student applying for credit for courses completed in high school, or for test-out credit, must be enrolled in a foreign language course at the time of application. After successful completion of that course, the department will recommend granting the credit for which the student has applied.

See also course listing under **Foreign Language Education** (next section).

FOREIGN LANGUAGE (General courses)

010. English as a Foreign Language. 0 cr. A two-semester, non-credit course in English for foreign students who do not have adequate facility in English for university work.

199/299. Independent Study. Each 1 to 4 cr. Individual study of foreign language under the direction of a consenting faculty member. Prereq: Cons chrmn.

301. Contrastive Linguistics. 3 cr. A comparison of the phonological, morphological, and synthetic structures of English with French, German, Russian, and Spanish. This course counts toward a language major or minor. Prereq: French 212, or German 212, or Russian 212, or Spanish 212, or equiv.

340. Special Language Studies. 1 to 3 cr. Special focus on some aspect of a language or the relationship between two or more languages. The focus will be determined by the instructor each time the course is offered. May be repeated under different subtitles. Prereq: One year of study in a foreign language.

399/499. Independent Study. Each 1 to 4 cr. Individual study of foreign language under the direction of a consenting faculty member. Prereq: Cons chrmn.

FOREIGN LANGUAGE EDUCATION

333. (Formerly Education 333) **Techniques in Secondary Education: Foreign Language.** 3 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching.

CHINESE

101. First Year Chinese. 4 cr. Elementary modern Mandarin, for students with no previous training in the language.

102. First Year Chinese. 4 cr. Continuation of 101. Prereq: 101 or equiv.

211. Second Year Chinese. 4 cr. Intermediate modern Mandarin; intensive grammar review, practice in reading, speaking, and writing Chinese. Prereq: 102 or equiv.

212. Second Year Chinese. 4 cr. Continuation of 211. Prereq: 211 or equiv.

FRENCH

101. First Year French. 4 cr. For students with no previous training in the language, or by placement examination.

102. First Year French. 4 cr. Continuation of 101. Prereq: 101, or by placement examination.

211. Second Year French. 4 cr. Intensive grammar review in reading and speaking. Prereq: 102, or by placement examination.

212. Second Year French. 4 cr. Continuation of 211. Prereq: 211, or by placement examination.

313. Intermediate Conversation. 2 or 3 cr. Prereq: 212, or by placement examination.

314. Intermediate Composition. 2 or 3 cr. Prereq: 212, or by placement examination.

317. Advanced Conversation and Composition. 2 or 3 cr. Prereq: 313 or 314, or by placement examination.

320. Phonetics and Diction. 3 cr. Prereq: 212, or by placement examination.

331. French Culture and Civilization. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 212, or by placement examination.

340. Introduction to French Literature. 3 cr. Intensive reading in French literature, methods of literary analysis of the various genres: introduction to fundamental techniques of literary criticism. Prereq: 212, or by placement examination.

341. Survey of French Literature. 3 cr. French literature to 1800. Prereq: 340 or cons instr.

342. Survey of French Literature. 3 cr. Nineteenth century French literature to the present. Prereq: 340 or cons instr.

350. Seventeenth Century Literature. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

355. Eighteenth Century Literature. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

360. Nineteenth Century Literature. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

370. Twentieth Century Literature. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

493. Special Literature Studies. 2 or 3 cr. Special focus to be determined by the instructor offering the course, one of the following: a literary genre or group, a recurrent theme in literature, a single author, or a comparison of two authors. Prereq: 300-level literature course, or cons instr.

499. Independent Study. 1 to 4 cr. Individual study under the direction of a consenting faculty member. Prereq: Cons chrmn.

GERMAN

101. First Year German. 4 cr. For students with no previous training in the language, or by placement examination.

102. First Year German. 4 cr. Continuation of 101. Prereq: 101, or by placement examination.

211. Second Year German. 4 cr. Intensive grammar review. Prereq: 102, or by placement examination.

212. Second Year German. 4 cr. Continuation of 211. Prereq: 211, or by placement examination.

243. German Literature in Translation. 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: So st or cons instr. This course does not apply toward the major or minor in German.

313. Intermediate Conversation. 2 or 3 cr. Prereq: 212, or by placement examination.

314. Intermediate Composition. 2 or 3 cr. Prereq: 212, or by placement examination.

317. Advanced Conversation and Composition. 2 or 3 cr. Prereq: 313 or 314, or equiv.

320. Phonetics and Diction. 3 cr. Prereq: 212, or by placement examination.

331/531. German Culture and Civilization. 3 cr. A subtitle, indicating the focus, will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 313 or by placement examination.

340. Introduction to German Literature. 3 cr. Intensive reading, methods of literary analysis of the various genres; introduction to fundamental techniques of literary criticism. Prereq: 212, or by placement examination.

355. Literature of the Eighteenth Century. 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

360. Literature of the Nineteenth Century. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

370/570. Literature of the Twentieth Century. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 340 or cons instr.

441. Survey of German Literature. 3 cr. From the beginnings to the eighteenth century. Prereq: One 300-level German literature course, or cons instr.

442. Survey of German Literature. 3 cr. From the eighteenth century to the present. Prereq: One 300-level German literature course, or cons instr.

493. Specialized Studies in German Literature. 1 to 3 cr. Special focus to be determined by the instructor offering the course, one of the following: a literary genre or group, a recurrent theme in literature, a single author, or a comparison of two or more authors. May be repeated for credit under different subtitles. Prereq: One 300-level German course and cons instr.

499. Independent Study. 1 to 4 cr. Individual study under the direction of a consenting faculty member. Prereq: consent of the chairman.

GREEK

105. New Testament Greek. 4 cr. Fundamentals of New Testament Greek necessary to develop reading ability. Not to be counted toward the Foreign Language requirement of the general degree requirements.

106. New Testament Greek. 4 cr. Readings from the New Testament. Not to be counted toward the Foreign Language

requirement of the general degree requirements. Prereq: 105, or cons instr.

POLISH

101. First Year Polish. 4 cr. For students with no previous training in the language.

102. First Year Polish. 4 cr. Continuation of 101. Prereq: 101 or equiv.

211. Second Year Polish. 4 cr. Prereq: 102 or equiv.

212. Second Year Polish. 4 cr. Continuation of 211. Prereq: 211 or equiv.

293. Specialized Studies in Polish. 1 to 3 cr. Individual study under the direction of consenting faculty member. Prereq: consent of the chairman.

RUSSIAN

101. First Year Russian. 4 cr. For students with no previous training in the language.

102. First Year Russian. 4 cr. Continuation of 101. Prereq: 101, or by placement exam.

211. Second Year Russian. 4 cr. Intensive grammar review, practice in reading and speaking Russian. Prereq: 102, or by placement exam.

212. Second Year Russian. 4 cr. Intensive grammar review. Prereq: 211 or by placement exam.

243. Russian Literature in Translation. 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: So st, or cons instr. This course does not apply to the Russian minor.

313. Intermediate Russian Conversation. 2 or 3 cr. Prereq: 212 or by placement exam.

314. Intermediate Russian Composition. 2 or 3 cr. Prereq: 212, or by placement exam.

320. Phonetics and Diction. 3 cr. Prereq: 212, or by placement exam.

331. Russian Culture and Civilization. 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 212 or by placement exam.

493. Specialized Studies in Russian Literature. 1 to 3 cr. Special focus to be determined by the instructor offering the course: a literary genre or group, a recurrent theme in literature, a single author, or a comparison of two or more authors. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: one 300-level Russian course or cons instr.

499. Independent Study. 1 to 4 cr. Individual study under the direction of consenting faculty member. Prereq: consent of the chairman.

SPANISH

101. First Year Spanish. 4 cr. For students with no previous training in the language, or by placement exam.

102. First Year Spanish. 4 cr. Continuation of 101. Prereq: 101, or by placement exam.

211. Second Year Spanish. 4 cr. Intensive grammar review, practice in reading and speaking Spanish. Prereq: 102, or by placement exam.

212. Second Year Spanish. 4 cr. Continuation of 211. Prereq: 211, or by placement exam.

243. Spanish Literature in Translation. 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: So st or cons instr. This course does not apply toward the major or minor in Spanish.

313. Intermediate Spanish Conversation. 2 or 3 cr. Prereq: 212, or by placement exam.

314. Intermediate Spanish Composition. 2 or 3 cr. Prereq: 212, or by placement exam.

317. Advanced Conversation and Composition. 2 or 3 cr. Prereq: 313 or 314 or by placement exam.

320. Phonetics and Diction. 3 cr. Prereq: 212, or by placement exam.

331. A Cultural History of Spain. 3 cr. Spanish culture from prehistoric times to the present. Prereq: 212, or by placement exam.

332. Latin American Civilization. 3 cr. Latin American culture from pre-Columbian Times to the present. Prereq: 212, or by placement exam.

341. Survey of Spanish Literature. 3 cr. Spanish literature from the earliest works to the Renaissance. Prereq: 212, or 331, or by placement exam.

342. Survey of Spanish Literature. 3 cr. Spanish literature from the Renaissance to the present. Prereq: 212, or 331, or by placement exam.

353. Survey of Spanish American Literature. 3 cr. From chronicles to modernism. Prereq: 212 or 332, or by placement exam.

354. Survey of Spanish American Literature. 3 cr. From modernism to the present. Prereq: 212 or 332, or by placement exam.

449. Poetry and Drama of the Golden Age. 2 or 3 cr. Verse of the major Golden Age poets. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

450. Prose of the Golden Age. 2 or 3 cr. Development of the Spanish novel in the sixteenth and seventeenth centuries. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

451/651. Cervantes. 3 cr. Don Quijote and other works in the life and times of Miguel de Cervantes. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

460. Nineteenth Century Spanish Literature. 2 or 3 cr. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

470. Literature of the Twentieth Century. 2 or 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

471. Spanish-American Literature of the Twentieth Century. 2 or 3 cr. Selected readings. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: 331, or one 300-level Spanish lit course, or cons instr.

493/693. Specialized Studies in Spanish Literature. 1 to 3 cr. Special focus to be determined by the instructor offering the course, one of the following: a literary genre or group, a recurrent theme in literature, a single author, or a comparison of two or more authors. A subtitle indicating the focus will be added each time the course is offered; may be repeated for credit under different subtitles. Prereq: One 300-level Spanish course and cons instr.

499. Independent Study. 1 to 4 cr. Individual study under the direction of consenting faculty member. Prereq: consent of chairman.

FORESTRY

For the description of the major and minor and for course listings in Forestry, see the section headed **Natural Resources** later in the catalog.

FRENCH

For the description of the major and minor and for course listings in French, see the section headed **Foreign Languages and Comparative Literature** earlier in the catalog.

GENERAL SCIENCE (College of Letters and Science)

Allen Blocher, Gregory Kulas, advisers (Department of Physics and Astronomy).

Students majoring or minoring in General Science must register with one of the advisers **no later than** the second semester of their junior year.

A. A major in General Science in the College of Letters and Science consists of the following:

1. One science from each of the following groups:

   Group (a) Chemistry 105 and 106, or 115 and 116.
   Physics 103 and 104, or 110 and 211 and 212.

   Group (b) Biology 130 and 160.
   Geography 102 and 103.
   Geology 104 and 105.

2. The one-semester survey course in each of the other sciences listed above.
3. Ten credits selected from courses numbered 300 or above in Astronomy, Biology, Chemistry, Geology, Physics, or Physical Geography (courses numbered 352, 353, and 354 apply).
4. Collateral requirement: Mathematics 107 or eligibility for 110.

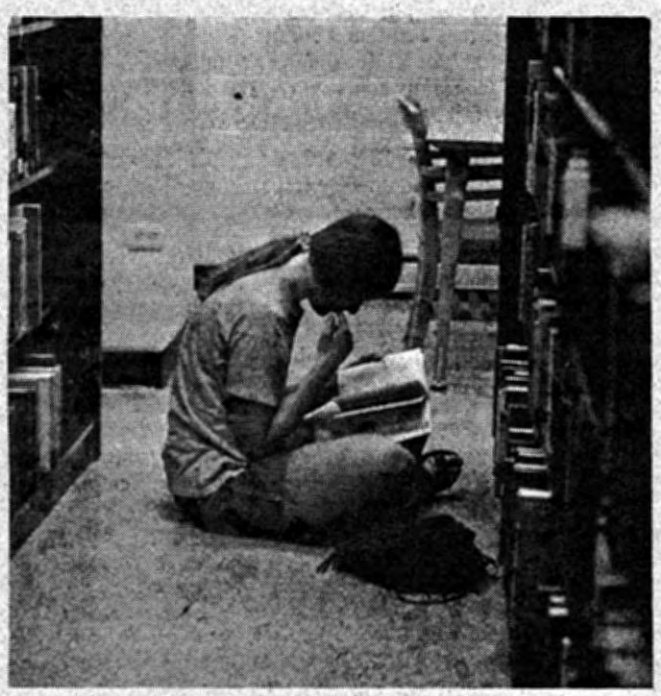
B. A major in General Science for teacher certification consists of the following:

1. Chemistry 105 and 106, or 115 and 116.
   Physics 103 and 104, or 110 and 211 and 212.
2. Two of this group: Biology 130 and 160; Geography 102 and 103; Geology 104 and 105.

   OR All of this group: Biology 130 and 160; Geography 102; Geology 104.

3. Additional credits in Biology, Chemistry, or Physics, selected to satisfy the requirements for a minor of at least 22 credits in that subject matter area.
4. Additional credits to total 54 in the science.
5. Collateral requirement: Mathematics 107 or eligibility for 110.

A minor in General Science in the Elementary Education curriculum consists of 25 credits selected from Astronomy, Biology, Chemistry, Geography (only courses numbered 101, 102, 103, 352, 353, and 354 apply), Geology, and Physics. A minimum of one five-credit course must be selected from each of three of the different areas.



GEOGRAPHY AND GEOLOGY (College of Letters and Science)

Delmar C. Multhauf, chairman.

Geography

Courses in Geology are listed under the heading **Geology,** following Geography in this section of the catalog.

A. A major in Geography consists of a minimum of 34 credits to include the following:

1. Geography 101, or 102 and 103 (if Geography 101 is taken, Geography 352 and either 353 or 354 must also be included); Geography 110 or 151, 376, 378, 479.
2. At least two regional courses from the following: Geography 214, 226, or 326, 300, 301, 302, 327, 328, 329, 330, 331, 332.
3. At least one topical course from the following: Geography 253, 340, 369, 370, 371, 372, 373, 374, 375.
4. Sufficient additional credits to total 34 or more. This may include Latin American Studies 423.
5. No geography course at the 300 or 400 level taken on a pass/fail basis may be credited toward the major.

To be accepted as a major, to be retained as a major, and to be approved for graduation, the student must have a minimum grade point ratio of 2.00 in all courses taken within the Geography major, regardless of a declaration of academic

bankruptcy. The department chairman may allow exemptions to the above on a conditional basis.

B. A minor in Geography consists of 22 credits to include the following:

1. Geography 101, or 102 and 103; 110 or 151.
2. At least one course from each of the following groups:
   a. Geography 113, 214, 226 or 326, 253, 340, 300, 301, 302, 327, 328, 329, 330, 331, 332.
   b. Geography 369, 370, 371, 372, 373, 374, 375.
3. Sufficient additional credits to total 22 or more. This may include Latin American Studies 423.
4. No geography course at the 300 or 400 level taken on a pass/fail basis may be credited toward the minor.

Geography 101, 102, 103, 352, 353, and 354 are **physical geography** courses. All others, except Geography 276, 376, 377, 378, 379, and 386 are **human.**

100. Fundamentals of Physical Geography. 3 cr. Earth's landforms, climates, natural vegetation, and soils. Two hrs lec, two hrs lab per week; field trips. For students not intending to major or minor in Geography. This course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirements.

101. Survey of Physical Geography. 5 cr. Map interpretation, earth-sun-moon relationships, weather and climate, and landforms. Three hrs lec, four hrs lab per week; field trips. For students not intending to major or minor in Geography. Credit in this course can be used to meet the laboratory science requirement for a degree, but cannot be counted for graduation or the major if 102 and 103 (or equiv) are counted.

102. Physical Geography. 5 cr. Elements of weather and climate, including earth-sun relationships, temperature, pressure and winds, humidity, and storms; world climate classification and vegetation zones. Three hrs lec, four hrs lab per week.

103. Physical Geography. 5 cr. Composition and areal distribution of the earth's features, including landforms, soils, rocks and minerals, surface and ground water; map interpretation; field trips. Three hrs lec, four hrs lab per week.

110. Economic Geography. 3 cr. Production and distribution of the world's commodities of commerce—its foodstuffs, raw materials, manufactured goods, and trade.

113. World Regional Geography. 3 cr. An introductory interpretation of geographic regions of the world with emphasis on the contrasts and similarities among the different regions. Not open to geography majors at the junior and senior levels.

151. Cultural Geography. 3 cr. Cultural features as products of an ever-changing interaction of human groups both with each other and with their inherited environments.

211. Wisconsin. 2 or 3 cr. A geographic analysis of the natural and cultural features of the state. Prereq: So st.

214. The Northlands. 3 cr. Arctic and Subarctic regions of North America, the North Atlantic, and Eurasia. Prereq: So st.

226. United States and Canada. 3 cr. Regional geography of the United States and Canada. Prereq: So st.

253. Ethnic Geography of the United States. 3 cr. The various manmade landscapes in the United States with an emphasis on the role that identifiable groups from differing cultural backgrounds have in their creation. Prereq: So st.

276. Map Analysis and Use. 2 cr. The nature, types, and sources of maps and related imagery; determination of location, scale, and direction; interpretation of symbols and relief; applications of maps and imagery to the solution of problems. One hr lec, two hrs lab per week. Prereq: So st.

290. Selected Field Study. Intensive on-site investigation of geographical phenomena within a designated area of the earth; on-campus preparation required. One credit for each week, or its equiv. Prereq: cons instr.

300/500. Africa. 3 cr. Regional interpretation with particular attention to the distribution and activities of the peoples in relation to the physical and cultural patterns and to the various stages and problems of development.

301/501. Middle America. 2 cr. Mexico, Central America, and the Antilles: Landforms, climate, natural vegetation, resources, population, historical evolution, political divisions, and economic organization

302/502. Southwest Pacific. 3 cr. A regional and topical geography approach to Australia, New Zealand, and the Melanesian, Polynesian, and Micronesian islands in terms of environmental circumstances, native and alien cultural heritage, and political affiliations.

326/526. Historical Geography of the United States. 3 cr. Man's changing evaluation and utilization of the American land; a study of cultural successions in various regions of the United States, emphasizing the origin and areal diffusion of representative cultural forms.

327/527. Asia. 3 cr. Physical features of the continent in relation to the distribution of population, agriculture, industry, and trade; special attention given to China, Japan, Korea, India, and Southwestern Asia.

328/528. Europe. 3 cr. Distinctive features of Europe as a continent; physical and historical background; natural regions and their division into political units; the characteristics of each country (excluding the Soviet Union).

329/529. South America. 3 cr. A topical and regional analysis of the geography of South America.

330/530. The Soviet Union. 3 cr. A regional and topical geographic interpretation of the USSR in terms of environmental conditions, historical influences, technological development, and Marxist-Leninist ideology.

331/531. China. 3 cr. Regional concept of physical and cultural characteristics of China with special emphasis on resources, population, and economic development.

332. Brazil. 3 cr. A regional geography of Brazil, viewing the physical and cultural characteristics with emphasis on the development of the population, resources, and economy. Prereq: 113 or 329, or Hist 353, or cons instr.

340/540. Environmental Degradation: A World Survey. 3 cr. A systematic review of critical locations representing man's destructive effects on the physical environment.

352. Landforms. 3 cr. Form and origin of landforms; field trips in the local area to supplement classroom activities. Prereq: 101 or 103, or cons instr.

353. Analytical Climatology. 3 cr. Study of the composition, characteristics, and circulation of the atmosphere. Prereq: 101 or 102, or cons instr.

354/554. Regional Climatology. 3 cr. A descriptive explanatory analysis of world climatic patterns and classification systems. Prereq: 101 or 102, or cons instr.

369. Political Geography. 3 cr. A geographical interpretation of political areas; the political significance of cultural and physical aspects of such areas.

370/570. Transportation Geography. 3 cr. Survey and analysis of carriers, terminals, and routes of the world, with emphasis on commodity flow and traffic patterns.

371/571. Geography of Domesticated Plants and Animals. 3 cr. Historical study of the beginnings of agriculture and origins and dispersals of domesticated plants and animals in the world.

372. Geography of Manufacturing. 3 cr. The distribution of manufacturing with emphasis on northeastern United States, the nations of Europe, and eastern Asia.

373. Urban Geography. 3 cr. Physical characteristics, spatial patterns, functions, populations, land use, and livelihood structures of cities.

374. Agricultural Geography. 3 cr. Characteristics, development, and location factors of world agricultural production, including both a topical and regional analysis.

375. Mineral Resources. 3 cr. Distribution and production of world mineral resources, including conservation principles.

376. Cartography. 4 cr. History and development of maps, mathematical principles and projections; globes and models; relief; thematic and statistical cartography. Two hrs lec, four hrs lab per week.

377. Air Photo Interpretation. 3 cr. Characteristics of aerial photographs and the use of air photo interpretation to gather data concerning regional landform analysis, resource inventories, and land use evaluation. Two hours lec, two hours lab per week.

378. Field Study. 3 cr. Direct observation of geographical factors, both physical and cultural, and their influence in a given region; preparation and presentation of a report. Prereq: 376, or cons instr.

379/579. Remote Sensing of the Environment. 3 cr. Principles of remote sensor technology and their application to inventory earth resources, detect and monitor pollution, and measure other environmental phenomena; interpretation of multiband photography, multispectral, thermal infrared, and radar imagery, and other types of data derived from sensors carried in aircraft and satellites. Prereq: Any geology or physical geography course, or cons instr.

386. Advanced Cartography. 3 cr. Scribing photographic reproduction techniques, dry transfer techniques, electronic cartography (including use of field plotter; advanced map analysis and statistical cartography). One hr lec, four hrs lab per week. Prereq: 376.

390. Selected Field Study. Same as Geography 290, for juniors and seniors. One credit for each week, or its equiv. Prereq: Cons instr.

391. Special Topics. 1 to 3 cr. Topics of interest to be treated from the geographical point of view. A subtitle will be added each time the course is offered; may be repeated under different subtitles.

395/595. Directed Study. 1 to 3 cr. Students may, by prior arrangement with an instructor, arrange for directed study of a geographical topic. Prereq: One course in geography, and consent of the chairman.

399. Research. 1 to 3 cr. Students may, by prior agreement with an instructor, arrange for a special research problem; research results will be publicly presented. Prereq: Consent of chairman.

479. Seminar. 1 cr. Problems of geography pertaining to concepts, methods, and practices, regional and topical. Prereq: Geography major with senior standing, or cons instr.

701. World Populations and Resources. 3 cr. The elements of population, its numbers distribution and characteristics, with an analysis of selected populations, their resource bases, and related problems. Open to experienced teachers who have met the introductory lower division course requirements in history and the social studies and who have not had similar work.

713. Agricultural Geography. 3 cr. Origin and dispersal of agriculture, development characteristics, and localization of world agricultural production. Prereq: Introductory course in geography or cons instr.

754. Geography of the Far East. 3 cr. Development of agriculture, industry, and trade in relation to physical setting, resources, and population; study of one selected region for each session. Prereq: Introductory course in geography, or cons instr.

Geology

A. **Minor in Geology** consists of at least 18 credits, including:

1. Geology 104 and 105; or Geology 101, and 295 for two credits.
2. Geology 300 and 340.
3. Remaining credits selected from Geology 201, 295, 339, 370, 380, and 395.

100. Geology and Man. 3 cr. The origin and distribution of earth materials as related to human activity. Two hrs lec, two hrs lab per week; field trips. This course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirement.

101. Principles of Geology. 5 cr. An introduction to geological processes integrated with a survey of earth history. Three hrs lec, four hrs lab per week; field trips.

104. Physical Geology. 4 cr. Introduction to the study of minerals and rocks and processes which act upon and within the earth. Three hrs lec, two hrs lab per week; field trips.

105. Historical Geology. 4 cr. Survey of the history of the earth and life; emphasis on the evolution of continents. Three hrs lec, two hrs lab per week; field trips. Prereq: 104.

201. Structural Geology. 3 cr. Properties, relationships, and positions of the component rock masses of the earth; graphic and stereographic projection methods of solving structural problems. Prereq: 101 or 104 or 105, or equiv.

295. Directed Study. 1 or 2 cr. Students may, by prior agreement with an instructor, arrange for directed study of a geological topic. Prereq: Cons instr.

300. Mineralogy. 3 cr. An introduction to crystallography and descriptive mineralogy with emphasis on the rock forming minerals. Two hrs lec, two hrs lab per week. Prereq: 104 or Chem 105 or 115.

339/539. Fossil History of the Vertebrates. 3 cr. A survey of the evolutionary history of the major vertebrate groups as revealed by the fossil record.

340. Sedimentology. 3 cr. The processes of weathering, transportation, deposition, and lithification which produce the detrital, biochemical, and chemical sedimentary rocks. Two hrs lec, two hrs lab per week; field trips. Prereq: 104.

370/570. Pleistocene Geology. 3 cr. The origin and development of glacial features and related phenomena over the last three million years; field trips. Prereq: 104 or Geog 103 or cons instr.

380/580. Oceanography. 3 cr. Scientific survey of the oceans in their physical, chemical, biological, and geological aspects.

395. Directed Study. 1 to 3 cr. Students may, by prior agreement with an instructor, arrange for directed study of a geological topic. Prereq: Cons instr, and a 300-level course in geology.

GERMAN

For the description of the major and minor and for course listings in German, see the section headed **Foreign Languages and Comparative Literature** earlier in the catalog.

GREEK

For course listings in Greek, see the section headed **Foreign Languages and Comparative Literature** earlier in the catalog.

HEALTH EDUCATION

A minor in Health Education is offered in the School of Health, Physical Education, Recreation, and Athletics. It is described under the heading **Physical Education.**

HEALTH, PHYSICAL EDUCATION, RECREATION, AND ATHLETICS

The courses taught in the School of Health, Physical Education, Recreation, and Athletics are listed under the heading **PHYSICAL EDUCATION.**

HISTORY (College of Letters and Science)

Justus Paul, chairman.

A. A major in History** consists of at least 36 credits:

1. a. History 211-212.
   b. Six credits selected from History 101, 102, 114, 115, 116, 117, 118. (Majors taking 101 will not receive credit toward the major for 115 or 116; majors taking 102 will not receive credit toward the major for 117 or 118.)
   c. Six credits selected from History 215, 216, 219, 220, 225, 241, 253, 254.
2. Eighteen advanced credits selected from courses numbered 300 or above, including either 489 or 490 taken in the senior year. These 18 credits must be divided between at least two of the following three fields, with at least 6 credits in each of the two fields.
   a. European History: 301, 302, 304, 305, 306, 308, 309, 310, 311, 314, 315, 316, 320, 321, 322, 325, 326, 327, 330, 331, 332, 333, 334, 335, 339, 340, 390*, 395*, 399*, 490*.
   b. Non-Western History: 337, 338, 341, 343, 345, 346, 347, 348, 349, 350, 352, 390*, 395*, 399*, 490*. Latin American Studies 423 may also apply toward this requirement.
   c. United States History: 356, 357, 358, 359, 360, 361, 362, 363, 366, 367, 368, 369, 371, 372, 373, 374, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 389, 390*, 395*, 399*, 490*.

   * When appropriate to that area of History.

B. A major in History** with a concentration in **minority and ethnic studies** consists of at least 46 credits:

1. History 101, 102, 120, 130, 211, 212.
2. At least 18 credits distributed as follows:
   a. Nine credits from among History 379, 380, 381, 382, 385, 386.
   b. Six credits from among History 314, 316, 327, 338, 340, 343, 346, 348, 352.
   c. One credit of History 399, arranged with the adviser.
   d. History 489 or 490.
3. At least 10 credits from the following but no more than six in any one category:
   a. Fine Arts: Art 382, 388: Music 101.
   b. Humanities: English 240, 280, 370, 371, 372, 382.
   c. Social Science: Anthropology 339, 371; Geography 253; Political Science 315; Sociology 270, 305, 490 (when an appropriate subtitle is indicated).

C. A minor in History** consists of at least 24 credits, including:

1. History 211-212.
2. Six credits selected from History 101, 102, 114, 115, 116, 117, 118, 215, 216, 219, 220, 225, 241, 253, 254. (Minors taking 101 will not receive credit toward the minor for 115 or 116; Minors taking 102 will not receive credit toward the minor for 117 or 118.)
3. Minors who omit all European surveys must select three credits of European history at the 300-400 level.
4. Twelve advanced credits selected from courses numbered 300 or above.

The adviser will assist the student in selecting a balanced program which will provide a rounded knowledge of the subject in relation both to time and location.

**Approval for graduation as a History major or minor requires an overall grade point ratio of 2.00 in all courses taken within the History major or minor, regardless of declaration of academic bankruptcy.

101. European Civilization I. 3 cr. Late antiquity to the fifteenth century.

102. European Civilization II. 3 cr. Fifteenth century to the present.

The former **104, 105, 106, 107,** and **108** are now **114, 115, 116, 117,** and **118.**

114. (Formerly 104) **Ancient History.** 3 cr. Ancient Near East, Greece, and Rome.

115. (Formerly 105) **Medieval Europe.** 3 cr. Fourth to twelfth centuries.

116. (Formerly 106) **Medieval Europe.** 3 cr. Twelfth to sixteenth centuries. Prereq: 115 or cons instr.

117. (Formerly 107) **Modern Europe.** 3 cr. Sixteenth to nineteenth centuries.

118. (Formerly 108) **Modern Europe.** 3 cr. Nineteenth and twentieth centuries.

120. Ethnic Groups in Europe. 3 cr. Modern European ethnic and cultural groups; origins, accomplishments, current trends.

130. Racial and Ethnic Groups in the United States. 3 cr. Origins, accomplishments, current trends.

211. United States to 1865. 3 cr. Prereq: So st.

212. United States since 1865. 3 cr. Prereq: So st.

215. East Asia to 1800. 3 cr. Prereq: So st.

216. East Asia since 1800. 3 cr. Prereq: So st.

219. Middle East to 1798. 3 cr. Prereq: So st.

220. Middle East since 1798. 3 cr. Prereq: So st.

225. (Previously listed incorrectly as 255) **Southeast Asia.** 3 cr. Survey of the traditional cultures of Southeast Asia; the establishment of Western colonial rule; the development of independent national governments; and decolonization. To be offered **only** in the **Far East Program.** Prereq: So st or consent of the chairman of the History Department.

241. Problems in Russian Culture. 2 or 3 cr. Interpretive approach to Russian culture through the study of selected topics in the fine arts. Prereq: So st.

253. Latin America. 2 or 3 cr. European discoveries to independence. Prereq: So st.

254. Latin America. 2 or 3 cr. Independence to the present. Prereq: So st.

The course formerly listed as **255** is now listed as **225.**

290. Comparative History. 2 or 3 cr. An integrative course for analysis of a selected problem, movement, or institution common to two or more periods of history. Topics and area will be announced in the Time Table. Prereq: So st.

301/501. Western Culture. 3 cr. Development of the practical and fine arts, government, and human communication; pre-history through the Roman period.

302/502. Western Culture. 3 cr. Roman period to contemporary times.

304/504. Ancient Greece. 3 cr.

305/505. Ancienct Rome. 3 cr.

306/506. Studies in Antiquity. 2 or 3 cr. Topics and area will be announced in the Time Table.

The former **307/507** and **308/508** are now **308/508.**

308/508. (Formerly 307/507 and 308/508) **Medieval Studies.** 3 cr. Topic will be announced in the Time Table.

309/509. Medieval Church. 3 cr. Western Christianity in the Middle Ages.

310/510. Medieval Thought and Letters. 3 cr. Intellectual history of Europe: fourth to fifteenth centuries.

311/511. Age of the Crusades. 2 or 3 cr. Eleventh century Europe, the Mediterranean, the crusades.

314/514. Expansion of Europe, 1415-1880. 2 or 3 cr. Age of the great discoveries.

315/515. The Renaissance. 2 or 3 cr. Fourteenth and fifteenth century Europe.

316/516. The Reformation. 2 or 3 cr. Sixteenth and seventeenth centuries.

317/517. Age of Absolutism. 2 or 3 cr. Europe, 1648-1798.

The former **319/519** and **320/520** are now **320/520.**

320/520. (Formerly 319/519 and 320/520) **European Economic History.** 3 cr. Topics and area will be announced in the Time Table.

The former **321/521** and **322/522** are now **321/521.**

321/521. (Formerly 321/521 and 322/522) **European Social and Intellectual History.** 3 cr. Topics and area will be announced in the Time Table.

322/522. (Formerly 323/523 and 324/524) **European Diplomatic History.** 3 cr. Topics and area will be announced in the Time Table.

The former **323/523** and **324/524** are now **322/522.**

325/525. History of Science. 3 cr. From the Greeks to Galileo.

326/526. History of Science. 3 cr. Since Galileo.

327/527. Recent World Politics. 3 cr. Selected topics in world history, 1919 to the present. Prereq: 118 and 212.

330/530. England to 1485. 3 cr.

331/531. England, 1485-1714. 2 cr.

332/532. England, since 1714. 2 cr.

333/533. The French Revolution and Napoleon. 2 or 3 cr. Revolutionary period in Europe.

334/534. History of France since 1815. 2 or 3 cr.

335/535. History of Germany since 1880. 3 cr.

337/537. Russian History and Civilization. 3 cr. Tenth to eighteenth centuries.

338/538. Russian History and Civilization. 3 cr. Nineteenth and twentieth centuries.

339/539. Eastern and Central Europe. 3 cr. To the Congress of Vienna.

340/540. Eastern and Central Europe. 3 cr. Nineteenth and twentieth centuries.

341. Problems in Russian Culture. 2 or 3 cr. Interpretive approach to Russian culture through the study of selected topics in the fine arts.

343/543. Africa South of the Sahara. 3 cr. Chiefly nineteenth and twentieth centuries.

345/545. China to 1644. 3 cr.

346/546. China since 1644. 3 cr.

347/547. Japan to 1854. 3 cr.

348/548. Japan since 1854. 3 cr.

349/549. Korea to 1800. 3 cr.

350/550. Korea since 1800. 3 cr.

351/551. Vietnam since 1800. 3 cr.

352/552. Independent Mexico. 2 or 3 cr. Wars of independence to the present.

356/566. U.S.: Colonial Era to 1763. 2 or 3 cr.

The former **357/557, 358/558,** and **359/559** are now **357/557** and **358/558.**

357/557. (Formerly 357/577 and 358/588) **The Revolution and the New Nation, 1763-1801.** 2 or 3 cr.

358/558. (Formerly 358/558 and 359/559) **Early National Period, 1801-1840.** 3 cr.

359/559. (Formerly 360/560) **Era of Controversy.** 2 or 3 cr. United States, 1840-1860.

The former **360/560** is now **359/559.**

360/560. (Formerly 361/561) **Civil War and Reconstruction.** 2 or 3 cr. United States, 1860-1877.

The former **361/561** is now **360/560.**

361/561. (Formerly 362/562 and 363/563) **United States, 1877-1920.** 3 cr. Age of enterprise, world power, reform, and World War.

The former **362/562, 363/563,** and **364/564** are now **361/561** and **362/562.**

362/562. (Formerly 363/563 and 364/564) **United States, 1920-1945.** 2 or 3 cr. Normalcy, depression, New Deal, global war, and peace.

363/563. (Formerly 365/565) **United States since 1945.** 2 or 3 cr.

The former **365/565** is now **363/563.**

366/566. Resource Development and Policy in the United States. 3 cr. Development of the agricultural, mineral, forest, and water resources; conservation practices and policies since the Colonial era.

367/567. The American Frontier. 3 cr. Westward expansion to the Mississippi valley; frontier problems.

368/568. The American West. 3 cr. Westward expansion; Mississippi valley to the Pacific.

The former **369/569** and **370/570** are now **369/569.**

369/569. (Formerly 369/569 and 370/570) **The American South.** 3 cr. Topics will be announced in the Time Table.

The former **371/571** and **372/572** are now **371/571.**

371/571. (Formerly 371/571 and 372/572) **United States Economic History.** 3 cr. Topics and area will be announced in the Time Table.

372/572. (Formerly 373/573 and 374/574) **United States Constitutional History.** 3 cr. Topics and area will be announced in the Time Table.

The former **373/573** and **374/574** are now **372/572.**

373/573. (Formerly 375/575 and 376/576) **American Diplomacy.** 3 cr. Ideology and practice of American diplomacy; emphasis on the twentieth century.

374/574. (Formerly 384/584) **United States Military History.** 3 cr. Role of the military in American life; colonial period to the present.

The former **375/575** and **376/576** are now **373/573.**

377/577. American Social and Intellectual History. 2 or 3 cr. To 1865.

378/578. American Social and Intellectual History. 2 or 3 cr. Since 1865.

379/579. Afro-American History. 3 cr. Contributions of the Afro-Americans to the United States to 1865.

380/580. Afro-American History. 3 cr. Contributions of the Afro-Americans to the United States since 1865.

381/581. Spanish Americans. 3 cr. Background and origins, special problems, contributions.

382/582. The North American Indian. 3 cr. Earliest times to the present.

383. American Labor History. 3 cr. American workers; colonial times to the present.

The former **384/584** is now **374/574.**

385/585. The American Woman. 3 cr. Social-intellectual history of the American woman; colonial period to the present.

386/586. Immigration to the United States. 2 or 3 cr. Background, special problems, contributions of immigrant ethnic groups.

387/587. American Reform Movements. 2 or 3 cr. Ideals and institutions of reform, including concern for human rights, accompanying the social and cultural criticism of the emerging industrial order from the early nineteenth century.

The former **388/588** has been discontinued.

389/589. Wisconsin. 2 or 3 cr. 1634 to the present.

390. Comparative History. 2 or 3 cr. An integrative course for analysis of a selected problem, movement, or institution common to two or more periods of history. Topics and area will be announced in the Time Table.

395. Oral History. 1 to 3 cr. Juniors and seniors majoring in History may, by agreement with the chairman of the History Department, arrange for special work in oral history, for which credit will be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project; may not be used in satisfaction of the general history requirement for a degree.

399. Special Work. Upper class students majoring or minoring in history may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week or its equivalent, devoted exclusively to a special project.

489. Great Historians and the Sense of History. 2 or 3 cr. The great historians and their conceptions of history based on readings from their works. Open to students with senior standing majoring or minoring in history. Open to other seniors with the consent of the chairman.

490. Selected Historical Problems. 2 or 3 cr. Open to students with senior standing majoring or minoring in history. Open to other seniors with the consent of the chairman. The specific problem(s) to be treated will be announced in advance each semester.

701. Great Issues in Western History. 3 cr. Selected issues in European and American history based upon a study of the sources. Open to experienced teachers who have met the introductory lower division course requirements in history and the social studies and who have not had similar work.

707. Life in the Middle Ages. 3 cr. The social history of western medieval Europe. Each student will present a paper on a particular aspect of medieval society.

711. English Medieval Constitutional Developments. 3 cr. The development of English institutions of government and law from the Anglo-Saxon period to the advent of the Tudor Dynasty. Prereq: 106 or equiv.

717. Soviet Russia from 1917 to the Present. 3 cr. The Union of Soviet Socialist Republics, its political, social and economic changes, its place in the Second World War and post-war relations.

720. Recent World Politics. 3 cr. An intensive investigation of selected topics in world history since 1919. Readings and discussions, with assessment of the worth of specific sources and writers in the topics considered. Prereq: 108 and 212 or equiv.

746. Problems in the Civil War and Reconstruction. 3 cr. The causes of the Civil War; problems in the North and South during the war; changes during the period of post-war reconstruction, 1865-1877; and the resulting problems; relationship of the above to contemporary developments in regard to civil rights and the South, and a survey of the historiography of the subject, including work of representative historians.

748. American Society in Transition 1865-1914. 2 or 3 cr. Selected topics chosen from the period in which the people of the United States were moving from a relatively unsophisticated agricultural society into a more complex urban and capitalistic culture.

751. The United States in the Second World War. 2 or 3 cr. The social, economic, intellectual, constitutional, political, military, and diplomatic History of the United States' participation in World War II.

752. The United States Since the Second World War. 2 or 3 cr. Developments in the history of the United States in recent times in the social, economic, constitutional, political, military, and diplomatic areas.

755. Key Issues in American Constitutional Development. 3 cr. The locus of sovereignty and judicial review; the Supreme Court and economic policy; racial discrimination since abolition of slavery; control of sedition and subversion; religion and the state; political theory and practice in a constitutional democracy.

771. European Historians. 3 cr. Theory and methods in the writing of European history; special attention to the methods, purposes, interpretations, ideas and work of leading historians.

773. American Historians. 3 cr. Theory and methods in the writing of American history; special attention to the methods, purposes, interpretations, ideas, and works of leading historians.

780. Historical Method. 3 cr. Securing and evaluating historical evidence; construction of historical papers based upon various kinds of source materials.

782. Seminar in American History. 3 cr. The specific topic will be indicated each time the seminar is offered.

784. Seminar in European History. 3 cr. The specific topic will be indicated each time the seminar is offered.

786. Seminar in Non-Western History. 3 cr. The specific topic will be indicated each time the seminar is offered.

796. Independent Study. 1 to 3 cr. Planned study designed to enrich and supplement the student's preparation in his area of specialization; regularly scheduled conferences with a staff supervisor.

799. Thesis. 2 to 6 cr.

HOME ECONOMICS (College of Professional Studies)

Agnes Jones, Assistant Dean and Head of the School of Home Economics.

A. A major in Home Economics Education consists of:

1. Core courses to total 22 credits, as follows: Home Economics 101, 102, 104, 211, 261, 366, 371, 485.
2. Additional required courses to total 18 credits: Home Economics 212, 233, 253, 323, 345, 381, and electives to total 18. (Home Economics 103 and 105 are also required unless the student is exempt by a proficiency test.)
3. Required collateral courses: Biology 101 or 160, 281; Chemistry 101 or 103; Economics 200; Psychology 200.
4. Sociology 101 is recommended but not required.
5. Education 380, 381, and 10½ credits of 398; Home Economics Education 391, 392, 394.

Students in this major should take Biology 101 or 160, and Chemistry 101, 103, 105, or 115 to satisfy the science requirement for a degree; and Economics 200, Psychology 200, and (preferably) Sociology 101 to satisfy the social science requirement.

B. A major in Early Childhood Education consists of:

1. **Core courses** to total 43 to 46 credits, as follows:
   a. Education and Psychology, 22 credits: Education 242, 301, 381, and 10 credits of 398; Psychology 200.
   b. Home Economics, 12 credits; Home Economics 101 or Art 101; Home Economics 261 or Psychology 260; Home Economics 253 or 351; Home Economics 361 or Education 241.
   c. Required support courses—select nine credits: Communicative Disorders 266 (3 cr.), 280 (3 cr.); Education 351 (3 cr.), 353(3 cr.); Physical Education 231 (3 cr.).
2. **Home Economics option**, 20 credits: Home Economics 104, 105, 211, 364, 366, 371, 467; Physical Education 252.

It is recommended that students elect a course in literature and one in children's literature to partially fulfill the humanities requirement.

Vocational certification is optional. If elected, the following additional work is required: Home Economics Education 394, 395; and Home Economics 793 or Education 383.

The Provisional certificate requires 2,000 hours of work experience; and the Standard certificate requires three years of successful teaching and 4,000 hours of work experience.

For a more complete description, see the section headed EARLY CHILDHOOD EDUCATION.

Students in this major should take Biology 101 or 160, and Chemistry 101, 103, 105, or 115 to satisfy the science requirement for a degree; and Economics 200, Psychology 200, and (preferably) Sociology 101 to satisfy the social science requirement.

C. **A major in Dietetics** is available in either of two programs:

1. **Dietetics Program** requiring an approved internship.

   a. Core courses, 12 credits: Home Economics 101, 104, 261, 366.

   b. Twenty-three credits required as follows: Home Economics 105, 253, 345, 347, 348, 355, 357, 377.

   c. Required collateral courses, 31-37 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106, or 115 and 116; Chemistry 260; Economics 200; Business 210; Mathematics 105 (unless exempt).

   d. Choice of one course each from (1), (2), and (3), eight or nine credits:

      (1) Business 370 or Psychology 270.
      (2) Business 320 or Economics 330.
      (3) Education 381 or Home Economics 393.

Note: Fulfilling the degree requirements in this Dietetic Program and completing an American Dietetic Association approved internship or traineeship will satisfy the requirements for membership in the American Dietetic Association.

2. **Coordinated Undergraduate Program in Dietetics. (CUP)** (meets requirements for membership in the American Dietetic Association.)

   a. Core courses, 12 credits: Home Economics 101, 104, 261, 366.

   b. Fifty credits required as follows: Home Economics 105, 250, 340, 341, 345, 354, 356, 447, 453, 458, 459 and Home Economics 393.

   c. Required collateral courses, 34-40 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106 or 115 and 116; 260; Economics 200; Mathematics 105 (unless exempt); Business 210, Economics 330 or Business 320.

   d. No internship is required.

   Admission to the Coordinated Program is competitive, requiring formal application during the second semester of the sophomore year and a current, approved physical examination. Satisfactory progress toward the achievement of the competencies required of a generalist in dietetics must be maintained as determined by the Coordinating Committee to continue in this Program.

D. **A major in Food and Nutrition** is available in three options:

1. **General Food and Nutrition:**

   a. Core courses, 22 credits: Home Economics 101, 102, 104, 211, 261, 366, 371, 485.

   b. Eighteen credits selected from the following: Home Economics 105, 253, 345, 347, 348, 355, 357, 377, 381, 446.

   c. Required collateral courses, 28-30 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106, or 115 and 116; Chemistry 260; Economics 200.

2. **Experimental Food and Nutrition:**

   a. Core courses, 16 credits selected from the following, with Home Economics 104, 261, and 371 required: Home Economics 101, 102, 104, 211, 261, 366, 271, 485.

   b. Twenty-four credits required as follows: Home Economics 105, 253, 345, 348, 355, 357, 381 or 383, 446, and two credits of electives in Home Economics.

   c. Required collateral courses, 28-30 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106, or 115 and 116; Chemistry 260; Economics 200.

   d. Choice of one of the following, two or three credits: Economics 330; Education 381 or Home Economics 393.

3. **Food Service Management:**

   a. Core courses, 12 credits: Home Economics 101, 104, 261, 366.

   b. Twenty credits as follows: Home Economics 105, 253, 345, 347, 348, 377, 449.

   c. Required collateral courses, 36-42 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106, or 115 and 116; Business 210, 211, 340, 370 (or Psychology 270); Economics 200; Mathematics 105, unless exempt.

   d. Choice of one course each from d.1. and d.2., six credits:

      d.1. Business 311, Business 330, Economics 345.
      d.2. Business 320 or Economics 330.

   e. Choice of one of the following options:
      Option I: choice of one course from the following (two or three credits): Home Economics 343, 355, 357, 446, 450.
      Option II: (to meet American Dietetics Association requirements), 12 credits: Chemistry 260; Home Economics 355, 357, 393.

Students in this major should take Biology 101 or 160, and Chemistry 105 or 115 to satisfy the science requirement for a degree; and Economics 200, Psychology 200, and (preferably) Sociology 101 to satisfy the social science requirement.

Note: Fulfilling the degree requirements in the Experimental Food and Nutrition and the Food Service Management options, and completing an American Dietetic Association approved internship will satisfy the requirements for membership in the American Dietetic Association.

E. **A major in Home Economics in Business** is available in four options:

1. **Communication:**

   a. Home Economics 101, 102, 103, 104, 105, 211, 212, 233, 322, 333, 366, 371 (or Economics 323), and electives to total 42 credits.

   b. Communication 105, 107, 210 or 217, 219, and electives to total 21 credits. Communication 101 may not be included among courses used to complete this major.

   c. Collateral course, three credits: Economics 201.

2. **Fashion Merchandising:**

   a. Home Economics 101, 102, 103, 233, 301, 303, 322, 323, 329, 330, 333, 366, 371, 417, to total at least 39 credits.

   b. Collateral courses, 21 credits: Art 102; Business 210, 330, 370 (or Psychology 270); Communication 210 or 217; Economics 201 and 3

cr of electives approved by the Program Area Coordinator.

3. **Food and Equipment:**

   a. Home Economics 101, 102, 104, 105, 253, or 351, 301, 345, 366, 371, 381, 446, 450, 492, to total at least 35 credits.
   b. Collateral courses, 16 credits: Biology 281; Business 330, 370 (or Psychology 270); Communication 210 or 217; Economics 201.

4. **Housing and Interiors:**

   a. Home Economics 101, 102, 201, 211, 212, 233, 301, 309, 311, 330, 366, 371, 412, 413, 416, and additional electives in studio or related art to total at least 50 credits.
   b. Collateral courses, nine credits: Art 102; Communication 210 or 217; Economics 201.

Students in this major will take Chemistry 101, 103, 105, or 115; and Biology 101 or 160 to satisfy the science requirement for a degree; and Economics 200, Psychology 200, and (preferably) Sociology 101 to satisfy the social science requirement.

F. **A minor in Home Economics** consists of at least 24 credits in Home Economics, including Home Economics 101, 102, 104, 211, 261, 366, 371, and four credits of Home Economics electives.

A minor is not required in the School of Home Economics. However, a student may elect a minor in any field. If a minor is elected, the education techniques course in that minor should be taken if the student plans to teach. If a Chemistry minor is selected, Chemistry 105 and 106, or 115 and 116, should be substituted for Chemistry 101 or 103. If a Biology minor is elected, Biology 130 and 160 should be substituted for Biology 101.

There is no "teaching" minor in Home Economics.

G. Cooperative relations have been established with Merrill-Palmer Institute of Human Development and Family Life in Detroit, Michigan, to give Home Economics majors an opportunity to study there for one semester, for which credit will be given at UW-Stevens Point. Students must be seniors or second semester juniors, have a high academic record, and be recommended by the Assistant Dean of the School of Home Economics.

See also course listings under **Home Economics Education** (next section).

101. Color and Design. 3 cr. Color and design in relation to personal and home problems. One hr lec, four hrs lab per week. Students may not receive credit for both Home Ec 101 and Art 101.

102. Selection of Clothing for Men and Women. 2 cr. Art principles related to the selection of fabric and style for individuals; evaluation of apparel in terms of aesthetic, economic, and social needs.

103. Clothing Construction. 3 cr. Study and application of basic principles of clothing construction as related to fabric, style, and fit. One hr lec, four hrs lab per week.

104. Human Nutrition and Food Preparation. 3 cr. Introduction to the field of food and nutrition; nutrients essential to human life and well-being; their functions in metabolism and their sources in food; application of this information to the significant relationship between food preparation, food habits, and health.

105. Human Nutrition and Food Preparation Laboratory. 2 cr. Basic ingredients and techniques used in food preparation with emphasis on theory; food preparation stressing nutritive value and the management of money and time. Four hrs lab per week. Prereq: 104 or con reg.

107. Food and Man. 3 cr. Role of food and nutrition affecting man's food habits and beliefs; cultural, socio-psychological, and economic aspects.

116. Individual and Family Health. 1 cr. Health care in relation to current health concerns and resources. One two-hr session per week.

201. Rendering Techniques. 3 cr. Presentation techniques in the areas of architectural exteriors, interior design, furnishings, and apparel to visually communicate design concepts. Prereq: 101 or Art 101.

211. Living Space Design. 3 cr. Matrix aspects, regulations, psychological, and economic factors of housing; design elements applied to space relationships and furnishings to create a satisfying environment. Prereq: 101 or Art 101.

212. Housing and Home Furnishings Laboratory. 2 cr. Studio problems in housing and home furnishings; field trips. Four hrs lab per week. Prereq: 211 or con reg.

233. Textiles. 3 cr. From fiber to finished fabric; recognition, testing, purchase, use and care of textiles. Two hrs lec, two hrs lab per week. Prereq: So st.

250. Introduction to Dietetics. 1 cr. Overview of the health care professions and delivery systems with a focus on dietetics. Two hrs per week. Prereq: So st.

253. Nutrition. 3 cr. Dietary standards at different stages in the life cycle; nutrient requirements and interrelationships: Digestion and metabolism of foods. Prereq: 104.

261. Development of the Young Child. 3 cr. Principles and research findings with implications for the guidance of young children in the home and in pre-school groups; observation at the pre-school laboratory. Two hrs lec, two hrs observation per week. Prereq: Psych. 200.

301. Techniques in Illustration and Display. 3 cr. Application of design elements and principles in commercial display and development of creative design techniques; various media explored. Prereq: 101 or Art 101.

303. Fashion Illustrating and Design. 3 cr. Problems in designing, sketching, and rendering, as met in the professional practice of fashion illustration; execution of original designs included. Prereq: 323.

309. History of Decorative Arts. 3 cr. Historical development of furniture, textiles, and accessories, as they relate to housing and interior design. Prereq: 101 or Art 101.

311/511. Advanced Interior Design. 3 cr. Advanced studies in the application of design theory and philosophy to interior living space design.

312. Structural Decorative Textiles. 3 cr. Application of design principles to two- and three-dimensional explorations in applique, canvas work, drawn work, hooking, and knotting techniques; historical as well as contemporary approaches. Prereq: 101 or Art 101.

322/522. Clothing Economics. 3 cr. Consumer clothing problems in relation to market conditions. Prereq: 102; Econ 200.

323. Applied Apparel Design. 3 cr. Study, construction, and fitting of a basic pattern using design principles as applied to flat pattern drafting; construction of a garment. One hr lec, four hrs lab per week. Prereq: 103, 233; or cons instr.

324/524. Tailoring. 3 cr. The application of tailoring techniques to the construction of a garment. One hr lec, four hrs lab per week. Prereq: 323 or cons instr.

329/529. History of Costume. 3 cr. The history of costume from ancient times to the present day.

330. Textiles and Clothing Retailing. 3 cr. Investigation of retailing factors, trade practices, and ethics involved in fashion merchandising. Prereq: Econ 201.

333/533. Experimental Textiles. 3 cr. Standard procedures and equipment for testing fabrics; emphasis on research techniques. One hr lec, four hrs lab per week. Prereq: 233; Chem 101 or 103; or cons instr.

340. Food Service Systems I. 6 cr. Theories, concepts, and application of organizational and personnel management; safety and sanitation; selection and layout of equipment; institutional menu writing and recipe standardization. Three hrs lec, nine hrs clinical experience per week. Prereq: jr st, and acceptance in CUP.

341. Food Service Systems II. 6 cr. Concepts and standards in quantity food production, purchase, and storage with practical application; food delivery systems; concepts and tools for cost control and financial management; three hrs lec, nine hrs clinical experience. Prereq: 340 and Jr st in CUP.

343/543. School Food Service. 2 cr. History and philosophy of school food service; legislation, trends, and educational roles; principles of organization and management of school food programs. Prereq: 104, or cons instr.

345. Meal Planning and Serving. 3 cr. Advanced food preparation with emphasis on meal planning, management and table service; each student has experience in demonstration and guest meal techniques. One hr lec, six hrs lab per week. Prereq: 104; Chem 101 or 105 or 115.

347/547. Organization and Management of Food Service. 4 cr. Principles of financial and production controls and the selection and the layout of equipment in food service systems. Three hrs lec, two hrs lab per week. Prereq: 104 or cons instr.

348/548. Quantity Food Production. 3 cr. Theory and application of principles in quantity food preparation and service; quality control, sanitation, recipe standardization, portion and cost control; menu planning, work simplification, and merchandising of foods. One hr lec, six hrs lab per week. Prereq: 104, 253; Chem 260; or cons instr.

351. Elementary Nutrition. 3 cr. The food needs of the individual and the foods which supply those needs, with special emphasis on the food needs of children.

354. Nutrition in the Life Cycle. 6 cr. Principles and concepts of normal nutrition; nutritional requirements related to phases in the human life cycle; clinical application. Three hrs lec, nine hrs clinical experience per week. Prereq: Admission to CUP: Biol 281, Chem 260, or cons instr.

355/555. Diet Therapy. 3 cr. Application of nutrition principles in the study of the dietary treatment of certain conditions and diseases. Two hrs lec, two hrs lab per week. Prereq: 104, 253; Chem 260.

356. Clinical Nutrition. 6 cr. Advanced study of fundamental physiological, biochemical, and nutritional concepts as a basis for nutritional care of the individual; theory, formulation, implementation, and evaluation of nutritional care plans in the treatment of disease; participation as a dietician on the health care team. Three hrs lec, nine hrs clinical experience per week. Prereq: 354, Biol 281, Chem 260, and cons instr.

357/557. Advanced Nutrition. 3 cr. Chemistry of foods and nutrition and the interrelationships in meeting the nutritional needs in humans. Two hrs lec, two hrs lab per week. Prereq: 104, 253; Chem 260; or cons instr.

361. Theory and Guidance of Play for Young Children. 3 cr. Theory and guidance of play activities which provide for growth through art, music, dramatic play, science, and other materials. One hr lec, four hrs of participation in pre-school lab per week. Prereq: 261 or Psych 260 or cons instr.

364. Administration of Early Childhood Education Programs. 2 cr. Organization and supervision including community relations, certification standards, budgeting, staffing, program design, facilities, and health protection.

366. Family Relationships. 3 cr. Interpersonal relationships within the family at all stages in the life cycle. Prereq: Psych 200 or Soc 101 or cons instr.

371. Family Economics and Management. 3 cr. Factors important in individual and family buying; evaluation of consumer information; management and economics principles in relation to use of resources.

377/577. Institution Purchasing. 2 cr. Principles and methods of purchasing food in quantity. One hr lec, two hrs lab per week. Prereq: 104 or cons instr.

381/581. Equipment for the Home. 2 cr. Selection, use, and care of household equipment. Lec and lab, four hrs per week. Prereq: 371 or cons instr.

383/583. Institution Equipment and Layout. 2 cr. Selection, arrangement, installation, use and care of various types of equipment and furnishings for institutional food service departments. Lec and lab, four hrs per week. Prereq: 104 or cons instr.

391/591. Study Tour. 1 to 6 cr. Study tours to appropriate industries, museums, or facilities for students in various curricular areas in Home Economics. A subtitle will be added to describe the area each time the course is offered.

393. Educational Techniques in Dietetics. 2 cr. Concepts of educational planning; resources, methods, and techniques for teaching in dietetics. One hr lec, two hrs lab per week. Prereq: Dietetics, Nutrition, and Food Science majors, or cons instr.

397. Field Work. 1 to 8 cr. A supervised training work program in a cooperating off-campus establishment; work experience and supervision followed by an evaluation of individual progress.

399. Special Work. Upper class students majoring in Home Economics may, by agreement with the assistant dean of the School of Home Economics, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

412/612. Institutional Interior Design. 3 cr. Individual assigned problems in interior design; solutions, presentations, and evaluation. Prereq: 212.

413/613. Problems of Housing. 3 cr. Housing as a cultural, economic, and institutional force; future development and needs. Prereq: 211.

416/616. Furniture and Accessory Design. 2 or 3 cr. Utilization of art principles and theories in the creative design of applied products such as furniture and accessories in a living space environment. Prereq: 101 or Art 101.

417/617. Applied Textile Design. 3 cr. Experimentation using art principles in the creative design of two- and three-dimensional textiles; printing, tie-dye, and batik as applied to wall hangings, furnishings, and apparel; emphasis on fiber, fabric, and usage interrelationships. Prereq: 101 or Art 101, and 233 or cons instr.

446/646. Experimental Foods. 3 cr. Application of scientific principles and experimental procedures in food preparation. One hr lec, four hrs lab per week. Prereq: 104; Chem 101 or 105 or 115; Biol 333; or cons instr.

447. Food Service Management in Dietetics. 6 cr. Refinement of skills and demonstration of competence as an administrative dietitian. One hr lec, fifteen hrs clinical experience per week. Prereq: Sr st in CUPID; con reg in 458 and 459; or cons instr.

449/649. Food Service Administration. 3 cr. Consideration of advanced administrative problems through experience in food service; job analysis, labor policies, labor organization, personnel problems and financial control in relation to food service administration. One hr lec, four hrs lab per week. Prereq: 347, 448; or cons instr.

450/650. Social and Cultural Aspects of Food. 3 cr. Foods and food customs of various regional, national, and ethnic groups. Two hrs lec, three hrs lab per week.

453. Nutrition in the Community. 4 cr. Current programs in nutrition; the need for organization and implementation of such programs. Two hrs lec, six hrs clinical experience per week. Prereq: Sr st in CUP.

456/656. Community Nutrition. 3 cr. Nutrition from the public health viewpoint: illness prevention and health maintenance; analysis of various programs designed for improving community nutrition. One hr lec, minimum of four hrs concurrent field work per week. Prereq: 253 and 355.

458. Nutritional Care in Dietetics. 6 cr. Refinement of skills and demonstration of competence as a clinical dietitian. One hr lec, fifteen hrs clinical experience per week. Prereq: Sr st in CUP; con reg in 447 and 459; or cons instr.

459. Seminar in Dietetics. 2 cr. Current topics, issues, and trends in dietetics; presentations by guest speakers, faculty, and students. Two hrs per week. Prereq: Sr st in CUP: con reg in 447 and 458; or cons instr.

467/667. Parent Education. 2 or 3 cr. Principles, procedures, and current research implications for working with parents and families. Prereq: 361 or cons instr.

485. Home Management. 2 cr. Emphasis on personal development and group relationships through living as a family; experiences in management of human and material resources. Residence in the Home Management House open to seniors and second semester juniors; one class period per week. Prereq: 345.

490/690. Workshop in Home Economics. 1 to 4 cr. A subtitle will be added to describe the area considered each time the course is offered.

492. Demonstration Techniques. 2 cr. Analysis, application, and evaluation of demonstration techniques.

700. Trends in Home Economics. 3 cr. New developments in the field of home economics; implications in research for individual and family needs.

712. Perspectives in Related Art. 3 cr. Philosophy, methods, and trends in the field of art as it relates to an individual in home and society; individual reading and research problems in addition to media and technique exploration.

719. Seminar in Housing and Home Furnishings. 3 cr. Critical review of current research data.

721. Recent Developments in Textiles and Clothing. 3 cr. Recent trends in the field of textiles and clothing, with emphasis on related consumer problems.

729. Seminar in Textiles and Clothing. 3 cr. Critical review of current research data.

748. Recent Advances in Food. 3 cr. Developments in food and food science; legislation concerning food quality.

749. Seminar in Food and Nutrition. 3 cr. Critical review of current research data.

753. Recent Advances in Nutrition. 3 cr. Lectures, reports, and demonstrations dealing with recent developments in nutrition.

765. Issues in Family Living. 2 or 3 cr. Investigation of current literature to determine issues affecting the nature and variability of the family.

769. Seminar in Human Development and Family Relationships. 3 cr. Critical review of current research data.

771. Current Problems in Family Economics. 2 or 3 cr. The family role in the changing economy; providing for family financial security; individual problems.

779. Seminar in Home Management and Family Economics. 3 cr. Critical review of current research data.

796. Independent Study in Home Economics. 1 to 3 cr. Planned study designed to enrich and supplement the student's preparation in his area of specialization.

799. Thesis. 2 to 6 cr. Research project dealing with a specific problem in an academic area and culminating in a thesis.

HOME ECONOMICS EDUCATION

The Master of Science Degree—Home Economics Education is described in the section of the catalog on THE GRADUATE COLLEGE.

290. Directed Study: Observation and Participation. 1 cr. Individually planned to help the student better understand the role of the home economics classroom teacher; learner characteristics, and instructional materials; conference reports required. Offered in mini-sessions only. Prereq: cons instr.

391. Curriculum for Home Economics. 3 cr. Philosophy, curriculum, and evaluative materials for the home economics program K-12.

392. Techniques for Teaching Home Economics. 2 cr. Techniques, materials, and administration for home economics programs K-12.

394. Philosophy of Vocational and Adult Education. 2 or 3 cr. Philosophy, organization and administration of vocational, technical and adult education; emphasis on programs in Wisconsin.

395/595. Introduction to Vocational Guidance. 2 cr. Occupational opportunities and statutory requirements in vocational and technical education programs.

396/596. Cooperative Occupational Education Programs. 2 cr. Philosophy, organization, and teaching techniques for cooperative vocational programs. Prereq: Admission to the Professional Education sequence.

791. Curriculum in Home Economics. 3 cr. Curriculum trends, evaluation of home economics programs, principles of curriculum structuring and development of guides for teaching home economics.

792. Perspectives in Home Economics. 2 or 3 cr. Critical analysis of recent developments in home economics education; trends in curriculum development, techniques, and materials.

793. Evaluation of Home Economics Programs. 3 cr. Techniques in the analysis of occupational and homemaking programs.

798. Research in Home Economics. 3 cr. Definition of problems and issues: critical examination of the research literature; planning of experimental investigation.

INSTITUTION MANAGEMENT

See **Food Service Management** under the Home Economics listing.

INSTRUCTIONAL RESOURCES (College of Professional Studies)

Roy VanDreser, Coordinator

Fulfillment of the requirements for the Instructional Resources minor will satisfy state licensing requirements for both school librarianship and audio-visual building coordinator. Either license may be obtained individually by meeting the requirements explained below.

A. **A minor in Instructional Resources** consists of a minimum of 25 credits including;
   1. Instructional Resources 211, 222, 223, 321, 325, 331, and 332; English 275 and 375.
   2. Remaining credits to be selected from Instructional Resources 231, 322, 399.

B. In addition to the above: To satisfy requirements of the School of Education and for state certification, it is necessary to have two credits of Instructional Resources 395 as a part of Education 398, in the minor described above.

C. The requirements for a minor in library science and audio-visual building coordinator are met within the Instructional Resources minor.

The sequence of Instructional Resources 222, 223, and 321 will meet the standard requirements for entrance into graduate Library Science work.

A state license for audio-visual building coordinator may be earned by completing Instructional Resources 331, and 231 or 332, and 18 credits in Education.

Courses in Instructional Resources were previously listed as Learning Resources.

See also **Learning Resources,** later in the catalog.

211. The Learning Resources Approach in Education. 1 cr. The development of the Learning Resources concept; purpose of Learning Resources in education processes, its relation to the curriculum, and its contribution to the improvement of instruction on the elementary and secondary levels; functional operation of the concept through a study of the representative operating systems. Prereq: So st.

222. Introduction to Reference. 2 or 3 cr. Materials of reference that are the basis of a learning resources reference collection and service, and practice in their use as a source of information and an aid to study and teaching. Prereq: So st.

223. Building Learning Resources Collections. 2 or 3 cr. Problems and values in building library collections with full concern for all materials that have relevance to the needs of elementary and secondary schools. Prereq: So st.

231. Basic Photography. 3 cr. Fundamentals of black and white photography including camera, types of film, filters, the use of the light meter and darkroom; practical experience in contact printing, developing, and enlarging. Prereq: So st.

321. General Cataloging and Classification. 4 cr. Theory and practice of cataloging and classification of book and non-book materials; emphasis on Dewey Decimal Classification and Sears Subject Headings, with an introduction to Library of Congress classification and subject headings. Prereq: 222 and 223, or cons instr.

322. Workshop in Learning Resources. 1 to 3 cr. Problems of the Learning Resources Center in elementary and secondary schools. A subtitle will be added to the title to describe the area each time the course is offered.

325. Organization and Supervision of the Learning Resources Center. 3 cr. The function of the Learning Resources Center in the school; responsibilities of the Center in carrying out the aims of the curricular and extra-curricular programs; problems of administration, budget, physical facilities, and standards of service. Prereq: 211 or Cons instr.

331/531. Audio-Visual Media. 3 cr. Utilization of such media as pictures, slides, motion pictures, tapes, maps, radio, and television in the communication process; self-instructional laboratory work in the operation of equipment and the production of materials.

332. Local Production of Media. 3 cr. Techniques in the planning and production of such media as flannel boards, filmstrips, single concept films, motion pictures, and tapes, and multi-media presentations. Prereq: 231 or 331, or cons instr.

351. Advanced Photography. 3 cr. Advanced work in specialized areas of photography; experience in theoretical and practical aspects of the special areas selected. The student will register for three of the specialized areas listed below, and may repeat the course for an additional three areas. Prereq: 231 or cons instr.

Lab. 1. Close-up and macro-photography. Special problems, equipment, and techniques involved in photography at extremely close distances.
Lab. 2. Creative photography. Use of photographic processes as art forms; emphasis on self expressions.
Lab. 3. Slide photography. Various techniques of writing, designing, and producing a slide sequence in color and black-and-white; the color slide as an art form.
Lab. 4. Journalistic photography. Special techniques of producing photographic materials for new and other print media, such as the picture book.
Lab. 5. Salon photography. Production of photographic prints for display and as decorative objects.
Lab. 6. Portraiture. Techniques and equipment used in producing the photographic portrait; special lighting effects in portrait and illustrative photography.
Lab. 7. Color photography. Production of the color print; laboratory controls and their relationship to color quality.

Lab. 8. Photo lab techniques. Bleaching, toning, spotting, dodging, burning in development control, and their effects on prints.

Lab. 9. Wildlife and scientific photography. Equipment and techniques used in producing prints and slides or illustration and scientific study; emphasis on telephoto and extreme close-up photography including micro-photography.

352. Introduction to Library Resources. 2 cr. Introduction to the systematic approach to subject materials, printed bibliography, references and materials of critical search, with practice in compilation of bibliographies using approved forms of descriptive bibliography and footnote usage. Open to sophomores with consent of instructor.

395. Practicum. 2 to 5 cr. Practical field experience in the operation of learning resources functions under the supervision of cooperating instructional media personnel. Practicum credits may be earned as part of the requirements for Education 398 (Student Teaching) or by other arrangements approved by the chairman of the Learning Resources department and of the Education department.

399. Special Work. Students minoring in Learning Resources may, with the approval of the coordinator of Instructional Resources, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. A maximum of two credits for such work will be acceptable for the minor in Learning Resources.

711. Preparation and Utilization of Programmed Instruction. 3 cr. An investigation of the research on learning and behavioral psychology as it pertains to programmed instruction; the application of the findings of such research in the preparation of programmed materials and their utilization in the classroom. Each student will be required to prepare a short program utilizing the techniques learned in the course. Prereq: Psych 450 or equiv is recommended.

713. Instructional Design. 3 cr. The application of the principles of systems analysis and systems design in investigating instructional problems and their solutions; emphasis on the creative use of research data from learning psychology in solving instructional design problems.

721. Utilization of Television in the School. 2 cr. Techniques necessary for utilization of educational television programs in large group, small group, and individualized instruction; for the experienced teacher.

LATIN AMERICAN STUDIES

Robert Knowlton, adviser.

A. **A major in Latin American Studies** consists of 34 credits:

1. A minimum of 24 credits shall be selected in at least three fields from among the following Latin American content courses. **Anthropology** 335 (Peoples of Central and South America), **Art** 382 (History of Latin American Art), **Geography** 301 (Middle America), 329 (South America), 332 (Brazil); **History** 253, 254 (Latin America), 352 (Independent Mexico); **Latin American Studies** 399 (Special Work), 423 (Latin American Development), **Spanish** 332 (Latin American Civilization), 353, 354 (Survey of Spanish American Literature), 471 (20th Century Spanish American Literature).
2. The remaining credits shall be in related, non-language courses chosen in consultation with the Latin American Studies adviser.
3. In addition, four semesters of college Spanish beyond the first year level are required and may include Spanish 332, 353, 354, and 471.

B. **A minor in Latin American Studies** consists of 24 credits, at least 16 of which shall be selected from content courses and the remainder in related, non-language courses chosen in consultation with the Latin American Studies adviser.

Eight credits of Spanish beyond the first year level are strongly recommended.

399. Special Work. Upper class students majoring or minoring in Latin American Studies may, by agreement with the Latin American Studies adviser, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

423. Latin American Development. 3 cr. An interdepartmental course in development, modernization, and institutions of Latin America; analysis of factors influencing development. A subtitle will be added to the title to describe the focus each time the course is offered. Prereq: Six hours of work in Latin American Studies content courses or consent of the Latin American Studies adviser.

LEARNING DISABILITIES

See **Special Learning Disabilities.**

LEARNING RESOURCES

See also **Instructional Resources.**

101. Effective Use of the Learning Resources Center. 1 cr. (Pass-Fail only) The services, personnel, and organization of the Learning Resources Center; the development of basic skills necessary for its use as an effective aid to study, research, and enjoyment.

LEARNING RESOURCES CENTER

Burdette Eagon, Dean; Allen Barrows, Director of Public Services; Donald Lacock, Director of Instructional Media Services; Keith Lea, Director of Technical Services.

Theresa Chao, Periodicals Librarian; Arthur Fish, Documents Librarian; John Gillesby, Head Reference Librarian; Ruth Steffen, Head Cataloger, Susan Schrup, Head of Instructional Materials Center; Zophia Soroka, Bibliography Librarian.

LECTURE-FORUM COURSE (College of Letters and Science)

Alan Lehman in charge.

101, 102, 301, 302. Lecture-Forum Course. Each 1 cr. Lectures and discussions by members of the faculty and by lecturers from outside the university. The purpose of the course is to stimulate interest in the problems of the world and to aid students in orienting themselves to that world. Each semester's offering will center around a general theme, which will be indicated by a subtitle to be added each time the course is offered. The course may be taken for two semesters for a total of two credits; two hours per week; no grade will be given except "Pass" or "Fail"; attendance is required for "Pass."

LIBRARY SCIENCE

See **Instructional Resources.**

MATHEMATICS

Bruce Staal, chairman.

A. **A major in Mathematics** consists of at least 34 credits including Mathematics 110, 111, 212, and 213. The student is required to take at least one course from each of 1 and 2:

1. Mathematics 323, 324, and 327.
2. Mathematics 330 and 331.
3. Collateral recommendation: Computer Science 106 (or demonstrated proficiency in FORTRAN programming).

The major must be completed with courses numbered 300 or above.

B. **A major in Mathematics for teacher certification** consists of:

1. At least 36 credits including:
   a. Mathematics 110, 111, 212, 213, 331, 340, 351, and 380.
   b. At least one of these: Mathematics 323, 324, or 327.
   c. Additional courses selected from 300-level Mathematics courses to total at least 36 credits. Mathematics 330, 335, and 341 are strongly recommended.
2. Collateral requirement: Computer Science 106. This requirement may be waived by the chairman upon demonstrated proficiency in FORTRAN programming.

A student must present and maintain a minimum grade point ratio of 2.00 in mathematics courses for acceptance and retention as a major in mathematics or a major in mathematics for teacher certification.

To have a major in mathematics or a major in mathematics for teacher certification approved for graduation, a student must have a minimum grade point ratio of 2.00 in mathematics courses selected by the student to satisfy the requirements of the major. In addition, a grade of C or better must be achieved in at least 15 of the credits required in courses numbered 300 or above. These standards apply regardless of a declaration of academic bankruptcy. The department chairman may allow exceptions to these standards on a conditional basis.

A student must present and maintain a minimum grade point ratio of 2.00 in mathematics student list card each time he registers.

C. **A minor in Mathematics** consists of 22 credits including Mathematics 110, 111, 212, and 213, and at least six credits in courses numbered 300 or above.

D. **A minor in Mathematics for teacher certification** consists of Mathematics 110, 111, 213, 340, 331 or 335, 351 or 355, and additional credits selected from Mathematics 212, 323, 331, 335,or 380, and Computer Science 106 to total at least 24 credits.

E. Elementary Education majors are required to take Mathematics 229, 239, and 349, and Mathematics Education 229, 239, and 349. It is strongly recommended that students include Mathematics 359 as an elective.

General Requirements: In the College of Letters and Science and in the College of Natural Resources, four credits of college mathematics are required for the Bachelor of Science degree. Exemption will be granted if the student presents three units of high school mathematics with an average grade of C or better in the aggregate.

In the College of Fine Arts and in the College of Professional Studies, the student has a choice between four credits of college mathematics and one year of a foreign language. Exemption will be granted if the student presents three units of high school mathematics with an average grade of C or better in the aggregate or two acceptable units of a foreign language.

Definitions:

1. An **acceptable high school unit** in mathematics is one year's work (exclusive of "general" mathematics) with a grade of C or better.
2. **Level I preparation** in mathematics consists, in most cases*, of two acceptable units of high school mathematics, and a suitable test score or credit in Mathematics 104 with a grade of C or better.
3. **Level II preparation** in mathematics consists, in most cases*, of three acceptable units of high school mathematics, and a suitable test score or credit in Mathematics 105.
4. **Level III preparation** in mathematics consists, in most cases*, of four acceptable units of high school mathematics, and a suitable test score or credit in Mathematics 107.

*Credit earned in a course in which the content covered is substantially less than that included in a traditional course will be evaluated accordingly.

See also course listing under Mathematics Education (next section).

103. Great Ideas in Mathematics. 4 cr. Traditional and contemporary mathematical thought from aesthetic, historical, and practical viewpoints. Open only to students who present less than Level I preparation, or with consent of the chairman.

104. Essential of Algebra and Geometry. 2 cr. Beginning algebra and geometry. Open only to students who present less than Level I preparation, or with consent of the chairman. Does not apply toward the general mathematics requirements for a degree.

105. College Algebra and Trigonometry. 4 cr. Beginning college algebra; trigonometric functions of acute angles. Prereq: Level I preparation, or consent of the chairman.

107. Integrated Algebra and Trigonometry. 4 cr. Concepts of algebra and trigonometry essential to subsequent mathematics courses. Prereq: Level II preparation or consent of the chairman.

110. Analytic Geometry and Calculus I. 4 cr. Analytic geometry of the plane; differentiation and integration of algebraic functions with some applications. Prereq: Level III prepartion or consent of the chairman.

111. Analytic Geometry and Calculus II. 4 cr. Analytic geometry of the plane continued; differentiation and integration of transcendental functions; integration techniques; parametric equations and vectors; additonal applications. Prereq: 110.

118. Mathematics for Economics and Business Analysis. 4 cr. Applications to business and economics problems; functions,

graphs, matrices, and determinants, systems of linear equations, progressions, compound interest, introduction to differentiation and integration, and probability. Intended primarily for students of business and economics. Prereq: Level II preparation or consent of the chairman of the department.

212. Analytic Geometry and Calculus III. 4 cr. Introduction to solid analytic geometry; differentiation of functions of several variables; multiple integrals; infinite series; applications. Prereq: 111.

213. Introduction to Linear Algebra. 4 cr. Logic; set theory; vector spaces over a field; linear transformation; matrices. Prereq: 111.

224. Calculus. 4 cr. A terminal course in selected concepts and techniques having applications in biology, business, economics, psychology, and sociology. Not open to majors or minors in mathematics. 110 and 224 may not both be taken for credit. Prereq: Level II preparation.

229. Foundations of Arithmetic for the Elementary School Teacher. 3 cr. Basic concepts of sets, logic, and number systems with special emphasis on structure. Two hrs lec and two hrs lab per week. Prereq: Level I preparation, or consent of the chairman; and con reg in Math Ed 229. Not to be counted toward a Mathematics major or minor.

239. Modern Algebra for the Elementary School Teacher. 3 cr. Topics selected from linear and abstract algebra with emphasis on topics directly related to the elementary school mathematics curriculum. Two hrs lec and two hrs lab per week. Prereq: 229, and con reg in Math Ed 239. Not to be counted toward a Mathematics major or minor.

320. Differential Equations. 3 cr. An introductory course treating ordinary differential equations of the first and second order; linear equations with constant coefficients; solution in series; numerical approximations; systems of ordinary equations, with certain applications. Prereq: 212.

322. Vector Analysis. 3 cr. Vector algebra; vector calculus; gradient, divergence, and curl; divergence theorem. Stokes' theorem; line and surface integrals; introduction to tensor analysis; applications. Prereq: 212.

323. Foundations of Analysis. 3 cr. The elementary topological properties of the real line and the Euclidean plane; connectedness, compactness, continuous and uniformly continuous functions. Prereq: 213.

324. Complex Variables. 3 cr. Complex numbers, functions of a complex variable; power series; elementary functions; conformal and bilinear transformation; integral theorems; Taylor and Laurent expansions; theory of residues; applications. Prereq: 212.

327. Advanced Calculus. 3 cr. Advanced treatment of infinite series, partial derivatives, exact differentials, lines, surface and volume integrals, and generalized integrals. Prereq: 212.

330. Intermediate Linear Algebra. 3 cr. Canonical forms (congruence, equivalence, similarities); applications. Prereq: 213.

331. Abstract Algebra. 3 cr. Groups, rings, field number systems, Euclidean domains, and polynomials. Prereq: 213.

335. Number Theory. 3 cr. Primes, composites, and divisibility; congruences and residue classes; number-theoretic functions; Diophantine equations. Prereq: 111.

340. College Geometry. 3 cr. Advanced topics in Euclidean geometry. Prereq: 111.

341. Non-Euclidean Geometry. 3 cr. The historical and logical development of hyperbolic and elliptic geometry. Prereq: 111.

342. Projective Geometry. 3 cr. Projective spaces; finite projective planes; the projective plane over the real numbers; special configurations, affine planes. Prereq: 111.

344. Advanced Analytic Geometry. 3 cr. Advanced topics in plane and solid analytic geometry. Prereq: 111.

347/547. Geometry for Elementary and Junior High School Teachers. 3 cr. Metric and non-metric properties of curves, surfaces, and solids; plane construction; models of surfaces and solids; measurement of length, area, and volume; coordinate geometry of the plane; finite geometry. Prereq: Cons instr.

Not to be counted toward a major or minor in mathematics. Credit may not be earned in both 347/547 and 349.

348/548. Measurement and Computation for the Elementary School Teacher. 3 cr. Theoretical and applied measurement including the metric system, computational algorithms and their suitability for use with calculators, and the relationship of these topics to the elementary school mathematics curriculum. Prereq: 310, or equiv; or cons instr. Not to be counted toward a Mathematics major or minor.

349. Geometry for the Elementary School Teacher. 3 cr. Metric and non-metric properties of Euclidean geometry; basic concepts of non-Euclidean geometry; finite geometries. Two hrs lec and two hrs lab per week. Prereq: 239, and con reg in Math Ed 349. Not to be counted toward a Mathematics major or minor. Credit may not be earned in both 349 and 347/547.

351. Probability and Statistics I. 3 cr. Probability from a set-theoretic viewpoint, probabilities in discrete sample spaces; random variables; properties of distributions. Prereq: 111.

352. Probability and Statistics II. 3 cr. Probability density functions; moments; Student T and chi-square distributions; correlation and regression; tests of hypotheses; applications. Prereq: 351.

355. Elementary Statistical Methods. 4 cr. Fundamental concepts and techniques which underlie applications to the various disciplines, including descriptive statistics; averages; dispersion; random sampling; binomial, normal, Student's T, Chi-square, and F distributions; estimation and tests of hypothesis; linear regression and correlation; laboratory emphasis on sampling and applications. Three hrs lec, two hrs lab per week. Not open to students who have had 225. Not to be counted toward a Mathematics major or minor, or the Mathematics major for teacher certification. Prereq: Level II preparation.

359/559. Probability and Statistics for the Elementary School Teacher. 3 cr. Concepts of probability and statistics with emphasis on topics related to the elementary school mathematics curriculum. Two hrs lec, two hrs lab per week. Prereq: 229. Not to be counted toward a Mathematics major or minor.

360. Numerical Analysis. 3 cr. Differences and interpolation; function approximation; solution of equation; linear systems and matrices; numerical solutions of ordinary differential equations; least square approximation; quadrature. Prereq: 212 and 213 and Computer Science 106, or consent of the chairman.

372. Topology. 3 cr. Topologies; topological spaces, relative topologies; separation axioms; connectedness; compactness, metrizability; continuity. Prereq: 323.

380. Seminar in the History of Mathematics. 2 cr. The historical development of selected mathematical ideas. Prereq: 213.

385/585. Historical Topics for the Elementary School Teacher. 3 cr. The historical development of number systems, numeration systems, algebra, geometry, and its relationship to the elementary school mathematics curriculum. Not to be counted toward a Mathematics major or minor. Prereq: 310, or equiv; or cons instr.

390/590. Special Topics in Mathematics. 2 or 3 cr. Topic and number of credits will be announced when the time table is published each semester. Prereq: Consent of the chairman.

499. Special Work. Upper class students majoring in Mathematics may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. Normally no more than three credits may be counted toward the Mathematics major.

MATHEMATICS EDUCATION

229. The Teaching of Elementary School Mathematics. 1 cr. Principles, aims, methods, and techniques of teaching elementary school mathematics, with emphasis upon the teaching of arithmetic. Studies and discussion of current problems in education. Prereq: con reg in Math 229.

239. The Teaching of Elementary School Mathematics. 1 cr. Principles, aims, methods, and techniques of teaching elementary school mathematics, with emphasis upon the teaching of algebraic concepts. Prereq: con reg in Math 239.

319. The Teaching of Elementary School Mathematics. 1 cr. Principles, aims, methods, and techniques of teaching elementary school mathematics, with emphasis upon the teaching of arithmetic and geometry; studies and discussion of current problems in education. Prereq: Math 310, or con reg.

349. The Teaching of Elementary School Mathematics. 1 cr. Principles, aims, methods, and techniques of teaching elementary school mathematics, with emphasis upon the teaching of geometry. Prereq: con reg in Math 349.

375/575. A Laboratory Approach to Mathematics. 3 cr. The use of laboratory techniques for learning and teaching mathematics; planning, equipping, and maintaining a mathematics laboratory; designing instructional materials for the effective use of a mathematics laboratory. Intended for teachers with little pervious training in the use of a mathematics laboratory. Prereq: 319 or Ed 335; or equiv; or cons instr.

390/590. Special Topics. 1 to 3 cr. Topic and number of credits will be announced when the time table is published. Prereq: Consent of the chairman.

399. Special Work. 1 to 3 cr. Upper class students may arrange for special work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted to a special project. Prereq: Consent of the chairman.

MEDICAL TECHNOLOGY (College of Professional Studies)

Dakshinamurthy Chitharanjan, Director.

A Bachelor of Science Degree in Medical Technology consists of:

A. **Academic Program:** 90 credits (exclusive of required Physical Education) of on-campus study including the following:

1. General degree requirements of the **College of Professional Studies.**
2. Chemistry—23 credits including the following: Chemistry 115, 116 (by special permission of the Director of Medical Technology, Chemistry 105 and 106 may, in some special cases, be accepted in lieu of this sequence); Chemistry 220 and 240; or 225, 226, and 228; Chemistry 248; Chemistry 361 or 365. Normally, this requirement should be satisfied with Chemistry 115, 116, 220, 240, 248, and 361.
3. Biology—16 credits; Biology 160, 210, 281, 333. (In addition, it is recommended that Biology 334 and 363 (total of 3 cr) be taken.)
4. Physics—10 or 11 credits: Physics 103 and 104; or 110, 211, and 212. Normally, this requirement should be satisfied with Physics 103 and 104.
5. Mathematics and/or Computer Science—six credits, selected from Mathematics 107, 110, or 224, 111, 212, 335; Computer Science 106. Normally, this requirement should be satisfied with Mathematics 224 and Computer Science 106.
6. For acceptance, and continued registration, as a candidate for this degree, a student must maintain an overall grade point ratio of 2.50 and a grade point ratio of at least 2.50 in mathematics and the sciences. Students not meeting this standard may petition the Director of Medical Technology for consideration.

B. **Internship:** On the completion of part A, the student must serve a 12 month internship in a hospital school of medical technology approved by the American Society of Clinical Pathologists. The university has established affiliation agreements with the following schools of medical technology with the Director and Educational Coordinator, respectively, given courtesy appointments as University Associates:

Samuel C. Shih, M.D.; St Elizabeth's Hospital, Appleton: James Erchul, M.D.; Robert Cihak, M.T. Beaver Dam Community Hospitals: W.G. Richards, M.D.; Francine E. Rask, M.T. Madison General Hospital: Philip Piper, M.D.; Audrey Tessmer, M.T. St. Mary's Hospital Medical Center: D.M. Connors, M.D.; Margaret Jensen, M.T. St. Joseph's Hospital, Marshfield: C.N. Reyes, M.D.; Virginia Narlock, M.T. Family Hospital, Milwaukee: R.F. Lipo, M.D.; Barbara Peplinsky, M.T. Theda Clark Memorial Hospital, Neenah: H. Cullen Henshaw, M.D.; Thom Pharmakis, M.T. St. Anthony's Hospital, Rockford, Illinois: Gilbert Stansell, M.D.; N. Eikenberry, M.T. Swedish-American Hospital, Rockford, Illinois: C.L. Lafler, M.D.; Lorinda Schiller, M.T. St. Michael's Hospital, Stevens Point: A. Milano, M.D.; Mary Lou Grantham, M.T. Waukesha Memorial Hospital: Robert Kascht, M.D.; B.E. Rankin, M.T. Wausau Hospitals: Kathy Belgea, M.D.; Erla Schuett, M.T. West Allis Memorial Hospital: H. J. Conlon, M.D.; Joyce Walsh, M.T.

Before the degree is awarded, the director of the school in which the student interned must notify the University Registrar that the internship has been successfully completed.

An internship in a non-affiliated school of medical technology will require approval through the Director of Medical Technology of the University and the University Registrar.

201. Clinical Orientation. 1 cr. Hospital introduction to laboratory techniques and procedures. Open only to students majoring in medical technology. Available on Pass-Fail basis only. Prereq: So st.

302. Special Topics. 2 cr. Survey of chemotherapy, antibacterial

and antiviral agents; biochemical aspects of immunology and drug action; nuclear medicine, radio-immuno-assay and immuno-electrophoresis. One hr lec, three hrs lab per week. Prereq: Biology 160, 210; Chemistry 116 or 106, 220 or 226.

The following is the description of the courses for the clinical internship year, for a total of 34 or 35 credits. These courses will be taught only at the hospital.

405. Clinical Chemistry I. 5 cr. Fundamental concepts of clinical biochemistry; measurement of specific substances in body fluids and feces by chemical analytical techniques, and correlation of results with disease states; principles of instrumentation; quality control.

406. Clinical Chemistry II. 4 cr. Continuation of 405; drug screening and identification.

415. Clinical Hematology I. 3 cr. Collection of blood specimens; fundamentals of blood and bone marrow composition, function, and cell morphology; normal morphology and pathologic conditions of cellular elements; laboratory techniques.

416. Clinical Hematology II. 4 cr. Continuation of 415; theories of blood coagulation and hemostasis; diagnosis of bleeding disorders with laboratory testing and correlation of these results with clinical history.

425. Clinical Microbiology I. 4 cr. Techniques and theories of medical diagnostic bacteriology; special emphasis on cultivation, identification, isolation, antimicrobial sensitivity of pathogenic bacteria; principles of sterilization, asepsis, and disinfection infection control.

426. Clinical Microbiology II. 4 cr. Continuation of 425; mycology, fungal contaminants, laboratory techniques; parasitology: division of medical protozoology, helminthology, and arthropodology; virology and Rickettsiae: characteristics of organisms, laboratory technique for isolation and identification.

435. Clinical Immunology-Serology. 2 cr. Antigens and antibodies; stimulation, production, and their interaction; immuno-deficiency diseases; tumor and organ transplants; performance of qualitative and quantitative serological procedures.

445. Immuno-hematology: Blood Banking I. 2 cr. Application of the principles of immunology and genetics to grouping and crossmatching of blood and its components for transfusion; donor collection and processing; titration of selected antibodies and their relation to transfusion reactions and the use of transfusion therapy in disease conditions.

446. Immuno-hematology: Blood Banking II. 3 cr. Continuation of 445.

455. Clinical Urinalysis. 2 cr. Theory of renal function in health and disease; renal function tests including chemical and microscopic examination of urine.

465. Clinical Nuclear Medicine. 1 cr. Basic concepts and instrumentation of nuclear physics; application of radioactive substances to the identification of diseases; study of isotopes of clinical importance and the methodology for their use.

499. Independent Studies. 1 cr. Independent laboratory research projects, designed to enrich and supplement the student's preparation.

MILITARY SCIENCE (College of Professional Studies)

Lieutenant Colonel Arthur M. Harris, chairman.

The Military Science Department offers to male and female students alike 22 credits in courses which may be taken on either a selected basis or as a complete program which qualifies the student for a commission as a second lieutenant in the U.S. Army Reserve or in the Regular Army upon graduation. The Reserve Officer Training Corps (ROTC) program is designed to develop leadership and management skills which are both desired in a civilian career and required for entry into the military service in a leadership capacity. ROTC provides the Army with over 70 percent of the officers commissioned annually. These officers provide an academic influence within the military and are the primary source of U.S. Army leadership available in time of emergency. ROTC instruction may begin in any semester. It is undertaken concurrently with the individual's undergraduate curriculum, and may overlap graduate study. A detailed Military Science orientation or answers to specific questions are available upon request.

The four-year curriculum provides a progressive course of study in leadership and management, and is divided into a two-year basic course (Freshman: MS I; and Sophomore: MS II) and a two-year advanced course (Junior: MS III: and Senior: MS IV). The voluntary basic course involves no obligation either for military service or even for continuation of the individual Military Science offering. It includes an optional laboratory providing 1/2 credit in each semester.

The advanced course is also voluntary, but a three month to three year active duty obligation and an obligation for reserve component duty are incurred. Advanced placement may be obtained by students (1) with JROTC experience, (2) completion of a six-week basic summer camp, or (3) veteran status. Veterans may receive all financial benefits of ROTC in addition to their GI Bill benefits. Advanced course students are paid $100 untaxed subsistence allowance for up to ten months of both school years. All students in the program must attend a six-week advanced ROTC summer camp, usually just prior to the senior year. While at the camp, the student receives one-half of the base pay of a second lieutenant, food, housing, and round trip travel expenses. Questions on advanced placement should be addressed to the department chairman.

Both male and female students may enroll in the Army ROTC two-year program at the beginning of the junior year. To qualify, the student must attend a paid "Basic" summer camp for six weeks during the summer following the sophomore year. Students who are further along in school but who have at least two years of undergraduate and/or graduate study remaining at UWSP may also qualify for this program. The ROTC curriculum for the on-campus portion of the two-year program is the same as the curriculum for the advanced course.

Three-year, two-year, and one-year scholarships are available for outstanding ROTC students who are interested in a career as an Army officer. Tuition, fees, books, and laboratory expenses plus $100 per month for up to ten months of each school year are included in each scholarship.

Regular Army commissions may be earned on a competitive basis. A fellowship program providing scholarships in graduate school is also available.

Army-financed flight training is open to MS IV students as an elective course. Airborne training may also be available to outstanding advanced program participants. The wide variety of activities in which ROTC students may participate includes mountaineering, rappelling, water survival, orienteering, field exercises, intramurals, social events, marksmanship, travel to military installations, drill, and others.

ROTC Basic Course: Military Science 101, 102, 211, 212.

ROTC Advanced Course: Military Science 301, 302, 451, 452.

Notes: 1. Military Science 101 and 102 are one-credit courses with an optional one-half credit laboratory, for which credit is awarded each semester for those electing it.

2. Military Science 211 and 212 are two-credit courses for which one-half credit of laboratory work is available as an option.

3. Successful completion of the ROTC program is attained by earning 20 credits in Military Science courses, of which 14 must be at the 300- or 400-level (excluding MS 390).

4. Military Science 390 is not required.

5. The work formerly included in 017, 018, 027, 028, 037, 038, 047, and 048 is now included in other courses.

101. Introduction to Military Science. 1 cr. (add'l 1/2 cr lab optional). Types of activities in which Army officers are involved: theory, principles and fundamentals: emphasis on practical work. Specific sub-topics vary, but may include map reading and land navigation, rappelling, water safety, and first aid, and personal defense.

102. Introduction to Military Science. 1 cr. (add'l 1/2 cr optional). Continuation of 101.

211. Land Navigation and Orienteering. 2 cr (add'l 1/2 cr optional). Map reading, use of maps and aerial photographs to include terrain appreciation and evaluation and field orienteering. (This course satisfies 1 cr of required Phy Ed 101.) (**Previous** completion of Phy Ed 101 - Orienteering - permits the student to complete the course by taking only the land navigation portion during the second half of the semester.) Prereq: So st.

212. United States Military History. 2 cr (add'l 1/2 cr lab optional). Factors contributing to the development of the military establishment, military art, and related social and economic trends. Taught in conjunction with the University's history department. (Lab: continuation of practical exercises presented in 211.) Prereq: So st.

301. Leadership, Management, and Methods of Instruction. 3 cr. Principles, objectives, and techniques; functions of the leader, and special problems in military leadership and methods of instruction; applications of principles to the problems of small units; development of potential by planning, preparing, presenting, and otherwise participating in practical instruction. Prereq: Cons chrmn.

302. Command and Control. 4 cr. Techniques of directing and coordinating individual and team tactics; functions of various branches in their support of the Army and its field forces: analysis of military communications system; application of the principles of leadership to the problems of platoon leaders and company commanders; development of potential by planning, preparing, presenting, and otherwise participating in practical instruction. Prereq: 301.

390. Pilot Instruction. 3 cr. (Optional, limited offering.) Fixed-wing small aircraft pilot instruction including approximately 36 hrs ground instruction and 36 to 40 hrs in-flight instruction and quality control checks; flight fundamentals of pre-solo, solo, basic instrument, and cross-country flying. Prereq: MS IV cadet in good standing, physically qualified, possessing flight aptitude; cons chrm.

451. Operations, Logistics, and Administration. 4 cr. Advanced instruction in management skills; processes for arriving at decisions and translating them into plans and orders; principles of administration and logistics; practical experience in the management of personnel through performance as a cadet officer in the conduct of formal drill and ceremonies; participation in planning and supervision of cadet activities. Prereq: 302.

452. Military Law. 2 or 3 cr. (2 cr option excludes laboratory, and is **not** open to students pursuing a commission.) Fundamental concepts of U.S. military justice; requirements for a separate body of law for the military; organization, historical evolution, and procedures of the Uniform Code of Military Justice; practical experience as in 451. Prereq: 451 or cons chrmn.

MUSEUM TECHNIQUES (College of Letters and Science)

Charles Long, Adviser.

The minor in Museum Techniques is interdepartmental and is administered by the department of Biology.

A minor in Museum Techniques consists of a minimum of 22 credits:

1. Biology 322.
2. Art 101 or 102; and 103 or 106; or Instructional Resources 231 and Art 101 or 102.
3. Either a. or b.
   a. Anthropology 290 and 340S.
   b. One or more of these: Biology 342, 360, 372, 374, 376, 377, 378.
4. The remaining credits to be selected from Anthropology 111; Biology 205, 379, 388; Communication 330, 400; Computer Science 106; Geology 300, 339; Instructional Resources 231; Natural Resources 374.

MUSIC (College of Fine Arts)

Donald Greene, chairman.

Special music scholarships are available to high school seniors with outstanding talent in musical performance. These scholarships are awarded each spring on the basis of special auditions held before members of the Music faculty. Information as to the date, time, and other details may be obtained from the chairman of the Music Department.

The following organizations are open to all students, on either a credit or an extra-curricular basis. **Band, Brass Choir, Jazz Band, Choir, Madrigals, Opera Workshop, Oratorio Chorus, University Singers, Orchestra, Small Ensembles.**

NOTE:

Music majors are required to register for two credits of large ensemble every semester (normally, a total of 16 credits, with exceptions for recital, student teaching, and transfer). Small ensembles are available for students who wish additional experience in the specialty literature. Permission to register, placement, and exceptions to the requirements are subject to the approval of the instructor and the chairman.

A. Bachelor of Music Degree.

All general requirements for the Bachelor of Music Degree in the College of Fine Arts will be completed along with the following credits in Music.

1. Theory, 20 credits: Music 110, 111, 112, 113, 210, 211, 212, 213. Placement examination required. Students with insufficient background must take Music 109 as prerequisite.
2. Theory electives, four credits: Music 313, 314, 315, 316, 413, 414.
3. Applied music, 12 credits. (Piano, when not the major applied area, must be taken for four credits or to grade III, whichever is reached first.) A proficiency grade of V must be earned on the major instrument before graduation.
4. Required Ensemble, 16 cr. (See NOTE, above.)
5. Music literature, 16 credits: Music 120, 121, 320, 321, and six credits of electives.
6. Music electives from at least two of the following groups, eight credits:
   a. Music 310, 410.
   b. Music 150 through 159.
   c. Music 160 through 177.

B. Bachelor of Music Degree in Applied Music.

All general requirements listed for the Bachelor of Music Degree in the College of Fine Arts will be completed with the following exception. The Natural Science requirements (VII) may be reduced to five credits with two acceptable units of high school science, or may be eliminated with three acceptable units of high school science. An acceptable unit is one year of work with a grade of C or better.

In addition to the general requirements, 80 to 82 credits of music are required in one of the following options:

1. **Piano.** Students admitted by audition only; they must reach a proficiency of Grade VIII in piano, and give a half recital in the junior year and a full recital in the senior year.
   a. Applied music, 28 credits: Music 160, four credits; music 260, 360 and 460, twenty-four credits.
   b. Theory, 26 credits: Music 110, 111, 112, 113, 210, 211, 212, 213; and six credits from 310, 313, 314, 315, 316, 317, 410, 413, 414. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
   c. Music literature and history, 16 credits: Music 120, 121, 320, 321, 420, 421.
   d. Piano pedagogy, two credits: Music 490.
   e. Required ensemble, 16 credits: Must include at least two credits in Music 128 or 129, for which eligibility will be determined by the instructor and the coordinator for accompanying. (See NOTE, above.)

2. **Organ.** Students admitted only by a piano audition before the organ and piano faculty; Grade IV proficiency in piano is required. A half-recital is required in the Junior year, and a full recital (including at least three memory selections) in the Senior year. Organ proficiency of Grade VIII is required for performance in the Senior recital and for graduation.
   a. Applied music, 28 credits: Music 161 (four credits); Music 261, 361, 461. (24 credits).
   b. Theory, 26 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 310, 311.
   c. Music Literature and History, and Hymnology, 18 credits; Music 120, 121, 320, 321, 324, 325, 328.
   d. Service Playing Techniques, two credits: Music 344.
   e. Required ensemble, 16 credits (choral area preferred). (See NOTE, above.)

3. **Voice.** Students admitted by audition only; by the end of the sophomore year they must achieve a proficiency grade of III in piano and IV in voice. A half recital is required in the junior year and a full recital in the senior year. A proficiency grade of VII in voice must be reached for presentation of the senior recital and graduation.
   a. Applied music, 28 credits: Music 162, four credits; Music 262, 362, and 462, twenty-four credits.
   b. Theory 26 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 317; and four credits from 310, 313, 314, 410, 413, 414. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
   c. Music literature and history, 16 credits: Music 120, 121, 320, 322, 323, 422.
   d. Vocal pedagogy, two credits: Music 491.
   e. Required vocal ensemble, 16 credits. (See NOTE, above.)

4. **String instrument.** Students admitted by audition only; they must reach a proficiency grade of III in piano and VII in the major instrument, and give a senior recital.
   a. Applied music, 28 credits: Music 163 through 166, four credits; Music 263 through 266, 363 through 366, and 463 through 466, twenty-four credits.
   b. Theory, 32 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 315, 317; and eight credits from 310, 313, 314, 316, 410. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
   c. Music literature and history, 12 credits: Music 120, 121, 320, 321, 425.
   d. String Pedagogy, two credits: Music 495.
   e. Required ensemble, 16 credits. (See NOTE, above.)

5. **Wind instrument.** Students admitted by audition only; they must reach a proficiency grade of III in piano, and give a senior recital.
   a. Applied music, 28 credits: Music 167 through 176, four credits; Music 267 through 276, 367 through 376, and 467 through 476, twenty-four credits.
   b. Theory, 32 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 315, 317; and eight credits from 310, 313, 314, 316, 410. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
   c. Music literature and history, 12 credits: Music 120, 121, 320, 321, 425.
   d. Brass or woodwind pedagogy, two credits: Music 492 or 493.
   e. Required ensemble, 16 credits. (See NOTE, above.)

6. **Percussion.** Students admitted by audition only; they must reach a proficiency grade of III in piano, a grade of VI in percussion, and give a senior recital.

a. Applied Music, 28 credits: Music 177, (four credits); Music 277, 377, and 477, (24 credits).
b. Theory, 30 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 315, 317, and eight credits from 310, 313, 314, 316, 410. Placement examination is required; students with insufficient background must take Music 109 as prerequisite.
c. Music Literature and History, 10 credits: Music 120, 121, 320, 321.
d. Percussion Pedagogy, two credits: Music 494.
e. Required ensemble, 16 credits. (See NOTE, above.)

7. **Theory/Composition.** Students in this program must maintain at least a B average in the first two years of music theory to be considered candidates for a degree in Theory/Composition; they must reach a proficiency grade of IV in piano and V in a major instrument.

a. Applied music, 14 credits: Music 160 through 177, 260 through 277, 360 through 377, and 460 through 477 in any area.
b. Theory, 44 credits: Music 110, 111, 112, 113, 210, 211, 212, 213, 310, 311, 313, 314, 315, 316, 410, 411, 413, 414. (Theory-oriented majors will elect a senior year project rather than Music 413 and 414.) Placement examination required; students with insufficient background must take Music 109 as prerequisite.
c. Class applied music, eight credits: Music 152 through 158.
d. Music literature and history, 10 credits: Music 120, 121, 320, 321.
e. Required ensemble, 16 credits. (See NOTE, above.)

C. Bachelor of Music Degree in Music Literature.

All general requirements listed for the Bachelor of Music Degree in the College of Fine Arts will be completed along with the following credits in Music:

1. Theory, 20 credits: Music 110, 111, 112, 113, 210, 211, 212, 213. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
2. Theory electives, four credits: Music 310, 313, 314, 315, 316, 413, 414.
3. Applied music (major), 12 credits: A proficiency grade of V must be earned on the major instrument before graduation. If piano is not the major instrument, a proficiency grade of IV on piano is required, in addition to the proficiency on the major instrument.
4. Required ensemble, 16 credits. (See NOTE, above.)
5. Music literature, 24 credits: Music 120, 121, 320, 321, 326, 327, 426, 427; and 101 or 323 or 428.

D. Bachelor of Music Degree for teacher certification.

All general requirements for the Bachelor of Music Degree in the College of Fine Arts will be completed along with the following credits in Music, Music Education, and Education.

*A proficiency of Grade V must be earned on the major instrument before student teaching. A piano proficiency of Grade IV is required for the vocal emphasis and a piano proficiency of Grade III is required in the instrumental emphasis.

**When piano is not the major applied area, it will be the minor applied area.

D.1. Instrumental Emphasis.

1. Education, 16 credits: Education 380, 381, 398.
2. Music Education, four credits: Music Education 324, 326.
3. Music, 62 credits:

a. Theory, 20 credits: Music 110, 111, 112, 113, 210, 211, 212, 213. Placement examination is required; students with insufficient background must take Music 109 as a prerequisite.
b. Orchestration, two credits: Music 315.
*c. Applied Music, 10 credits.
d. Music Literature, 10 credits: Music 120, 121, 320, 321.
e. Class Applied Music, 10 credits: Music 152 and 153 are required. Students with String emphasis may substitute, for 152 and/or 153 on a credit for credit basis, Music 495 or Music Education 384 or 385.
f. Conducting, five credits: Music 317, 385.
g. Required ensembles, 14 credits.
h. Music electives, five credits.

Students fulfilling the requirements for a Bachelor of Music Degree for teacher certification with Instrumental Emphasis may also receive **vocal certification** by completing the following courses:

Music 141, 241, (4 cr.); 162-262 (6 cr.); 180 (2 cr.)

Music Education 323, 325, 382 (2 cr. each).

In addition, a proficiency of Grade IV must be earned in piano, and a portion of the student teaching must be completed in vocal music.

D.2. Vocal Emphasis.

1. Education, 16 credits: Education 380, 381, 398.
2. Music Education, six credits: Music Education 323, 325, 382.
3. Music, 62 credits:

a. Theory, 20 credits: Music 110, 111, 112, 113, 210, 211, 212, 213. Placement examination is required; students with insufficient background must take Music 109 as a prerequisite.
b. Vocal Pedagogy, two credits: Music 491.
*c. Applied Music (major), 10 credits: Voice, piano, or organ.
**d. Applied Music (minor), six credits.
e. Music Literature, 10 credits: Music 120, 121, 320, 321.
f. Conducting, five credits: Music 317, 384.
g. Required ensemble (major), 14 credits.
h. Opera Workshop, two credits: Music 180.
i. Music in the Junior High School: Music Education 382.
j. Music electives, five credits.

Students fulfilling the requirements for a Bachelor of Music Degree for teacher certification with Vocal Emphasis may also receive **instrumental certification** by completing the following courses.

Music 142, 242; or 143, 243 (4 cr.); Music 163-168, 263-

268 (6 cr.); Class Applied Music (152 and 153 are required) (10 cr.).

Music Education 324, 326 (2 cr. each).

In addition, a proficiency of Grade IV must be earned in the instrumental applied area, and a portion of the student teaching must be completed in instrumental music.

E. A minor in Music consists of 26 credits, in addition to required ensemble, as follows:

1. Fourteen credits: Music 110, 111, 112, 113, 120, 121. Placement examination required; students with insufficient background must take Music 109 as prerequisite.
2. Six credits of Music 160 through 177 and 250 through 277.
3. Six credits of electives from the two following groups.
   a. Music 321, 323, 326, 327, 426, 427.
   b. Music 210, 211, 310.
4. In addition to the 26 credits specified in 1, 2, and 3, above, Music minors are required to earn four credits of large ensemble, selected from Music 140, 141, 142, 143, 180.

See also course listing under **Music Education** (next section.)

100. Appreciation and History of Music. 3 cr. Development of music, stressing the elements of music understanding and intelligent listening; form and design in composition. Not to be counted toward a Music major or minor, or the Bachelor of Music Degree.

101. American Music. 2 cr. From the time of the Pilgrims to the present, with special emphasis on Jazz and its influence on contemporary music.

102. Popular Music in America. 3 cr. The music of America's people, past and present: the great jazz and folk movements, Broadway musical theatre, film music; recording, publishing, and broadcasting. Not to be counted toward a music major or minor, or the Bachelor of Music Degree. A subtitle will be added each time the course is offered; it may be repeated any number of times, but the same subtitle cannot be repeated. May be applied toward the Humanities requirement in all curricula except for the Bachelor of Music Degree.

103. Diction for Singers. 2 cr. Lyric diction in English, Italian, German, and French.

109. Fundamentals of Music Theory. 2 cr. A survey of the basic elements of musical structure and communication (notation, rhythm, scales, intervals, chords), and their application toward developing vocal, manual, and aural musicianship skills. Three hours per week.

***110. Elementary Theory.** 3 cr. Review of theory fundamentals, introduction to part-writing, harmonic and structural analysis in the diatonic idiom, and supporting keyboard skills. Prereq: Placement exam; students with insufficient background must take 109.

***111. Elementary Theory.** 3 cr. Extension of written and keyboard musicianship skills in elementary techniques of modulation and chromaticism. Prereq: 110 and 112.

***112. Elementary Music Reading and Ear-Training.** 2 cr. Applied musicianship skills in support of, and concurrent with, Music 110. Prereq: Same as for 110.

***113. Elementary Music Reading and Ear-Training.** 2 cr. Extension of applied musicianship skills in support of, and concurrent with, Music 111. Prereq: 110 and 112.

*See note after **Music 213,** below.

120. Music Literature I. 2 cr. From the eighteenth century to the present time; required listening. Open to all students with previous experience in music.

121. Music Literature II. 2 cr. Symphonic literature, with emphasis on form and analysis; required listening. Open to all students with previous experience in music.

128-139. First Year Small Ensembles. Each 1 cr. May be repeated once for credit. Prereq: cons instr.

128—Studio Accompanying; **129**—Chamber Piano; **130**—Vocal; **131**—String; **132**—Flute; **133**—Clarinet; **134**—Saxophone; **135**—Mixed Woodwind; **136**—Low Brass; **137**—Mixed Brass; **138**—**Percussion; 139**— Jazz Band.

140-143. First Year Large Ensembles. Each 2 cr. May be repeated once for credit. Prereq: cons instr.

140—Oratorio Chorus; **141**—Choir; **142**—Orchestra; **143**—Band.

151-157. Class Applied Music. Each 2 cr. The elements of each medium taught by class participation and observation.

151—Voice; **152**—Violin; **153**—Strings; **154**—Double Reeds/Flute; **155**—Single Reeds; **156**—Brass; **157**—Percussion.

158. Group Piano. 1 or 2 cr. Piano through Level III; for the non-pianist music major; exemption, by audition, from any level or part of a level. Not to be counted toward a major or minor in Music, except the Bachelor of Music Degree for Teacher Certification — Vocal Emphasis.

159. Group Piano for the Elementary Teacher. 2 cr. Basic piano skills in music and rhythmic reading, and in the harmonization of simple melodies; for students in elementary education.

160-179. First Year of Applied Music. Each 2 cr. Prereq: Consent of chairman.

160—Piano; **161**—Organ; **162**—Voice; **163**—Violin; **164**—Viola; **165**—Cello; **166**—String Bass; **167**—Flute; **168**—Oboe; **169**—Clarinet; **170**—Bassoon; **171**—Saxophone; **172**—Trumpet; **173**—French Horn; **174**—Trombone; **175**—Baritone; **176**—Tuba; **177**—Percussion; **178**—Harp; **179**—Composition.

180. First Year of Opera Workshop. 1 cr. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit.

181. Accompanying. 2 cr. Basic techniques of accompanying, through the actual preparation of musical works for performance; participation in both class and student recitals. Prereq: cons instr.

182. Introduction to Jazz Improvisation. 1 or 2 cr. Elements of improvising in jazz sytles through playing. Prereq: Knowledge of chords and scales, or cons instr. 1 cr for first eight weeks; 2 cr for the full semester.

183. Improvisation of Music. 2 cr. Applied improvisation using the musical materials of jazz, aleatory, chance, and free improvisation. Prereq: Basic proficiency on a musical instrument, an understanding of improvisation in other media, or cons instr.

200. Music in Recreation. 2 cr. Recreational relation of music to

community activities; work with barbershop quartets, folk dancing, music for playgrounds, community singing and recreational instruments such as the ukuele and recorder. Prereq: cons instr. Not to be counted toward a Music major or minor or toward the Bachelor of Music degree.

210. Intermediate Theory. 3 cr. Part-writing, harmonic and structural analysis in the chromatic idiom, and supporting keyboard skills. Prereq: 111 and 113.

***211. Intermediate Theory.** 3 cr. Extension of theory and musicianship to the contemporary idiom; historical survey of musical form and style, with individual creativity and supporting keyboard skills. Prereq: 210 and 212.

***212. Intermediate Music Reading and Ear-Training.** 2 cr. The study of advanced applied musicianship skills in support of and concurrent with, 210. Prereq: 111 and 113.

***213. Intermediate Music Reading and Ear-Training.** 2 cr. The extension of advanced applied musicianship skills in support of, and concurrent with 211. Prereq: 210 and 212.

*These courses are offered in pairs, and in this sequence: Music 110 with 112; 111 with 113; 210 with 212; 211 with 213.

Students who fail or receive an incomplete in applied musicianship courses (Music 112, 113, 212, 213) may enroll for the next course in the sequence with permission of the theory faculty, provided the failed course is repeated, or the incomplete removed, in the concurrent semester.

230-239. Second Year Small Ensembles. Each 1 cr. May be repeated once for credit. Prereq: 130-139.

230—Vocal; **231**—String; **232**—Flute; **233**—Clarinet; **234**—Saxophone; **235**—Mixed Woodwind; **236**—Low Brass; **237**—Mixed Brass; **238**—Percussion; **239**—Jazz Band.

240-243. Second Year Large Ensembles. Each 2 cr. May be repeated once for credit. Prereq: 130-139.

240—Oratorio Chorus; **241**—Choir; **242**—Orchestra; **243**—Band.

260-279. Second Year of Applied Music. Students who are working toward the Bachelor of Music Degree in Applied Music receive 4 cr; other, 2 cr. May be repeated once for credit. Prereq: 160-178; and consent of chairman.

260—Piano; **261**—Organ; **262**—Voice; **263**—Violin; **264**—Viola; **265**—'Cello; **266**—String Bass; **267**—Flute; **268**—Oboe; **269**—Clarinet; **270**—Bassoon; **271**—Saxophone; **272**—Trumpet; **273**—French Horn; **274**—Trombone; **275**—Baritone; **276**—Tuba; **277**—Percussion; **278**—Harp; **279**—Composition.

280. Second Year of Opera Workshop. 1 cr. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit. Prereq: 180.

300. Music Here and Now. 3 cr. A study of some of the music performed on campus each semester with particular attention to the history of the composition, its forms, and the history of the form. Attendance at five concerts is required. Not to be counted toward a music minor or the Bachelor of Music degree.

310. Advanced Theory I. 3 cr. Contrapuntal styles of the eighteenth century including analysis and writing of examples. Prereq: 211.

311. Advanced Theory II. 3 cr. Contrapuntal styles of the sixteenth century including analysis and writing of examples. Prereq: 211.

313/513. Composition. 2 cr. Twentieth century compositional techniques with projects in short chamber forms, both vocal and instrumental. Prereq: 211 or cons instr.

314/514. Composition. 2 cr. Twentieth century compositional techniques with projects in large forms for chamber ensembles. Prereq: 211 or cons instr.

315. Orchestration I. 2 cr. Modern band and orchestra instruments in regard to their ranges, playing characteristics, physical properties, history, and advisable use. Prereq: 110.

316. Orchestration II. 2 cr. Arranging of music for small and large ensembles with the accent on written work to produce proper blend and color; correlated study of examples from the masters. Prereq: 315.

317. Conducting. 2 cr. Problems of organizing and coaching techniques for vocal and instrumental groups; experience in conducting the college ensembles. Prereq: 110.

320. History of Music. 3 cr. Major events and trends and their effects on the culture of the era, music in particular, from the Greeks to 1600.

321/521. History of Music. 3 cr. Same as 320, from 1600 to the present.

322. Choral Literature. 2 cr. Survey of literature for vocal ensembles with particular attention to mass, motet, and cantata.

323/523. Operas and Oratorios. 2 cr. Study of the great oratorios, masses, and other choral masterpieces from classics through the modern period.

324/524. Organ Literature I. 3 cr. Basic literature of the organ from the 14th to the late 17th century, including the important predecessors of J. S. Bach, their styles, and the organs for which they wrote. Prereq: Keyboard proficiency of grade 4.

325/525. Organ Literature II. 3 cr. Continuation of Music 324, with emphasis on the works of J. S. Bach through the contemporary period; style analysis by means of recordings and score study, with outside research assignments. (324 and 325 need not be taken in sequence.) Prereq: Keyboard proficiency of grade 4.

326/526. Baroque Period—1600 to 1750. 3 cr. Music idoms and styles of the period, with emphasis on the development and rise of new forms; music in the general culture of the period.

327/527. Classic Period—1750 to 1800. 3 cr. Same as 326, covering the Classic Period.

328. Hymnology. 2 cr. History, form, content, and purpose of the great hymns and canticles of the church, with emphasis on their liturgical significance and use in the present day service. Prereq: 320, 321.

330-339/530-539. Third Year Small Ensembles. Each 1 cr. May be repeated once for credit. Prereq: 230-239.

330/530. Vocal; **331/531.** String; **332/532.** Flute; **333/533.** Clarinet; **334/534.** Saxophone; **335/535.** Mixed Woodwind; **336/536.** Low Brass; **337/537.** Mixed Brass; **338/538.** Percussion; **339/539.** Jazz Band.

340-343/540-543. Third Year Large Ensembles. Each 2 cr. May be repeated once for credit. Prereq: 240-243.

340/540. Oratorio Chorus; **341/541.** Choir; **342/542.** Orchestra; **343/543.** Band.

344. Service Playing Techniques. 1 cr. Practical application of the problems in church service playing, with introduction to the performance in liturgical forms, anthem and oratorio accompaniments, piano adaptations for the organ, modulations, transposition, improvisation, and conducting from the console. May be repeated for a maximum of two credits. Prereq: 211; Organ proficiency of Grade IV.

359/379. Third Year of Applied Music. Students who are working toward the Bachelor of Music Degree in Applied Music receive 4 cr; others 2 cr. (junior and senior music students not majoring in Applied Music may register for 4 cr with the approval of the instructor and the department chairman.) Prereq: 260-279 and cons chrmn.

359. Harpsichord (prereq: Piano proficiency of Grade VII and cons instr; **360.** Piano; **361.** Organ; **362.** Voice; **363.** Violin; **364.** Viola; **365.** 'Cello; **366.** String Bass; **367.** Flute; **368.** Oboe; **369.** Clarinet; **370.** Bassoon; **371.** Saxophone; **372.** Trumpet; **373.** French Horn; **374.** Trombone; **375.** Baritone; **376.** Tuba; **377.** Percussion; **378.** Harp; **379.** Composition.

380. Third Year of Opera Workshop. 1 cr. Elements of producing, staging, directing and participation in opera, operetta, and musical comedy . May be repeated once for credit. Prereq: 280.

384. Advanced Choral Conducting and Rehearsal Techniques. 3 cr. Conducting and rehearsal techniques with emphasis on organization and stylistic considerations, and the development of technical proficiencies. Prereq: 317.

385. Advanced Instrumental Conducting and Rehearsal Techniques. 3 cr. Experience in selecting conducting, and rehearsing instrumental music suitable for use in elementary and secondary schools; emphasis on performance problems unique to band and orchestra instruments; required performance on secondary instruments. Prereq: 317

410. Advanced Theory III. 3 cr. Formal and harmonic analysis of nineteenth century styles. Prereq: 211.

411. Advanced Theory IV. 3 cr. Works from each of the following twentieth century styles: neoclassicism, expressionism, total-serialism, and indeterminancy. Prereq: 211.

413/613. Composition. 2 cr. Twentieth century compositional techniques with projects in multisectional forms for large ensembles. Prereq: 211 or cons instr.

414/614. Composition. 2 cr. Twentieth century compositional techniques with projects in improvisation and experimental media. Prereq: 211 or cons instr.

415/615. Band Arranging Techniques. 2 cr. Special attention to arranging needs of high school wind ensembles with particular emphasis on production numbers, solo backgrounds, small ensembles, and accompaniments.

416/616. Choral Arranging Techniques. 2 cr. Arranging for standard adult and adolescent choral groups, in the popular and serious idioms, with special attention to the needs of high school and specialty organizations. Prereq: Open only to music majors; or cons instr.

417/617. Jazz Arranging Techniques. 2 cr. Study of jazz and commercial arranging styles for the public school and professional organizations, with opportunities for performance in jazz ensembles. Prereq: Open only to music majors; or cons instr.

420/620. Piano Literature I. 3 cr. Keyboard literature from 1700 to 1825 with emphasis on major composers and their contributions to this field.

421/621. Piano Literature II. 3 cr. Same as 420, covering the period from 1825 to the present.

422/622. Voice Literature. 2 cr. A survey and study of solo vocal literature for the training of high school and beginning college students.

426/626. Romantic Period—1800 to 1890. 3 cr. Idioms and styles of the period, with emphasis on the development and rise of new forms; music in the general culture of the period.

427/627. Post-Romantic Period—1890 to the Present. 3 cr. Same as 426, covering the Post-Romantic Period.

428/628. Music Cultures of the Pacific, the Near East, and Asia. 3 cr. Basic kinds of music and musical instruments found in the major oriental civilizations and in the island cultures of the Eastern Hemisphere.

430-439/630-639. Fourth Year Small Ensembles. Each 1 cr. May be repeated once for credit. Prereq: cons instr.

430/630. Vocal; **431/631.** String; **432/632.** Flute; **433/633.** Clarinet; **434/634.** Saxophone; **435/635.** Mixed Woodwind; **436/636.** Low Brass; **437/637.** Mixed Brass; **438/638.** Percussion; **439-639.** Jazz Band.

440-443/640-643. Fourth Year Large Ensembles. Each 2 cr. May be repeated once for credit. Prereq: cons instr.

440/640. Oratorio Chorus; **441/641.** Choir; **442/642.** Orchestra; **443/643.** Band.

459-479. Fourth Year of Applied Music. (Same description as for 359-379) Prereq: 359-759 and cons chrmn.

459. Harpsichord (prereq: Piano proficiency of Grade VII and cons instr.) **460.** Piano; **461.** Organ; **462.** Voice; **463.** Violin; **464.** Viola; **465.** 'Cello; **466.** String Bass; **467.** Flute; **468.** Oboe; **469.** Clarinet; **470.** Bassoon; **471.** Saxophone; **472.** Trumpet; **473.** French Horn; **474.** Trombone; **475.** Baritone; **476.** Tuba; **477.** Percussion; **478.** Harp; **479.** Composition.

480. Fourth Year of Opera Workshop. 1 cr. Producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit. Prereq: 380.

490. Piano Pedagogy. 2 cr. Effective skills in private and class piano, with discussion and performance of piano literature; observation of class and private instruction. Prereq: Piano proficiency IV.

491. Voice Pedagogy. 2 cr. Vocal teaching methods; observation of class and private instruction. Prereq: Voice proficiency Grade IV.

492. Woodwind Pedagogy. 2 cr. Methods of teaching woodwind instruments with special attention to specific problems of each instrument.

493. Brass Pedagogy. 2 cr. Methods of teaching brass instruments with special attention to specific problems of each instrument.

494. Percussion Pedagogy. 2 cr. Literature and reference material covering the field of percussion, including various method books, textbooks, and publisher sources. Prereq: Percussion proficiency Grade IV.

495. String Pedagogy. 2 cr. Techniques employed by master string teachers of the past and present, including literature and music available for string instruction at all levels, in both private and class situations. Prereq: Performance grade IV, and/or cons instr.

499. Special Work. Upper class students majoring or minoring in Music, or those working toward a Bachelor of Music degree may by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project in theory, conducting, composition, orchestration, or music history.

711. Theory. 3 cr. Structure and materials of music, in which analysis is related to the performance and interpretation of music; musical materials drawn from small forms, 1650-1900.

712. Form and Analysis. 3 cr. Musical forms from all periods, with emphasis on structural analysis.

722. Mass, Motet, Cantata. 2 cr. Major choral forms; their beginnings and development with careful evaluation of representative works.

760-779. Artist Course in Applied Music. Each 2 cr. Opportunity for the gifted student to expand his repertoire and develop his musicianship.

760. Piano; **761.** Organ; **762.** Voice; **763.** Violin; **764.** Viola; **765.** 'Cello; **766.** String Bass; **767.** Flute; **768.** Oboe; **769.** Clarinet; **770.** Bassoon; **771.** Saxophone; **772.** Trumpet; **773.** French Horn; **774.** Trombone; **775.** Baritone; **776.** Tuba; **777.** Percussion; **778.** Harp; **779.** Composition.

796. Independent Study. 1 to 3 cr. Planned study designed to enrich and supplement the student's preparation in his area of specialization.

MUSIC EDUCATION

323. Music Teaching Techniques in the Elementary School: Vocal. 2 cr. Theory and application of effective vocal teaching skills in the primary and intermediate grades; aims and content of public school music in relation to general curriculum; classroom observations. Prereq: Music 110; open only to Music majors and minors.

324. Music Teaching Techniques in the Elementary School: Instrumental. 2 cr. Theory and application of effective instrumental teaching skills in the primary and intermediate grades, and their relation to public school music and the general curriculum; classroom observation. Prereq: Music 110; open only to Music majors and minors.

325. Music Teaching Techniques in the Secondary School: Vocal. 2 cr. Methods, materials, and curricular organization of vocal music in the high school, and its teaching strategies. Prereq: open only to Music majors and minors.

326. Music Teaching Techniques in the Secondary School: Instrumental. 2 cr. Methods, materials, and curricular organization of instrumental music in the high school, and its teaching strategies. Prereq: 110; open only to Music majors and minors.

381. Music in the Elementary School. 3 cr. Techniques and theory of effective teaching skills in the primary and intermediate grades, including the fundamentals of music as applicable to each grade as studied; aims and content of public school music in relation to general curriculum. Required in the Primary and Intermediate curricula. Not to be counted toward a Music major or minor. Prereq: Music 109 and 159, or exemption by examination.

382. Music in the Junior High School. 2 cr. Theory and application of effective teaching skills in the junior high school; aims, methods, materials, planning and testing.

383. Music Education Workshop. 2 cr. Review of techniques in music education for the classroom teacher, with special emphasis any one semester in one of the following: music reading, rhythmic activities, creativity, listening activities, and the examination of materials.

384/584. Pedagogy of Suzuki Talent Education. 2 cr. Teaching skills required for individual, class, or group lessons based on Suzuki Talent Education with special attention to specific methods of developing musical ability in 3-18 year old students using audio-visual materials, Suzuki literature, discussion, performance, and observation.

385/585. Suzuki Workshop. 2 cr. Techniques and practical applications of the Suzuki string method. May be repeated once for a total of four credits. Two sessions weekly and practical experience in Suzuki instruction. Prereq: 384 or cons instr.

424/624. Survey of Choral Literature. 2 cr. Selection and reading of solo and ensemble literature for the junior and senior high school student; for the experienced teacher.

425/625. Survey of Instrumental Literature. 2 cr. Selection and reading of solo and ensemble literature for the junior and senior high school student; for the experienced teacher.

426/626. Literature of Suzuki Talent Education. 3 cr. Survey of Suzuki performance and teaching literature, with special emphasis on graded performance and technical materials.

485/685. Band Pageantry. 2 cr. Marching and formation techniques for the street, parade, and the sport event.

486/686. Theory and Practice of Instrumental Repair, Adjustment, Tuning, and Maintenance. 2 cr. Beginning and intermediate work with use of tools for woodwind, brass, and percussion.

710. Theory for Junior and Senior High Schools. 3 cr. Latest teaching approaches for music theory including teaching machines, tape machine learning, programmed learning, and research applications, laboratory and reading projects.

723. Music Literature for Junior and Senior High Schools. 3 cr. The selection and presentation of classic and modern literature for young people; styles and form and their implications for teaching.

750-759. Pedagogical Techniques for Music Teachers. Each 2 cr. Designed to assist the experienced teacher.

750—Piano; **751**—Voice; **752**—Violin; **753**—Low Strings; **754**—Flute; **755**—Double Reeds; **756**—Clarinet; **757**—Trumpet; **758**—Low Brass; **759**—Percussion.

781. New Developments in Elementary Music. 3 cr. Exploring the Kodaly and Orff approaches to classroom music and their relation to current research.

783. Problems in Curriculum and Supervision. 3 cr. Working with curriculum as it relates to a total school program; for the experienced teacher.

784. Rehearsal Techniques: Choral. 3 cr. Problems related to the organization and preparation of ensembles with particular emphasis to techniques of the rehearsal.

785. Rehearsal Techniques: Instrumental. 3 cr. Problems related to the organization and preparation of ensembles with particular emphasis to techniques of the rehearsal.

786. Seminar in Music Education I. 3 cr. Aesthetic and philosophical foundations of music education; emphasis on current trends in educational thought and their implications for music education.

787. Seminar in Music Education II. 3 cr. Psychological foundations of music education; emphasis on the development of teaching objectives and didactic strategies.

788. Seminar in Music Education III. 3 cr. Aesthetics, philosophical, and practical foundations of Suzuki talent education, its techniques and teaching objectives.

789. Introduction to Research. 2 cr. Methodology and elementary statistics as they apply to research in music education.

799. Thesis. 2 to 6 cr.

NATURAL RESOURCES, College of

Daniel O. Trainer, Dean; James G. Newman, Assistant to the Dean.

The College of Natural Resources offers courses in Forestry, Natural Resources, Soils, Water, and Wildlife. These courses are described under the appropriate headings in the following pages.

Majors and/or minors are offered in Environmental Law Enforcement, Forestry, Outdoor Education, Resource Management, Soil Science, Water Resources, and Wildlife. Students in the majors must meet the general degree requirements of the College of Natural Resources. In addition to the general requirements, the following should be noted:

1. Most of the courses in the College of Natural Resources numbered 300 and above require a student to have completed the introductory courses in Natural Resources, Forestry, Soils, Water, and Wildlife, as well as the Summer Camp courses. It is therefore important that a student complete the required introductory courses and summer camp before the beginning of the first semester of the junior year.
2. The courses taken to fulfill a specific major (such as Wildlife-Game Management) must be approved by the student's adviser prior to graduation. It is therefore imperative that each student work with an adviser in choosing his course sequence.

To be accepted as a major, to be retained as a major, and to be approved for graduation, the student must have a minimum grade point ratio of 2.00 in all courses taken within the major or minor (including collateral courses) regardless of a declaration of academic bankruptcy. The department chairman may allow exceptions to the above on a conditional basis.

The Master of Science Degree - Natural Resources is described in the section of the catalog on THE GRADUATE COLLEGE.

ENVIRONMENTAL LAW ENFORCEMENT

A **minor in Environmental Law Enforcement** is available to all majors in the College of Natural Resources, and to others with the approval of the Dean of the College. It is designed to provide a law enforcement background which can be utilized by students with a major in resource management.

The minor consists of 22 credits in the following courses: Natural Resources 393 (3 cr), and 473; Philosophy 315, 380; Physical Education 252; Political Science 212, 313; Sociology 230 (101 or 102 is prereq).

ENVIRONMENTAL STUDIES

The minor in Environmental Studies is described earlier in this section of the catalog under that heading, and is administered by the College of letters and Science.

FORESTRY

A. A major in Forestry consists of:

1. Forty-one credits including Forestry 120, 321, 322, 332, 425, 426, 432; Natural Resources 170, 372; Soils 260; Water 180; Wildlife 140; seven credits selected from the following professional forestry electives: Forestry 324, 325, 333, 424, 427, 428, 429, 440, 493; Geography 377; Natural Resources 371, 473, 474, 490; Paper Science 101; Soils 361.
2. Six credits of Summer Camp courses: Forestry 320; Soils 360; Wildlife 340.
3. Completion of one of the three collateral emphases:

   a. **Forest Management:**
   Biology 130, 160, 351; Chemistry 105 and 106, or 115 and 116; Economics 200; Mathematics 110 or 224; and at least four credits from the following: Biology 205; Chemistry 220, 240; Computer Science 106; Geology 104; Mathematics 355; Natural Resources 171; Physics 201.

   b. **Forest Administration:**

   b.1. Biology 130, 160; Business 320; Chemistry 101 or 103 or 105 or 115; Economics 200, 201; Mathematics 105 or 107 or eligibility for 110.

   b.2. At least six credits from this group: Communication 211, 217, 330, 335, 336, 365, 400; English 342, 350.

   b.3. At least six credits from this group: Business 330, 370, 380; Economics 311, 315, 341, 345, 361, 365, 453; Political Science 250, 304, 320, 322, 342, 351, 354, 356; Psychology 270, 320; Sociology 311, 312, 356, 359.

   c. **Urban Forestry:**

   c.1. Forestry 324, 333, 424. (These courses may be used to meet the forestry elective requirements listed above in 1.)

   c.2. Biology 130, 160, 351; Chemistry 105 or 115; Economics 200; Mathematics 105 or 107 or eligibility for 110; Wildlife 454; Natural Resources 374.

c.3. The following are suggested to add to your understanding of the urban environment and to meet some Social Science, Humanities, and elective requirements: Communication 210, 335, 400; Drama 132; Geography 373; Philosophy 280; Political Science 241, 341, 354, 356; Psychology 200; Sociology 101, 356; Forestry 427.

B. A minor in Forestry consists of:

1. Forestry 120, 322, 332, 425, and 432.
2. Eight credits selected from the following: Forestry 320, 321, 324, 325, 426, 427, 428, 493; Natural Resources 372; Soils 361.

By using the Forestry minor to complement an appropriate major, the student may prepare himself for one of the various fields within forestry; e.g., with Resource Management for forest and park land management; with Business Administration for preparation in industrial forestry; with Biology for preparation in forest genetics, forest entomology and pathology; with Soils for preparation in forest soil science, etc.

120. Introduction to Forest Resources. 3 cr. Introduction to the forest resources of the United States with special emphasis on the role of forestry in historic and current events; elementary mensuration; management techniques. Two hrs lec, two hrs lab per week.

320. Forest Measurement and Surveying. 2 cr. See Summer Camp Program, which is described under Natural Resources.

321/521. Dendrology. 3 cr. Identification, classification, distribution, and economic importance of the principal forest trees of the United States. Two hrs lec, two hrs lab per week. Prereq: Summer Camp or cons instr.

322/522. Forest Mensuration. 3 cr. Measurement of forest stands, products, and growth, including the construction and use of appropriate instruments, tables, and surveys. Two hrs lec, three hrs lab per week. Prereq: Math 105 or 107 or eligibility for 110; Summer Camp or cons instr.

324/524. Forest Protection I: Abiotic Agents. 2 cr. Analysis of non-living agents, such as forest fires, air pollutants, weather phenomena and soil condition, and the damage they do to trees; principles of detection, prevention, and control. Prereq: Summer Camp or cons instr.

325/525. Principles of Range Management. 3 cr. Technical study of sustained yield management practices applicable to rangelands with consideration of proper stocking and grazing systems and methods of range surveying. Prereq: Biol 130; Soils 260; Summer Camp or cons instr.

332/532. Silvics. 3 cr. Ecological foundations of silviculture with reference to forest site factors; influence of forest on the environment; growth and development of trees and stands; origin, development, and classification of forest communities. Two hrs lec, three hrs lab per week. Prereq: 320; Summer Camp or cons instr.

333/533. Urban Forestry. 3 cr. Management of trees and other vegetation in metropolitan areas to enhance the urban environment. Prereq: 332 or cons instr.

424/624. Forest Protection II: Pathology. 2 cr. Identification, ecology and control of important disease organisms affecting forest and shade trees or wood in service. One hr lec, three hrs lab per week. Prereq: 321; Biol 130; Summer Camp or cons instr.

425/625. Forest Management and Finance. 3 cr. Principles of organizing and regulating forest properties; valuation and investment analysis. Two hrs lec, two hrs lab per week. Prereq: 321, 322, 332, 432; Summer Camp or cons instr.

426/626. Forest Protection III: Entomology. 3 cr. Identification, ecology and control of important forest, shade tree and structural insects, with emphasis on principles of integrated control. One hr lec, four hrs lab per week. Prereq: 321; Biol 160; Summer Camp or cons instr.

427/627. Recreational Use of Forests and Parks. 3 cr. Principles and methods involved in the development and administration of recreational and interpretive programs on recreational lands. Two hrs lec, two hrs lab per week. Prereq: Summer Camp or cons instr.

428/628. Wood Technology. 3 cr. Structure of wood; identification of native woods by microscopic and macroscopic features; physical and chemical properties; uses. Two hrs lec, two hrs lab per week. Prereq: 321; Summer Camp or cons instr.

429. Forest Products. 2 cr. Source, character, and methods of manufacture of natural and derived forest products. Prereq: Summer Camp or cons instr.

432/632. Silviculture. 2 cr. Principles governing establishment, treatment, and control of forest stands; natural and artificial regeneration systems; intermediate cuttings, and cultural operations with emphasis on the principal forest types of temperate North America. One hr lec, three hrs lab per week. Prereq: 332; Summer Camp or cons instr.

440/640. Forest Tree Improvement. 3 cr. Distribution of genetic variation in forest tree populations; introduction, selection, progeny testing, species hybridization, and polyploidy to obtain superior tree populations. Prereq: 321, 322, 432; or cons instr.

493/693. Forestry Field Seminar. 1 or 2 cr. See Field Seminar Program, which is described under Natural Resources.

499. Special Work. Upper class students in Forestry may, by agreement with the Assistant to the Dean of the College of Natural Resources, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for every week, or its equivalent, devoted exclusively to a special project.

730. Tree Physiology. 4 cr. The principle physiological processes of trees including synthesis and use of foods, and growth phenomena. Prereq: Biol 551 and Chem 220 or equiv.

NATURAL RESOURCES

The major in Resource Management is described under that heading later in this section.

The following courses are offered in **Natural Resources:**

090/390. Nature Interpretation in Central Wisconsin. 0 or 2 cr. (A written report involving approximately thirty hours of research and study outside of class is required for credit in the course.) Firsthand acquaintance with the major ecological areas of central Wisconsin, key plants and animals, their interrelationships, and the effect of man's activities. Morning on-campus, afternoon field trips on six Saturdays during the fall semester (8:30 a.m. to 4:30 p.m.)

091/391. Nature Interpretation Agencies, Areas and Issues. 0 or 2 cr. (A written report involving approximately thirty hours of research and study outside of class is required for credit in the course.) A panoramic survey of the major public agencies, private organizations, interpretive areas, books and periodicals involved in conservation and nature interpretation. Mornings

on-campus, afternoon field trips Monday through Saturday of the week preceding Summer Session (8:00 a.m. to 4:00 p.m.), plus a final weekend field trip.

092/392. Nature Interpretation Activities. 0 or 2 cr. (A written report involving approximately thirty hours of research and study outside of class is required for credit in the course.) Four Saturdays during the second semester, plus one week including final weekend field trip during the week preceding Summer Session. Field studies will simulate a school camp; and intensive program of activities and crafts for nature study and outdoor recreation.

170. Introduction to Natural Resources. 1 cr. The integrated management of natural resources and their role in man's natural, social, and economic welfare. Open to all students.

171. Elementary Surveying. 3 cr. Use of the tape, compass, level, and transit; U.S. land system; simple maps, traverse closure, and area computations; profiles, stadia plane table. One hr lec, six hrs lab per week. Prereq: Math 105 or equivalent training in trigonometry.

291. Internship in Natural Resources. 1 to 6 cr. Supervised training program with a cooperating off-campus agency; work experience, supervision, and evaluation of individual progress. May be repeated, but no more than six total credits of 291 and 491 will be allowed. Prereq: Consent of the Dean, College of Natural Resources.

370/570. Resource Management for Environmental Quality. 3 cr. Natural, social, and economic factors influencing the quality of man's environment; fulfills the requirements for those who need a conservation course for teacher certification. Not open to majors or minors in the College of Natural Resources. Two hrs lec, two hrs lab per week.

371/571. Conservation Administration. 2 cr. Administrative principles and organizational structure of private, local, state, and federal conservation agencies.

372/572. Resource Economics. 3 cr. Fundamental economics concepts and their application to resource use; traditional and revised theories of land use; problems of land policy management.

373/573. Agronomy. 3 cr. Grain and forage crops, with emphasis on management practices. Two hrs lec, two hrs lab per week. Prereq: Summer Camp or cons instr. Purchase of a $3.50 laboratory manual is required.

374/574. Environmental Interpretation Methods. 3 cr. Methods for revealing the significance of natural and human history to visitors at parks, recreation areas, museums and other institutions; verbal and non-verbal methods explored in relation to interpretive signs, trails, exhibits, and visitor centers; philosophical and theoretical aspects of interpretation.

380. Ecology of the Wisconsin River. 6 cr. The historical, climatological, geological, hydrological, and limnological aspects of the Wisconsin River; a case study of the effects of these factors on policies and programs involving uses of the river valley.

390. Nature Interpretation in Central Wisconsin. 2 cr. See 090.

391. Nature Interpretation Agencies, Areas, and Issues. 2 cr. See 091.

392. Nature Interpretation Activities. 2 cr. See 092.

393. Environmental Law Enforcement. 1 to 3 cr. Environmental law enforcement practices including such subject areas as search, seizure, ballistics, criminal codes, evidence collection and preservation. A subtitle will be added to the title to describe the area(s) each time the course is offered. May be repeated under different subtitles up to a total of three credits. Offered in mini-session only. Prereq: cons instr.

473/673. Resource Policy and Law. 3 cr. Legislation pertaining to natural resources with consideration given to the need for, purpose of, and implementation of such laws.

474/674. Integrated Resource Management. 3 cr. Integrated management of resources with emphasis on combinations of principles prerequisite to the formulation and implementation of natural resources policy; special attention to current issues, problems, trends. Prereq: Forestry 120, Soils 260, Water 180, Wildlife 140.

475/675. International Environmental Studies Seminar. 3 or 6 cr. See Field Seminar Program.

480/680. Urban and Regional Planning Practice. 3 cr. The history and analysis of major current problems facing public and quasi-public planning agencies; review of past, current and possible solutions in area resource management.

490. Natural Resources Seminar. 1 cr. Individual and group investigation of current problems in conservation. Prereq: Sr st for majors or minors in Nat Res.

491. Internship in Natural Resources. 1 to 6 cr. Supervised training program with a cooperating off-campus agency; work experience, supervision, and evaluation of individual progress. May be repeated, but no more than six total credits of 291 and 491 will be allowed. Prereq: Consent of the Dean, College of Natural Resources.

499. Special Work. Upper class students majoring or minoring in the College of Natural Resources, who have demonstrated above average academic ability, may, by agreement with the Assistant to the Dean of the College of Natural Resources, arrange for special independent study in their interest area, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

781. Problems in Urban and Regional Planning. 3 cr. Practical application of urban and regional planning theory to specific and representative case studies.

790. Ecological Basis for Planning and Design. 3 cr. Ecological principles, relationships and interaction between natural and man-made elements of the environment; critical view of various resource planning projects at local, state and national levels. Prereq: cons instr.

792. Park Administration. 3 cr. Parks and related areas and influential historical, economic, and social factors; philosophy, history and current developments in recreational area and park administration at local, state, regional and national levels, as well as private and commercial enterprises.

793. Principles and Practice of Environmental Interpretation. 3 cr. Principles and techniques involved in programs employed to communicate the values of natural history and cultural features to visitors; planning, construction, and use of interpretive devices, exhibits, museums, and related outdoor facilities.

795. Graduate Seminar. 1 cr. Reports and discussions of recent published research in resource management and related fields.

796. Independent Study. 1 to 3 cr. Advanced work on a specific natural resource problem.

797. Research Methods, Design and Analysis. 3 cr. Principles and methods regarding design and management of natural resources experimental investigations, statistical analysis of

data, and preparation of research outlines. Prereq: cons instr.

799. Thesis. (Not on Plan B.) 2 to 6 cr.

Field Seminar Program

The Field Seminar Program is designed to acquaint students with research and management activities not available to them through campus and summer camp experiences. The program will be conducted as extended tours of areas and facilities pertinent to the appropriate resource discipline.

Forestry 493/693. Forestry Field Seminar. 1 or 2 cr. (For one credit, the course will be taken on a Pass-Fail basis; for two credits, the completion of a comprehensive report on the field experiences is required.) Spring vacation tour through areas selected for intensive forest management and research facilities differing from those available in the upper Midwest; observation of silvicultural practices, managerial programs, and wood utilization techniques. Prereq: cons instr.

Natural Resources 475/675. International Environmental Studies Seminar. 3-6 cr. Study in a selected region of the world which will survey environmental problems and programs of the area; comparisons with U.S. environmental and natural resource issues. Prereq: cons instr.

Soils 493/693. Soils' Field Seminar. 1 or 2 cr. For one credit, spring vacation tour through areas selected for soils varying from those of cool, humid zone; investigation of soil genesis and morphology, land forms, vegetative types, and soil management practices. Prereq: cons instr.

Wildlife 493/693. Wildlife Field Seminar. 1 or 2 cr. For one credit, the course may be taken on a pass-fail basis; for two credits, the completion of a comprehensive report on the field experience is required. Prereq: cons instr.

Summer Camp Program

Forestry 320. Forest Measurement and Surveying. 2 cr. Field practices in the application of forest measurement and surveying techniques.

Soils 360. Techniques of Soil and Water Conservation. 2 cr. Field practices in the application of various soil and water conservation techniques, including land use classification, various methods of erosion control, and public relations measures.

Wildlife 340. Techniques in Fish and Wildlife Management. 2 cr. Field practices in the application of various fish and wildlife management techniques.

OUTDOOR EDUCATION

A minor in Outdoor Education consists of 22 credits selected from the following lists. At least 10 of these must be outside the student's major field or emphasis.

I. Required core courses, 8-11 credits: **Biology** 204 or 205 (Ecology); **Education** 350 (Outdoor Education) or **Special Studies** 310 (Outdoor Education Workshop), **Physical Education** 241 (Camp Leadership) or 343 (Group Games and Social Recreation).

II. Additional courses selected from the following, so that the credits in I. and II. total at least 22, and the courses elected in II. are from at least two different fields.

Anthropology 111 (Prehistoric Man), 112 (Man, Culture, and Society); **Art** 103 (Drawing,) 231 (Water Color), 234 (Oil Painting), 241, 342 (Indian Crafts); **Astronomy** 311 (Introduction); **Biology** 244 (Trees and Shrubs), 342 (Plant Taxonomy), 372 (Vertebrates), 377 (Ornithology), 379 (Field Zoology); **Communication** 330 (Promotional), 335 (Speech-Making), 336 (Small Group); **Drama** 130 (Interpretive Reading), 383 (Creative Dramatics), 484 (Children's Theatre); **Education** 339 (Techniques in Social Studies), 372 (Workshop— Conservation); **English** 250 (Intermediate Composition), 324 (Romantic Movement), 329 (American Renaissance); **Forestry** 427 (Recreational Use of Forests and Parks); **Geography** 101, 102 (Earth Science), 211 (Wisconsin), 352 (Landforms), 353, 354 (Climatology); **History** 389 (Wisconsin); **Instructional Resources** 331 (Audio-Visual); **Music** 200 (Music in Recreation); **Natural Resources** 170 (Introduction), 370 (Management for Environmental Quality); **Physical Education** 142 (Community Recreation), 213 or 214 (Individual Sports), 241 (Camp Leadership), 253 (First Aid Instructors), 343 (Group Games).

PAPER SCIENCE

The major in Paper Science is administered by the College of Natural Resources. It is described under **Paper Science** later in the catalog.

RESOURCE MANAGEMENT

A. **A major in Resource Management** consists of:

1. Twenty-seven credits from the College of Natural Resources including Forestry 120; Natural Resources 170, 372, 474, 490; Soils 260; Water 180; Wildlife 140.
2. a. **Teacher certification** option: 38 or 39 credits in collateral courses including Biology 130, 160 205; Chemistry 105 or 115; Geography 101 or 103 or Geology 104; Mathematics 105 or 107 or eligibility for 110; and 12 credits from the following: Economics 204; History 366; Natural Resources 371; Philosophy 380; Political Science 304; Sociology 260.
   b. **Non-teaching** option: 31 or 32 credits in collateral courses including Biology 130, 160, 205; Chemistry 105 and 106, or 5 and 116; Geography 103 or Geology 104; Mathematics 105 or 107 or eligibility for 110.
3. Summer Camp courses including: Forestry 320; Soils 360; Wildlife 340.

To be accepted as a major, to be retained as a major, and to be approved for graduation, the student must have a minimum grade point ratio of 2.00 in all courses taken within the Resource Management major (this includes collateral courses) regardless of a declaration of academic bankruptcy. The department chairman may allow exceptions to the above on a conditional basis.

A minor in Resource Mangement consists of 22 credits including Forestry 120, Natural Resources 474, Soils 260, Water 180, Wildlife 140; the remaining credits must be elected from courses offered by the College of Natural Resources numbered 300 and above.

SOIL SCIENCE

A. **A major in Soil Science** consists of:

1. Thirty credits including Natural Resources 170, 372, 490; Forestry 120; Water 180; Wildlife 140; Soils 260, 362, 364, 461, 465.

2. Collateral courses: Biology 130, 160, 351; Chemistry 105 and 106 (or 115 and 116), 220, 240; Geology 104, and one additional 300- or 400-level geology or physical geography course; Mathematics 105 or 107, and 110 or 224; Physics 201, 202.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

B. A minor in Soil Science consists of 22 credits with at least 15 credits of Soils courses and includes:

1. Soils 260, 362.
2. At least two of the following: Soils 364, 365, 465 (majors in Forestry may substitute Soils 361 for one of these).
3. The remaining credits to be selected from the following: Soils 263, 360, 361, 461, 493; Forestry 325, 332; Geography 352, 379; Geology 300, 370; Natural Resources 373; Geography 377 or Natural Resources 377.

The Soil Science minor satisfies the minimum civil service requirements for soil scientist positions (classification and mapping) in Federal agencies such as the Soil Conservation Service and the Forest Service.

260. Introduction to Soil Resources. 4 cr. Program and development of soil with emphasis on physical, chemical, and biological properties and their relationship to soil fertility. Three hrs lec, two hrs lab per week. Prereq: Chem 105 or 115, or con reg. Purchase of a laboratory manual is required.

263. Soil Profile Description Writing. 1 cr. The preparation of morphological descriptions of soil profiles. Prereq: 260 and cons instr.

360. Techniques of Soil and Water Conservation. 2 cr. See Summer Camp Program under Natural Resources.

361/561. Forest Soils. 3 cr. Properties of soils in relation to silviculture and forest nursery management. Two hrs lec, two hrs lab per week. Prereq: Summer camp or cons instr.

362/562. Soil Genesis and Morphology. 3 cr. Geologic origin, characteristics, and taxonomic grouping of soils, together with emphasis on survey methods and mapping procedures. Two hrs lec, two hrs lab per week. Prereq: Summer Camp or cons instr.

364/564. Soil Analysis. 3 cr. Methods of determining physical and chemical properties of soils. One hr lec, four hrs lab per week. Pereq: Chem 116 or 106; Summer Camp or cons instr.

365/565. Interpretations for Land Use Planning. 2 cr. Use of soil surveys in making interpretations for land use allocations and in evaluating soil susceptability to erosion and other physical disturbances; field methods of determining engineering classifications of soil. One hr lec, three hrs lab per week. Prereq: 260, or cons instr.

461/661. Soil Management. 3 cr. Principles and practices of soil conservation and soil fertility. Two hrs lec, two hrs lab per week. Prereq: Summer Camp or cons instr.

465/665. Soil Physics. 3 cr. Physical properties of soils and methods of determination, with emphasis on influences on plant growth. Two hrs lec, two hrs lab per week. Pereq: 260; Math 107; Physics 103; Summer Camp or cons instr.

493/693. Soils Field Seminar. 1 cr. Spring vacation tour. See Field Seminar Program under Natural Resources.

499. Special Work. Upper class students in Soil Science may, by agreement with the Assistant to the Dean of the College of Natural Resources, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. Prereq: Summer Camp or cons instr.

760. Advanced Forest Soils. 3 cr. Advanced topics in the relationships between soil properties and silviculture, forest hydrology and nursery management. Prereq: 361/561 or cons instr.

762. Advanced Soil Genesis, Mineralogy and Classification. 3 cr. Processes and theories of soil information; principles and systems of soil classification. Prereq: 362/562 or cons instr.

WATER RESOURCES

A. A major in Water Resources, Management Option, consists of:

1. Thirty-one credits in the College of Natural Resources including Forestry 120; Natural Resources 170, 372, 473 or 475, 490; Soils 260; Water 180, 382, 480, 481, 483; Wildlife 140.
2. Thirty-eight credits in collateral courses: Biology 130, 160, 205; Chemistry 105 and 106, or 115 and 116; Economics 200, 201; Geography 103 or Geology 104; Mathematics 105 or 107 or 224.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

B. A major in Water Resources, Science Option, consists of:

1. Twenty-six credits in the College of Natural Resources including Natural Resources 170, 490; Soils 260, and 364 or 465; Water 180, 382, 480, 481, 482, 483.
2. Fifty-four to 58 credits in collateral courses: Biology 130, 160, 205, 351; Chemistry 115, 116, 220, 240; Geography 103 or Geology 104; Mathematics 107, and 110 or 224; Physics 201, 202.
3. Summer field courses: six credits in the disciplines of aquatic biology, geography, or natural resources. Where appropriate, experience gained during summer employment in water resources may be substituted for this requirement. To qualify, courses and/or experience must be approved by the Assistant to the Dean.

180. Introduction to Water Resources. 3 cr. Surface and subsurface water resources, their economic and social importance, control, and conservation.

382/582. Water Quality Management. 3 cr. Fundamental concepts in water quality management and special emphasis on selected water quality control systems. Prereq: Soils 260, or cons instr.

387/587. Aquatic Macroinvertebrates. 2 cr. Collection and identification of lotic and lentic freshwater macroinvertebrates which are important in fishery and water quality evaluations. One hr lec, two hrs lab per week. Prereq: cons instr.

389/589. Hydrology. 3 cr. Physical basis of surface and subsurface water occurence and flow; measurement, analysis and prediction of hydrologic phenomena. Two hrs lec, two hrs lab per week. Prereq: 180; and basic statistics course or cons instr.

480/680. Water Analysis. 4 cr. Study and interpretation of chemical characteristics of polluted and unpolluted waters. Two hrs lec, four hrs lab per week. Prereq: Chem 106 or 116 or cons instr.

The former **481/681** is now **482/682.**

481/681. (Formerly 441/641) **Limnology.** 3 cr. Physical, chemical, and biological phenomena of freshwater communites. Prereq: Biol 205.

482/682. (Formerly 481/681) **Pollution Ecology.** 3 cr. Effect of physical and chemical pollution on populations of aquatic plants and animals; relationship of pollution to man, including water quality requirements for recreation; public health, agriculture, and industry. Two hrs lec, two hrs lab per week. Prereq: Water 481 or cons instr.

483/683. (Formerly Wildlife 443-Experimental) **Limnology and Fisheries Methods.** 2 cr. (First semester only.) Field and laboratory techniques for the investigation of lake and stream ecosystems. Four hrs lab per week. Prereq: 481 or con reg; and cons instr.

484/684. (Formerly Wildlife 444/644) **Fisheries Management.** 3 cr. Principles of management of inland waters for fish production. Prereq: 441; Biol 374; Summer Camp; or cons instr.

486/686. (Formerly Wildlife 446/646) **Fish Culture.** 2 cr. Principles, problems, and technique of fish culture under artificial conditions. One hr lec, two hrs lab per week. Prereq: 481, 484; or cons instr.

487/687. (Formerly Wildlife 447/647) **Functional Ichthyology.** 3 cr. Interrelationships of structure, physiology, nutrition and genetics in the life history of fishes, using current methods such as microscopy, karyology, electrophoresis, proximate chemical analysis, and statistics. Prereq: Biol 374; Chem 106 or equiv.

488/688. (Formerly 788) **Water and Waste-Water Treatment.** 3 cr. A non-engineering approach to the methods of water treatment, routine laboratory testing, and protection of systems; domestic waste disposal by water carriage and non-water carriage methods; small unit and municipal disposal methods. Prereq: 480/680 and cons instr.

499. Special Work. Upper class students in Water Resources may, by agreement with the Assistant to the Dean of the College of Natural Resources, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

780. Advanced Water Analysis. 3 cr. Chemical methods and instrumental analysis of water supplies and waste water; laboratory management for routine testing and analysis and advanced techniques for determinations of trace elements, pesticides, and other pollutants. Prereq: 480/680 or equiv, and cons instr.

781. Recent Advances in Pollution Ecology. 3 cr. A reading and discussion course on recent research in pollution ecology; detailed analysis of research methods, results, interpretation of data, and evaluations of the work with respect to management of surface water supplies. Prereq: cons instr.

784. (Formerly Wildlife 740) **Advanced Studies in Fish Management.** 3 cr. Survey of the literature concerned with the ecology and management of fish populations. Prereq: 481/681 and 484/684; or cons instr.

786. Indicator Organisms in Pollution Biology-Plant. 3 cr. Identification of organisms which are indicative of water quality; survey of the important literature, methods of data analysis, and correlation with physical and chemical qualities. Prereq: 481/681, and Wildlife 441/641, and cons instr.

787. Indicator Organisms in Pollution Biology—Animal 3 cr. Identification of organisms which are indicative of water quality; survey of the important literature, methods of data analysis, and correlation with physical and chemical qualities. Prereq: 481/681, and Wildlife 441/641, and cons instr.

The former **788** is now **488.**

789. Advanced Hydrology. 3 cr. Modeling and systems theory in analysis of water resources management alternatives; application of hydrologic analysis to ecological problems. Two hours lec, two hours lab per week. Prereq: 389 or 589 or cons instr.

WILDLIFE

A. A major in Wildlife, Fisheries Management, consists of:

1. Eighteen credits of courses in the College of Natural Resources including Forestry 120; Natural Resources 170, 490; Soils 260; Water 481, 484; Wildlife 140.
2. Forty-nine to 51 credits in collateral courses: Biology 130, 160, 205, 374; Chemistry 105 and 106 (or 115 and 116), and 220; Geology 104; Mathematics 110 or 224, and 355; and seven credits selected from Biology 210, 281 or 351, 333, 346, 360, 362, 367, 378, 388.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

B. A major in Wildlife, Game Management, consists of:

1. Fifteen credits of courses in the College of Natural Resources including Forestry 120; Natural Resources 170, 490; Soils 260; Wildlife 140, 451.
2. Forty-six to 50 credits in collateral courses: Biology 130, 160, 205, and eleven credits selected from Biology 210, 281, 342, 355, 362, 370, 374, 377, 378, 385; Chemistry 105 and 106 (or 115 and 116), and 220; Geology 104; Mathematics 105 or 107 or eligibility for 110; and 355.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

041. Wildlife Forum. 0 cr. Same as 141, except for no credit.

140. Introduction to Wildlife Resources. 3 cr. Wildlife resources of the United States; the importance of wildlife to our past and present economic and cultural life; selected problems in wildlife conservation. Prereq: Biol 160 or con reg.

141. Wildlife Forum. 2 cr. Environmental issues related to the maintenance of wild animal populations with emphasis on the effects of land and water use upon animals. Will not fulfill the Wildlife 140 requirement.

340. Techniques in Fish and Wildlife Management. 2 cr. See Summer Camp Program under Natural Resources.

350/550. (Formerly 450/650) **Game Management Techniques.** 2 cr. Techniques of managing game populations; field mapping, food habitat studies, sexing and aging, game censuses, and control measures; emphasis on Wisconsin game populations. One hr lec, two hrs lab per week. Prereq: Summer Camp or cons instr.

353/553. (Formerly 453/653) **Wildlife Population Dynamics.** 2 cr. Mathematical, ecological, physiological, and behavioral characteristics of wildlife population fluctuations. Prereq: Wldl 140 or Biol 160; Math 355; or cons instr.

355/555. (Formerly 455/655) **Wildlife Diseases.** 2 cr. Infections, parasitic, and chemical diseases of wildlife, with emphasis on their occurence, significance, and role as ecologic factors. Prereq: Cons instr.

356/556. Wildlife Disease Methods. 1 cr. Methodology used to identify and study wildlife diseases in the field and laboratory. Three hrs lab per week. Prereq: 355/555 or con reg; or cons instr.

The former **441/641** is now **Water 481/681.**

The former **442/642** has been discontinued.

The former **444/644** is now **Water 484/684.**

The former **445/645** has been discontinued.

The former **446/646** is now **Water 486/686.**

The former **447/647** is now **Water 487/687.**

The former **450/650** is now **350/550.**

451/651. Game Management. 3 cr. History and development of game management in the United States; principles of management of game animals; coordination of such management with current land use practices. Two hrs lec, two hrs lab per week. Prereq: Biol 205, Summer Camp, or cons instr.

The former **452/652** has been discontinued.

The former **453/653** is now **353/553.**

454/654. Management for Non-Consumptive Uses. 2 cr. Life histories, behavior, and habitat requirements of wild animals as they relate to management for use other than harvest. Prereq: 340, or cons instr.

The former **455/655** is now **355/555** and **356/556.**

483/683. Wildlife Field Seminar. 1 or 2 cr. For one credit, the course may be taken on a pass-fail basis; for two credits, the completion of a comprehensive report on the field experience is required. Prereq: Cons instr. (See also Field Seminar Program under the Natural Resources heading.)

499. Special Work. Upper class students majoring in Wildlife may, by agreement with the Assistant to the Dean, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

The former **740** is now **Water 784.**

742. Wildlife Population Statistics. 3 cr. A study of the collection and analysis of data from wild populations including the development of ecological models. Two hrs lec, two hrs lab per week. Prereq: Water 484/684 or Wldl 451/651 or equiv; Math 107 or equiv and 225 or equiv; and cons instr.

752. Advanced Studies in Game Management. 3 cr. Survey of the literature concerned with the ecology and management of terrestrial animals. Prereq: 451/651 or cons instr.



OUTDOOR EDUCATION

The minor in Outdoor Education is described under **Natural Resources,** above.

PAPER SCIENCE (College of Natural Resources)

Michael Kocurek, chairman.

A major in Paper Science consists of:

1. Thirty-nine credits in Paper Science courses, including 215, 320, 326, 350, 355, 365, 430, 440, 460, 475, 485, 486, 490, 495.
2. Summer mill experience, 2 cr: Paper Science 300, 400.
3. Chemistry 115 and 116 (or 105 and 106); 225 and 226 and 228, (or 220); 248 (or 240); 330 (or 335 and 336 and 338).
4. Collateral courses: Computer Science 106; Economics 200; Mathematics 110, 111, 212, 355 (or 351 or Econ 300); Physics 110 and 211 and 212 (or 103 and 104); Water 481.

101. Introduction to Pulp and Paper Processes. 2 cr. A survey of the pulping and papermaking processes, with emphasis on present technology and use of raw materials; field trips to observe commercial operations.

210. (Formerly 240) **Pulp and Paper Laboratory Methods.** 2 cr. Precision laboratory methods in pulp, paper, and nonfibrous testing; microscopic techniques; emphasis on statistical analysis of data. One hr lec, three hrs lab per week. Prereq: Chem 116 or 106, or cons instr.

215. (Formerly 317) **Principles of Mass and Energy Balance.** 4 cr. Basic principles of process calculations; stoichiometric relations, heat and material balances, thermodynamic properties of steam, behavior of ideal and real gases, and combined heat and material balances. Prereq: Chem 116 or 106, or cons instr.

The former **230** is now **313.**

The former **240** is now **210.**

300. Summer Mill Experiences I. 1 cr. In order to gain field experience, paper science majors are required to work ten weeks in a pulp and papermill, with emphasis on manufacturing assignments. The student must submit a comprehensive report on the process to fulfill this requirement.

311. (Formerly 315) **Electrical Engineering Concepts.** 1 cr. Electro-mechanical energy conversion systems: alternating and direct current machinery; automatic sequences relay logic, as applied to pulp and papermaking process systems. Prereq: Physics 212 or cons instr.

312. (Formerly 325) **Principles of Corrosion.** 2 cr. Basic mechanism and causes of corrosion; electrochemistry; metallic oxidation; protection mechanisms and techniques; anodic and cathodic protection coatings; applications to pulp and paper mill systems. Prereq: Chem 330 or 335, or cons instr.

313. (Formerly 230) **Mechanics of Deformable Media.** 2 cr. Principles of stress, strain, and rate of strain; bending, shearing, and compound stresses in beams; elastic, plastic deformations, creep; mechanics of fibers, paper, and paperboard. Prereq: Physics 110 or cons instr.

The former **315** is now **311.**

The former **317** is now **215.**

320. (Formerly 435) **Fluid Mechanics and Hydraulics.** 3 cr. Properties of fluids; momentum transport phenomena; laminar and turbulent flow; measurement and control of flow; fluid machinery; engineering calculations and design; economic factors. Two hrs lec, three hrs lab per week. Prereq: 215 or cons instr.

The former **325** is now **312.**

326. (Formerly 370) **Heat Transfer Operations.** 3 cr. Fundamental heat transfer mechanisms: conduction, convection, and radiation; heat transfer coefficients; heat exchange equipment; evaporation and evaporator systems; drying; economic factors; applications specific to pulp and paper processes; study of field operations. Two hrs lec, three hrs lab per week. Prereq: 320 or cons instr.

350. (Formerly 372) **Wood and Pulping Technology.** 4 cr. Cellulose, hemicelluloses, lignin, wood extractives, wood and fiber microstructure; commercial pulping and bleaching processes. Three hrs lec, three hrs lab per week; field operations. Prereq: Chem 226 or 220.

355. (Formerly 371) **Paper and Fiber Physics.** 3 cr. Fiber structure and properties; interfiber bonding; mechanical, optical, chemical properties of paper; interrelations between structure, manufacturing consolidation factors, and ultimate properties. Two hrs lec, three hrs disc per week. Not to be counted toward the major or minor in Physics. Prereq: 350 or cons instr.

356. (Formerly 380) **Colloid and Surface Phenomena.** 3 cr. Principles of colloid and surface chemistry; electrokinetic and base exchange phenomena; thermodynamics of interfacial systems; adsorption; applications to coatings, flocculation, fillers, and wet end additives. Prereq: Chem 330 or 335.

The former **370** is now **326.**

The former **372** is now **350.**

The former **380** is now **365.**

399. Research Problem. 1 to 3 cr. Upper class students majoring in Paper Science may, with consent of the chairman, arrange for special laboratory or field research in consultation with staff and industry. Emphasis is placed on problem analysis, literature searches, and communication of research results. Credit is awarded on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

400. Summer Mill Experience II. 1 cr. A ten week mill assignment with emphasis on a technical project involving the process or product. The student must submit a comprehensive report on the process to fulfill this requirement.

430. (Formerly 441) **Mass Transfer Operations.** 3 cr. Fundamental concepts; mass transfer coefficients; gas absorption; filtration; extraction; pulp washing systems; sedimentation; cooling, humidification, air conditioning; drying; applications specific to pulp and paper processes; study of field operations. Two hrs lec, three hrs lab per week. Prereq: 325 or cons instr.

The former **435** is now **320.**

440. Industrial Thermodynamics and Kinetics. 3 cr. Thermodynamic properties; energy and entropy balances; thermodynamics of energy conversion: combustion, steam, vapor power cycles; energy recovery systems; chemical kinetics and reaction engineering; economic and environmental factors; applications specific to pulp and paper processes; study of field operations. Two hrs lec, three hrs lab per week. Prereq: 325, and Chemistry 330 or 335; or cons instr.

The former **441** is now **430.**

460. (Formerly 465) **Process Simulation and Control.** 4 cr. Dynamic behavior and control of pulp and paper processes; process model formulation and solution, utilizing laplace transform, analog, and digital computing techniques; control theories and equipment; controller tuning; applications specific to the pulp and paper processes; study of field operations. Three hrs lec, three hrs lab per week. Prereq: Math 212.

The former **465** is now **460.**

The former **470** is now **475.**

The former **471** is now **355.**

475. (Formerly 470) **Transport Operations in Fiborus Systems.** 3 cr. Hydrodynamics of fibrous suspensions; dynamics of sheet formation and water removal; fundamentals of pressing; analysis of the drying process in terms of heat and mass transfer; economic factors; engineering calculations performed on full scale production papermachine. Two hrs lec, three hrs lab per week. Prereq: 430 and 460; or cons instr.

The former **480** has been replaced by **485** and **486.**

485. (Formerly part of 480) **Systems Engineering.** 3 cr. Engineering economics; interest and economic equivalence; methods of comparing project and investment alternatives; public benefit analysis; forecasting; optimization; economic modeling and simulation emphasizing computer techniques. Prereq: Cons instr.

486. (Formerly part of 480) **Engineering Design Project.** 1 cr. Individual student project: project definition; equipment selection and sizing; capital and operating cost estimation; economic evaluation and justification; oral and written presentation of project. (Student projects emphasize environmental and energy systems.) Three hrs lab per week. Prereq: 485 or con reg.

490. Seminar I. 1 cr. Orientation to technical and professional aspects of the paper industry; effective use of literature, and technical communication techniques; presentation of information by students, staff, and guest lecturers. Prereq: Senior standing in paper science, or cons instr.

The former **491** is now **495.**

495. (Formerly 491) **Seminar II.** 1 cr. Use of the literature, procedures in designing a research project, and the presentation of information by students, staff, and guest lecturers. Prereq: Senior standing or cons instr.

PEACE STUDIES (College of Letters and Science)

Robert Artigiani, chairman of the Peace Studies Committee.

100. Dimensions of a Peaceful World. 3 cr. An interdisciplinary study of alternatives to violence and war, including biological, psychological, economic, political, philosophical, and humanistic alternatives.

200. The Social Matrix of War. 3 cr. Economic, political, and social forces which give rise to war, and the social dislocation resulting from war. May be used as Social Science credit in meeting general requirements for a degree. Prereq: So st.

230. Seminar in Non-violence. 3 cr. Philosophy, history, and strategy of various non-violent movements, such as those of Ghandi and Martin Luther King. May be used as Humanities credit in meeting general requirements for a degree. Prereq: So st.

240. The Personal Element in Peace. 3 cr. Exploration of how a peaceful person develops, survives, and contributes to society; theories of man with emphasis on humanistic and interpersonal concepts; theories of love, love as giving meaning to life, and its expression in government and business. May be used as Humanities credit in meeting general requirements for a degree. Prereq: So st.

300. Dimensions of a Peaceful World. 3 cr. Same as 100, for juniors and seniors.

310. The Sociology of Peace and War. 3 cr. Major sociological works on peace and war, including contributions from psychology and philosophy, and the proposals of major peace proponents, including Erasmus, Kant, and Aron. May be used as Social Science credit in meeting general requirements for a degree.

370. Futures. 3 cr. Possible futures for mankind on earth; surveys of projections of observed social and scientific trends and alternative social systems relating to the question of the survival of mankind. May be used as Social Science credit in meeting general requirements for a degree.

389. Biological Factors and Effects of War and Aggression. 2 or 3 cr. The biological basis of cooperation and conflict in animals, including man; ecological effects of contemporary warfare on plants and animals.

399. Special Work. 1 to 3 cr. Upper class students may, be arrangement with an instructor, enroll for special work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to the independent study. Written proposals for special work must be submitted to the Peace Studies Committee for approval.

PHILOSOPHY (College of Letters and Science)

John Zawadsky, chairman

A. **A major in Philosophy** consists of a minimum of 27 credits including courses to be taken in the following areas:

1. History: Philosophy 217 and 218.
2. Logic: Philosphy 221 or 322.
3. Value Theory: One course to be selected from Philosphy 220, 303, 305.
4. Systematic: One course to be selected from Philosophy 306, 310, 312,318.

B. **A minor in Philosophy** consists of a minimum of 18 credits including Philosophy 217 and 218, and one course to be selected from Philosophy 220, 221, 303, 305, 322.

A minimum of 34 credits is required for **teacher certification** with a major in Philosophy, and a minimum of 22 credits for a minor; all other requirements are the same.

To ensure that a student's program is as well planned as possible, the Philosophy Department requires that each major or minor must have a departmental adviser.

NOTES:

1. All philosophy courses to be applied toward the major or minor are to be selected with the **approval** of the student's departmental adviser.
2. Selected upper division courses in Religious Studies may be applied to the philosophy major or minor with the approval of the student's departmental adviser where such inclusion would clearly strengthen the student's philosophy program.

3. A minimum grade point ratio of 2.00 in philosophy courses taken is a requirement for acceptance, for continuation, and for departmental approval for graduation as a philosophy major. No philosophy course with a grade lower than C nor a course taken pass/fail may be counted toward the major. The chairman of the department may allow exceptions to these standards.

100. Introduction to Philosophy. 3 cr. A survey of the important problems in philosophy such as the nature of reality, knowledge, value, God and man. Not open to juniors and seniors except with consent of instructor. It is recommended that juniors and seniors take Phil 300.

105. Philosophy and Religion of India and China. 3 cr. An introduction to the origin and development of Indian and Chinese thought and religion, with special emphasis on Hinduism, Taoism, and Confucianism.

205. Life, Work, and Sex. 3 cr. A study of philosophic methods for the analysis of everyday experience and for the interpretation of human existence. Offered in mini-session only.

207. Classical Christian Metaphysics. 3 cr. An examination of the development of philosophy from St. Augustine through St. Thomas Aquinas to William of Occam. Prereq: So st.

217. History of Ancient Greek Philosophy. 3 cr. The pre-Socratic, Plato, Aristotle, and post-Aristotelian philosophers. Prereq: So st.

218. History of Early Modern Philosophy. 3 cr. Major philosophic movements and figures from the Renaissance through Immauel Kant. Prereq: So st.

220. Problems in Political and Social Philosophy. 3 cr. A systematic analysis of the fundamental concepts of political and social theory including the concepts of the state, of law and rights, of political obligation, of authority and power, and of justice. Prereq: So st.

221. Elementary Logic. 3 cr. Fundamental principles of correct reasoning, the study of logic as a formal science, the uses and misuses of logic and language, and the relationships among thought, language, and the world. Prereq: So st.

230. Introduction to Philosophy of Education. 3 cr. Representative theories of education and issues of current educational concern. Prereq: So st.

300. Introduction to Philosophical Thinking. 3 cr. Problems and methods of philosophy; reading and discussion of the works of classical and contemporary philosophers, such as Aristotle, Descartes, Hume, Sartre, Russell. Not open to those who have had 100.

303. Philosophy of Art. 3 cr. An examination of traditional and contemporary theories about the nature and function of art, the processes of artistic creation and appreciation, and philosophical problems in art criticism.

305/505. Ethics. 3 cr. A critical examination of moral concepts and representative ethical systems.

306. Philosophy of Science. 3 cr. An examination of scientific theories in terms of their content and structure, their explanatory function, and their confirmation. Prereq: 3 cr in philosophy or cons instr.

308. Nineteenth Century Philosophical Thought. 3 cr. Philosophy and related ideas of the century of ideology and progress including such figures as Hegel, Darwin, Marx, and Mill, and their influence on post-nineteenth century philosophy. Prereq: 3 cr in philosophy or cons instr.

309. Contemporary Philosophy. 3 cr. The philosophic trends of the 20th century including Existentialism, Logical Positivism, Ordinary Language Philosophy, and Phenomenology. Prereq: 3 cr. in philosophy or cons instr.

310. Metaphysics. 3 cr. A study of the nature, limits and structure of ultimate reality and its relation to the sciences. Prereq: 3 cr in philosophy or cons instr.

312. Epistomology. 3 cr. A study of the nature, limits and bases of human knowledge. Prereq: 3 cr in philosophy or cons instr.

314. Moral Issues in Law and Social Policy. 3 cr. A critical study through legal case materials of issues common to law and morality, including morals and legislation, civil rights, and the justification of punishment.

315. Philosophy of Law. 3 cr. An examination of legal concepts, natural law, and the logic of legal reasoning. Prereq: 3 cr in philosophy or cons instr.

316. Philosophy of History. An investigation of historical knowledge and explanation, together with an analysis of representative theories of history, e.g., J.S. Mill, Hegel, Marx, Toynbee, Collingwood, Hempel and Popper. Prereq: 3 cr in philosophy or cons instr.

318. Philosophy of Language. 3 cr. An introduction to theories of meaning and the role played by language in man's conception of the world. Prereq: 3 cr of philosophy or cons instr.

320. Philosophy of Religion. 3 cr. The basic problems of the philosophy of religion, such as the existence of God, the problem of evil, religious language, and immortality.

322/522. Symbolic Logic. 3 cr. A detailed study of truth functions, quantification theory and axiomatics, including the scope and limits of formal logic. Prereq: 221 or cons instr.

325/525. Educational Philosophy of Pragmatism. 3 cr. The educational philosophy of pragmatism, concentrating on the writings of John Dewey. Prereq: 3 cr in philosophy or cons instr.

330. Existential Philosophy. 3 cr. Phenomenology and the philosophy of human existence from Kierkegaard to Sartre.

331/531. History of Pre-Revolutionary Russian Philosophy. 3 cr. The development of Russian religious and philosophic thought from its Byzantine origins to the end of the nineteenth century.

332/532. Development of Soviet Ideology. 3 cr. An examination of the sources and evolution of historical and dialectical materialism—the philosophy of the Soviet Union.

335. Basic Texts of Hinduism and Buddhism. 3 cr. A systematic examination of classical India philosophic texts such as the **Upanisads,** the **Yoga Sutras,** the **Bhagavad Gita,** or the **Prajnaparamita** literature of Buddhism. Prereq: 105 or cons instr.

336. Contemporary Indian Thought. 3 cr. A history of Indian thought from Ram Mohan Roy to Mohandas Gandhi with special emphasis on the influence of both the classical Indian tradition and Western philosophy. Prereq: 3 cr in philosophy or cons instr.

337. Indian Yoga. 3 cr. The history, theory, and practice of Indian yoga from the Upanishads to the modern period. Prereq: 105, Religious Studies 100, or cons instr.

338. Chinese Philosophy. 3 cr. Origins and development of the

major schools of Chinese thought, concentrating on texts from various periods. Prereq: 105 or const instr.

340. American Philosophy. 3 cr. Philosophical trends and thinkers in American religious, political, and scientific thought from the colonial period to the present century.

380. Environmental Ethics. 3 cr. Philosophical, religious, and scientific concepts and values which have structured human attitudes toward the natural environment; alternative concepts and values will be explored.

399. Independent Study. 1 to 3 cr. An independent study of a philosophical problem, theme, thinker, or period of special interest to the student may be arranged with an instructor in the department, in consultation with the chairman. Number of credits will depend on scope of the project.

490/690. Seminar. 3 cr. Intensive study of a major philosophic figure or topic. A subtitle indicating the figure or topic will be added each time the course is offered. Prereq: cons instr.

PHYSICAL EDUCATION (School of Health, Physical Education, Recreation, and Athletics)

Robert Bowen, Assistant Dean.

A. **A major in Physical Education** is available in several options:

Option I. The broadfield teaching major in Physical Education consists of 55 credits (48 credits in a., b., and c., below; and seven credits of collateral courses listed in d., below).

a. Physical Education 105, 120, 213, 214, 225, 252, 253, 271, 280, 331, 360, 370, 372, 374, 380, 391; Dance 216.
b. Four credits from Physical Education 109, 110, 123, 124, 201, 202.
c. Sufficient credits to total 48 (along with a. and b., above.), with at least eight credits selected from one of the following tracks:

1. **Secondary School Physical Education:** Physical Education 250, 254, 351, 353, 395; Dance 218, 219; Dance Education 217; Psychology 315, 320; and no more than two credits from among Physical Education 101 courses containing activities different from those required in paragraph a., above.

2. **Health:** Physical Education 340 (required); and five credits from the following: Physical Education 104, 254, 353; Biology 333; Education 177; Psychology 260, 315.

3. **Elementary School Physical Education:** Physical Education 332 (required); and five credits from the following: Physical Education 343, 395; Dance Education 220; Education 351, 353; Psychology 260; Communicative Disorders 280.

4. **Recreation:** Physical Education 142 (required); and six credits from the following: Art 241, 342; Biology 109, 244, 309, 377, 379; Education 241, 350; Dance 103, 104, 218, 219; Dance Education 217, 220; Forestry 427; Geography 101; Music 200; Natural Resources 170; Physical Education 141, 241, 343; Sociology 366.

5. **Dance:** Dance 101, 103, 104, 105, 106, 108, 110, 209, 211, 218, 219, 302, 303, 304, 327, 410; Dance Education 217, 220, 327, 420.

6. **Coaching:** Physical Education 371 (required); and five credits from the following: Physical Education 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 351, 361 (limit of four credits in courses 282 through 293); Sociology 311, 315.

7. **Aquatics:** Physical Education 101—sections in Water Safety Instructor, Synchronized Swim, Board Diving, Skin Diving, Scuba Diving, Canoeing, Water Games; Physical Education 254, and 353.

d. Collateral courses: Biology 281; Home Economics 351 (Initial laboratory science shall include Biology 160, and either Chemistry 101 or Physics 101).
e. Red Cross Senior Lifesaving certificate is required for graduation; Water Safety Instructor's certificate is strongly recommended.
f. Proficiency for Physical Education 201, 202, 213, and 214 is attempted at both written and skill levels. All prospective majors in physical education will have opportunity to demonstrate proficiency in their choice of the 12 activities listed under Physical Education 201, 202, 213, and 214 at the summer orientation advising session, and should come prepared for the written portion.

If the written proficiencies are met, skill exemption may be attempted during the first week of the semester. If that, too, is accomplished, the student is exempt from any further prerequisite in that activity. Failure to attempt or meet the proficiencies results in class participation. See description under course headings.
g. Students preparing for teacher certification with a major in Physical Education must take Physical Education 328 as one of their techniques courses. Students who choose to be certified at both elementary and secondary levels must do student teaching at both levels.

Option II. The major in Physical Education **for students wishing to complete a minor program in another subject** consists of:

a. Physical Education 105, 120, 225, 252, 253, 271, 280, 331, 360, 370, 372, 374, 380, 391; Dance 216.
b. Two credits of Physical Education 213 or 214; and two credits from Physical Education 109, 110, 123, 124, 201, 202.
c. Initial laboratory science shall include Biology 160, and either Chemistry 101 or Physics 101.
d. Red Cross Senior Lifesaving certificate is required for graduation; Water Safety Instructor's certificate is strongly recommended.
e. Requirements for teacher certification as outlined under Option I., item g., must be met if the student wishes to teach.

Option III. The non-teaching major in Physical Education consists of 36 or 55 credits, as outlined under Options I or II. The twenty-credit Education requirement should be replaced with 20 credits of courses numbered 300 and above as approved by the student's adviser.

Option IV. The major in Physical Education for **K-6 Teacher Certification** consists of 36 credits:

a. Physical Education 105, 120, 252, 271, 280, 331, 332, 360, 370, 374; Dance 216; Dance Education 220.
b. The remaining 10 credits shall be selected from among Physical Education 213, 214, 225, 241, 343, 371, 372 and 391 up to four credits in team sports may be included in this category.
c. Required collateral courses: Biology 160, 281; Psychology 200, 260, 330, and 370 or 375.
d. Red Cross Senior Lifesaving certificate is required for graduation; Water Safety Instructor's certificate is strongly recommended.

B. A minor in Coaching consists of 22 credits:

1. Physical Education 181, 271, 351, 361, 371, 391.
2. At least one course from the following: Psychology 240, 250, 315, 320; Sociology 310, 311, 315.
3. At least one course from the following: Physical Education 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293.

A minor in Health Education consists of 22 credits:

1. Biology 281; Home Economics 351; Physical Education 104, 240, 253, 340, 362.
2. The remaining five credits shall be selected from among: Biology 333; Communicative Disorders 280; Education 177, 351, 388, 393; Home Economics 261; Physical Education 140, 280, 254 or 353; Psychology 250, 260 or 315; Sociology 224, 240.

Students preparing to teach must take Physical Education 327 as one of their techniques courses, and must take Education 398 (Student Teaching) at all levels in which certification is sought.

D. A minor in Recreation consists of 22 credits:

1. Physical Education 141, 142, 241, 343; Education 177; Forestry 427.
2. At least seven credits from the following: Art 342; Biology 204; Dance 103, 108, 110, 216; Dance Education 217; Drama 383; Education 350; Geography 101; Music 200; Natural Resources 370.

E. A minor in Safety Education consists of 24 credits.

1. Education 177, 305, 378, 379, 392/592, 393/593; Physical Education 252.
2. At least six credits from the following; Education 220, 306, 370 (Motorcycle), 374/574; Learning Resources 331/531, 332; Psychology 301, 315, 351; Sociology 230, 312, 332.

NOTE: Certification for **High School Driver Education Instructors** requires Education 177, 378, 379, 392/592, 393/593, and a teaching certificate.

Students wishing to teach Driver Education and/or Safety Education are required to take 3 to 5 credits of Education 398 in Driver and Safety Education, in addition to Education 398 in the major field.

NOTES:

1. **All curricula in the university require four credits of Physical Education 101** for a degree. Students will register in one section of Physical Education 101 in each of their four academic years; they may not repeat the same activity at the same level.

ATTENTION ATHLETES!! WSUC eligibility rules require a 12 hr. study load in each semester. Phy Ed 101 - Athletics - may not be counted in these twelve credits.

2. **Students with medical restrictions** are expected to fulfill the four-credit requirement in physical education. Contact the office of the School of Health, Physical Education, Recreation, and Athletics prior to or during the first week of the first semester in school; in subsequent semesters, make arrangements during the registration period.
3. **Students who transfer** to this university are expected to fulfill the physical education requirement on the basis of one credit per year; i.e., senior transfers will be required to earn one credit of Physical Education 101; juniors, two credits; sophomores, three credits; and freshmen, four credits.
4. **A veteran** with at least two years of active military service may obtain a waiver of the general physical education requirement (Physical Education 101) by presenting Armed Forces separation card, Form 214, to the Assistant Dean during the first week of classes.
5. **A $2.50 course fee** is required for Physical Education 101, 107, 108, 109, 110, 120, 123, 124, 201, 202, 213, 214, 225, 231, 232, 331, 332, 343, 374.
6. **Majors in Physical Education and minors in Coaching, Health Education, Recreation and Safety Education** must declare their intentions to pursue these programs in the office of the Coordinator of Professional Studies, Room 127 of the Physical Education Building, for purposes of program guidance.
7. **Students may elect additional courses** in Physical Education beyond the four-credit general requirement. Credit in these courses will satisfy general elective options, and will count toward graduation.

The School of Health, Physical Education, Recreation, and Athletics offers courses in Health, Recreation, Coaching, and Physical Education. Although all carry the Physical Education prefix, those which relate specifically to Health, Recreation, and Coaching are listed under those headings. The remainder, many of which are applicable to the other areas, are listed under Physical Education.

Many Safety Education course descriptions may be found under the listings of the School of Education in this catalog.

Health (Courses carry the **Physical Education** designation.)

104. Current Health Issues. 2 cr. Physical and emotional assessment, sexuality, nutrition, drug use and abuse, health care delivery, infectious and non-infectious disease, consumer health issues, with overall emphasis on prospective health. One hr lec, one hr lab per week.

140. Responsible Sexuality. 2 cr. Sexual development in America, reproduction and contraception, and related issues; development of skills in presenting this knowledge to children in classroom and family settings.

240. Principles and Administration of School Health Programs. 3 cr. Basic principles of health education and administrative practices in all aspects of the school health program. Prereq: So st.

252. Standard First Aid and Personal Safety. 1 cr. American Red Cross first aid training with certificate issued on satisfactory completion of course. Prereq: So st.

253. Standard First Aid Instructors. 1 cr. Medical self-help training and preparation for teaching standard first aid prescribed by American Red Cross; certificate of authorization granted on satisfactory completion of course. Prereq: Valid standard first aid certificate.

254. Advanced First Aid and Emergency Care. 2 cr. American Red Cross Advanced Training with certificate issued on satisfactory completion of course. Prereq: 252; or valid standard first aid certificate; Red Cross requires that the candidate for certification must be 18 years of age before the certificate will be granted.

280. Health Education in the Elementary School. 3 cr. Principles, techniques, and materials applied to teaching health in the elementary school; collateral emphasis on personal health behavior. Prereq: So st.

340. Curriculum and Resources in Health Education. 2 cr. Comprehensive study of the content, scope and sequence of current curricular resources. Prereq: 104 and 240.

353. Advanced First Aid Instructors. 1 cr. Preparation for teaching Advanced First Aid prescribed by American Red Cross; certificate of authorization granted on satisfactory completion of course. Prereq: valid advanced first aid certificate; Red Cross requires that the candidate for certification must be 21 years of age before the certificate will be granted.

362. Practicum in Health Education. 2 cr. Practical experience and field problems in health education. One hr lec, two hrs lab per week. Prereq: 104, 240; 340; Biol 281; Home Ec 351.

Recreation

(Courses carry the **Physical Education** designation.)

141. Recreation for Special Populations. 3 cr. Recreation for mentally retarded, youthful offenders, mentally ill, alcohol and drug addicts, physically disabled, deprived, racial minorities, and the aged. Two hrs lec, two hrs lab per week.

142. Community Recreation. 3 cr. Problems involved in setting up recreation programs on a yearly basis. Two hrs lec, two hrs lab per week.

241. Camp Leadership. 2 cr. Theory and practice in camp craft, problems of cabin living, counselor training, waterfront laboratory, nature study, handicrafts and special projects; field trips and supplementary reading. Prereq: So st.

343. Group Games and Social Recreation. 2 cr. Quiet games, singing and folk games, and games of low organization suitable for home, school, and community recreation; supplemental to 142.

Coaching

(Courses carry the **Physical Education** designation.)

181. (Formerly 281) **Theory and Techniques of Officiating.** 2 cr. Mechanics and techniques of officiating interscholastic athletic contests; field work required; preparation for WIAA certification.

The former **281** is now **181.**

282-293. Coaching of Specific Sports. Each 2 cr. Theory and technique, training schedules, strategy, coaching methods, and conditioning. Prereq: So st.

282—Basketball; **283**—Wrestling; **284**—Football; **285**—Baseball; **286**—Track and Field; **287**—Soccer; **288**—Ice Hockey; **289**—Swimming; **290**—Volleyball; **291**—Tennis; **292**—Gymnastics; **293**—Golf.

351. Athletic Training and Taping. 2 cr. Cause, treatment, and prevention of injuries common to athletic activities; taping, bandaging; discussion of such topics as rehabilitation, conditioning, and variable factors of athletic performance levels. Prereq: valid first aid certificate or medical self-help certificate; Phy Ed 271.

361. Practicum in Coaching. 2 cr. Practical experiences in coaching sports at various educational levels. One hour lec, two hours lab per week. Prereq: 281 and at least two coaching theory courses.

371. Scientific Concepts of Coaching. 3 cr. Principles of mechanics and laws of physics; physiological phenomenon of activity; psychological principles applied to human movement. Prereq: 271.

Physical Education

101. Physical Education. 1 cr. Developmental, individual, and recreational activities, such as fitness, archery, bowling, golf, tennis, rhythms, aquatics, intercollegiate athletics, intramurals, and cheerleading will be offered in different sections. Two hrs per week. Students may elect sections as class enrollments permit. Four credits of this course are required for graduation. Students may not repeat the same activity at the same level. Certain Dance courses may be substituted (See descriptions under Dance). Phy Ed 109, 110, 123, 124, 231, and 232 may be substituted if specified for the student's major or minor.

105. Introduction and Principles of Physical Education. 2 cr. An introductory course for all Physical Education majors interpreting the history, philosophy, and principles of physical education.

107. Physical Education for the Older Student. 2 cr. Primarily for the student over 30 years of age who wishes to elect this course in place of two credits in 101. A combination lecture-laboratory course dealing with such matters as diet and weight control, relaxation, exercise, movement, recreational activities, and physical problems of aging.

108. Physical Education for the Older Student. 2 cr. A continuation of 107, primarily for the student over 30 years of age who wishes to elect this course in place of two credits in 101.

109. Team Sports. 2 cr. Football and volleyball, with emphasis on playing skills and teaching methods. Four hours per week.

110. Team Sports. 2 cr. Basketball and soccer, with emphasis on playing skills and teaching methods. Four hours per week.

120. Foundations of Physical Education Activities. 2 cr. The nature of exercise and conditioning, and fundamental movement patterns and basic skills. Four hours per week.

123. Team Sports. 2 cr. Swimming and wrestling, with emphasis on playing skills and teaching methods. Four hours per week.

124. Team Sports. 2 cr. Track and field, and baseball, with emphasis on playing skills and teaching methods. Four hours per week.

199. Independent Study. 1 cr. Students may arrange for work not normally available through regular courses. Work must be pre-arranged and a statement filed in the office of the Coordinator of Professional Studies in the School of Health, Physical Education, Recreation, and Athletics prior to the beginning of the work. Prereq: consent of supervising faculty member and of the Coordinator.

201. Advanced Team Sports. 2 cr. Techniques of teaching field hockey, soccer, and volleyball. Four hours per week. Prereq: beginning course, sports clinic, or proficiency in each of the three sports.

202. Advanced Team Sports. 2 cr. Techniques of teaching basketball, softball, and track and field. Four hours per week. Prereq: beginning course, sports clinic, or proficiency in each of the three sports.

213. Individual Sports. 2 cr. Techniques of teaching golf, bowling, and archery. Four hours per week. Prereq: beginning course, sports clinic, or proficiency in each of the three sports.

214. Dual Sports. 2 cr. Techniques of teaching badminton, tennis, and table tennis and table tennis. Four hours per week. Prereq: beginning course, sports clinic, or proficiency in each of the three sports.

225. Advanced Gymnastics. 2 cr. Techniques of teaching gymnastics, advanced techniques in competitive gymnastics activities. Four hours per week. Prereq: beginning course, or proficiency in gymnastics.

231. Physical Education for the Elementary Classroom Teacher. 3 cr. A conceptual approach to gross motor development, perception, and motor patterns of children through the third grade. Lectures, collateral reading, research, and field trips. Required of all students in the primary education curriculum. Three hours per week plus field work. Prereq: So st.

232. Physical Education for the Elementary Classroom Teacher. 3 cr. A continuation of 231 with emphasis on grades four through six. Lectures, collateral reading, research, and field trips. Required of all students in the intermediate-upper elementary education curriculum. Three hours per week plus field work. Prereq: So st.

250. History and Philosophy of Physical Education. 2 cr. Development of philosophies of physical education as influenced by the political, economic, and social conditions of various countries. Prereq: So st.

271. Human Anatomy. 3 cr. The skeletal, muscular, circulatory, respiratory, and nervous systems of the human body; designed for Phy Ed majors. Prereq: So st.

327. Techniques in Elementary and Secondary Education: Health Education. 2 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in elementary and secondary school teaching.

328. Techniques in Elementary and Secondary Education: Physical Education. 2 cr. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in elementary and secondary school teaching.

331. Physical Education for the Elementary School. 3 cr. The physical education program at the elementary school, with emphasis on preschool through grade three. Three hrs per week; field work required. Enrollment limited to students majoring in Phy Ed.

332. Physical Education for the Elementary School. 3 cr. Continuation of 331 with emphasis on grades four through six. Three hrs per week; field work required. Prereq: 331.

360. Practicum in Physical Education. 2 cr. Practical experiences in teaching individuals and small groups in elementary, secondary, and college physical education classes. Must be taken prior to student teaching. One hr lec, two hrs lab per week. Prereq: cons instr.

365. Physical Education Curriculum. 2 or 3 cr. Curriculum planning and development for elementary and secondary phy ed. Two hours lec; field trips; third credit requires additional field trips.

370. Kinesiology. 3 cr. Study of body movement and principles which affect movement. Prereq: 271; Biol 281.

372. Physiology of Exercise. 2 cr. Effects of exercises of speed, strength, skill, and endurance; nature of muscular behavior; fatigue, breathlessness, and exhaustion; effects of exercise with respect to age, sex, and occupation. Prereq: 271; Biol 281.

374. Adapted Physical Education. 2 cr. Teaching materials of the preventive and corrective phases of physical education as applied to individual development needs of students at all school levels. Prereq: 370; Biol 281.

380. Tests and Measurements in Physical Education. 3 cr. Analysis and construction of tests, interpretation of data and measurements in physical education.

391. Organization and Administration of Physical Education and Athletics. 2 cr. The school program in Physical Education and Athletics; problems of the administration of gymnasia, playgrounds, pools, locker rooms, interscholastic athletics and intramurals; management of the business affairs of each type of program.

395. Seminar in Physical Education, Health, and Recreation. 1 cr. Current developments in physical education, health, and recreation. Prereq: Sr st for Phy Ed majors.

397. Workshop in Physical Education. Variable credit. Designed to give teachers an opportunity to gather new ideas and practical experiences for use in teaching situations; consideration given to the individual teachers and particular problems encountered in their own school system. A subtitle will be added each time the course is offered. May be repeated for a maximum of 3 cr.

399. Special Work. Upper level students majoring in Physical Education may, by agreement with the Assistant Dean of the School of Health, Physical Education, Recreation, and Athletics, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. Work must be pre-arranged and a statement filed in the office of the Coordinator of Professional Studies in the School of Health, Physical Education, Recreation, and Athletics prior to the beginning of the work. Prereq: consent of the supervising faculty member and of the Coordinator.

PHYSICS AND ASTRONOMY (College of Letters and Science)

Francis Schmitz, chairman.

A. **A major in Physics** consists of a minimum of 34 credits, including Physics 110, 211, and 212 (Physics 103 and 104 will be accepted by the chairman of the department under certain conditions) and 23 additional credits including Physics 307, 308, 411, and at least one credit of 388 or 499. The remaining credits will be selected from Physics 301, 303, 305, 315, 333, 380, and 412. **For teacher certification,** Astronomy 311 may be elected as part of the 34 credits. Any student intending to major in Physics **must register** for acceptance as a major in the department office, preferably prior to the junior year.

B. **A minor in Physics** consists of 22 credits, available either in **Plan 1 or Plan 2:**

Plan 1. (Intended for students whose mathematical preparation ultimately includes calculus and differential equations.)

a. Physics 110, 211, and 212 (Physics 103 and 104 may be accepted by the chairman of the department under certain conditions); Physics 307, 411.
b. The remaining credits will be selected from Physics 301, 303, 305, 308, 315, 333, 380, 388, 412, and 499.
c. For **teacher certification** Astronomy 311 may be elected as part of the 22 credits.

Plan 2. (Intended for students with a non-calculus mathematical preparation.)

a. Physics 103 and 104 (or 110, 211, and 212), 323, and 324.
b. The remaining credits will be selected from Astronomy 311; Physics 301, 333, and other Physics courses numbered 300 and above for which the prerequisites have been satisfied.

A student intending to minor in physics must register for acceptance as a minor with the department no later than the first semester of the junior year.

The following courses will be offered in the **second semester only** in 1977-78, in 1979-80: Physics 305, 308, 324, 380.

The following courses will be offered in the **second semester only** in 1976-77, in 1978-79, and in 1980-81: Physics 303, 315, 323, 412.

NOTES:

(1) (a) A student may receive credit for only one of these: Physics 100, 101, 103, 110, 201.
(b) A student may receive credit for only one of these: Physics 100, 101, 104, 202, 211.

(2) A student who takes 103 and 104 and then 212 in pursuit of a major shall be required to take a minimum of 23 credits in courses numbered above 212 to complete the major, or a minimum of 11 credits to complete the minor under Plan A.

(3) A student will not receive credit for graduation for a course after having successfully completed a more advanced course in a similar area. The following restrictions hold:

A Student Who Has Successfully Completed	**Is Not Eligible For**
(a) Physics 101	(a) Physics 100
(b) Physics 103	(b) Physics 100, 101, 201
(c) Physics 104	(c) Physics 100,101,201,202
(d) Physics 110	(d) Physics 100,101,103,201
(e) Physics 211*	(e) Physics 100,101,103,201
(f) Physics 303, 307, 308	(f) Physics 323
(g) Physics 411, 412	(g) Physics 324

*A student taking 104, 110, and 104 may receive a total of only 10 credits.

100. Conceptual Physics. 3 cr. The fundamental concepts of physics as related to man and his physical environment. Two hrs lec, two hrs lab per week. This course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirements.

101. General Physics. 5 cr. Fundamental principles of physics with emphasis on application; designed for students in the Elementary Education curriculum and in general education. Not to be counted toward a major or minor in Physics. Two hrs lec, one hr disc, four hrs lab per week.

103. General Physics. 5 cr. Mechanics, heat, and sound. Three hrs lec, one hr disc, three hrs lab per week. Prereq: One year of high school algebra and one year of high school geometry, or equiv.

104. General Physics. 5 cr. Light, electricity and magnetism, and topics in modern physics. Three hrs lec, one hr disc, three hrs lab per week. Prereq: 103, or equiv, or cons instr.

110. General Physics I. 3 cr. Mechanics. One of the three lecture periods will be scheduled as a two-hr block for an occasional alternate lab experience. Prereq: Math 110, or con reg, or cons instr.

201. Applied Principles of Physics I. 3 cr. Selected topics in mechanics, fluids, wave motion, sound, thermodynamics, and electrostatics. Two hrs lec, three hrs lab per week. May be applied to the Natural Science requirement in the College of Natural Resources ONLY. Prereq: Math 105 or 107 or equiv, or cons instr.

202. Applied Principles of Physics II. 4 cr. Selected topics in electricity, magnetism, electronics, optics, and modern physics. Two hrs lec, one hr disc, three hrs lab per week. May be applied to the Natural Science requirement in the College of Natural Resources ONLY. Prereq: 201 or equiv or cons instr.

211. General Physics II. 4 cr. Heat, sound, and electrostatics. Two hrs lec, one hr disc, three hrs lab per week. Prereq: 110; Math 111, or con reg, or cons instr.

212. General Physics III. 4 cr. Electricity, magnetism, optics, and modern physics. Two hrs lec, one hr disc, three hrs lab per week. Prereq: 211; Math 212, or con reg, or cons instr.

220. Statistics. 3 cr. Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of area, friction. For students in the pre-engineering curriculum. Prereq: 110; Math 111; or cons instr.

221. Dynamics. 3 cr. Kinematics, force-mass-acceleration relationships, work and energy, impulse and momentum, moments of inertia of mass. For students in the pre-engineering curriculum. Prereq: 220; Math 212; or cons instr.

301. Electronics. 4 cr. Theory, application and practice of vacuum tube and solid state devices; circuits and systems using these devices. Two hrs lec, four hrs lab per week. Purchase of laboratory manual is required. Prereq: 104, or 212, or cons instr.

303. Advanced Optics. 4 cr. Principles of physical and geometrical optics. Three hrs lec, two hrs lab per week. Prereq: 212; Math 212.

305. Advanced Mechanics. 3 cr. Vectors, rectilinear and curvilinear motions, including simple harmonic and damped vibrations; rotation of rigid bodies. Prereq: 212; Math 212.

307. Electricity and Magnetism I. 4 cr. Direct and alternating current circuits; transients; introduction to theory of electrostatics. Three hrs lec, two hrs lab per week. Prereq: 212; Math 212; con reg in 301 is recommended.

308. Electricity and Magnetism II. 4 cr. Continuation of theory of electrostatics; magnetic properties of materials; Maxwell's equations. Three hrs lec, two hrs lab per week. Prereq: 307.

315. Thermodynamics. 3 cr. Principal concepts of thermodynamics and elementary kinetic theory. Prereq: 212; Math 212.

323. Electricity, Magnetism, and Optics. 4 cr. A review of elementary concepts and an introduction to more advanced principles of electricity, magnetism, and optics. Not to be

counted toward a major in Physics or Plan 1 of the minor. Three hrs lec, two hrs lab per week. Prereq: 104; Math 107 or eligibility for Math 110.

324. Modern Topics in Physics. 4 cr. A study of atomic and nuclear processes; introduction to relativity, elementary particles, and concepts of solid-state physics. Not to be counted toward a major in Physics or Plan 1 of the minor. Three hrs lec, two hrs lab per week. Prereq: 104; Math 107 or eligibility for Math 110.

333. Physical Approach to Environmental Science. 3 cr. A study of the environment emphasizing physical principles; energy and the environment, impact of technology, mechanics of the environment; application to environmental problems. Prereq: Completion of the general degree requirement in natural science; Math 104 or equiv, or cons instr.

380. Selected Topics. 3 cr. Approximately six weeks of concentrated study in each of three of the following areas: solid-state physics, quantum mechanics, shop techniques, electronics, mathematical methods of physics, planetary and space physics, general relativity. The selection of topics is based on the needs of the particular group and the interest of the instructor. Prereq: 212.

388. Research Participation. 1 to 4 cr. (Re-enrollment permitted to a maximum of six credits.) Investigations of current problems in physics, requiring three to twelve hrs per week in the laboratory. Prereq: Recommendation by a staff member and approval of the research supervisor.

411. Atomic Structure I. 4 cr. Atomic theory of matter: atomic spectra, Bohr atom, Schrodinger equation, Pauli exclusion principle; quantum theory of the periodic table. Three hrs lec, two hrs lab per week. Prereq: 212; Math 212.

412. Atomic Structure II. 4 cr. Experimental and theoretical nuclear physics; radioactivity; nuclear reactions and scattering; fundamental particles. Three hrs lec, two hrs lab per week. Prereq: 411.

496. Independent Study. 1 to 4 cr. Planned study designed to enrich and supplement the student's preparation in his area of specialization; regular scheduled conferences with the staff supervisor. Prereq: Cons chrmn.

499. Special Work. Upper class students majoring or minoring in Physics may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

701. Physical Science. 3 or 4 cr. An examination in depth of certain developments in physical science from the standpoint of the principles involved and the impact of man's thought and way of life. Open to teachers who feel the need for an introductory course in physical science.

796. Independent Study. 1 to 4 cr. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Prereq: The student must be mature enough to be able to do independent study; the course must supplement his current graduate work.

POLISH

For course listings in Polish, see the section headed **Foreign Languages and Comparative Literature** earlier in the catalog.

POLITICAL SCIENCE (College of Letters and Science)

Mark Cates (-1976), Richard Christofferson (1967-), chairman.

A. A major in Political Science consists of at least 34 credits including:

1. Political Science 101 and 102.
2. At least one course numbered 200 or above from each of at least four of the following fields; and a minimum of 15 credits in courses numbered 300 and above.
   a. American Government: Political Science 304/504, 308, 310, 313, 314/514, 315, 316, 320, 322, 411, 412.
   b. Public Administration: Political Science 250, 344, 350, 351, 354, 356, 358, 454.
   c. State & Local Government: Political Science 242, 341, 342, 344, 454.
   d. Comparative Government: Political Science 206, 350, 361, 364/564, 370.
   e. Political Theory: Political Science 270, 391, 392, 393, 394, 395, 396/596, 497.
   f. International Relations: Political Science 280, 380, 382, 384.
   g. Public Law (Public Law is recommended for pre-law majors); Political Science 212, 313, 320, 382, 411, 412.

To be accepted as a major, to be retained as a major, and to be approved for graduation the student must have a minimum grade point ratio of 2.00 in **all** courses taken within the Political Science major **regardless of declaration of academic bankruptcy.** The chairman may allow exceptions to this standard on a conditional basis.

B. A minor in Political Science consists of at least 22 credits, including Political Science 101 and 102; at least one course numbered 200 or above from each of at least three fields; and a minimum of 10 hours in courses numbered 300 and above.

INFORMATION AND RECOMMENDATIONS:

1. The department's faculty recommends that a major or minor entering a field take the 200-level survey course prior to enrollment in the upper-division courses.
2. Although upper-division courses' numbers are distributed between 300-level and 400-level designations, the department's faculty advises that level courses are generally within the capabilities of students of junior standing.
3. Sophomores may be admitted to upper-division courses by consent of the instructor and the chairman. (See "Course Numbers" at the beginning of this section titled COURSES OF INSTRUCTION.)
4. Prerequisites are generally not required but do exist in some courses; they are listed in the course descriptions.
5. Political Science 100, Contemporary Political Issues, is available only on a pass/fail basis.
6. Political Science 301 is primarily for non-majors and non-minors. However, upperclassmen who are majors or minors may substitute this course for Political Science 101 with permission of the chairman.

Internship Program:

7. Opportunity is offered upper class students to be involved

in an internship with a federal, state, regional, or local agency. A limited number of students may participate in the Washington Semester at the American University; those who are selected must pay the American University's tuition for that semester. Students are not required to participate in an internship.

100. Contemporary Political Issues. 1 cr. A critical examination of the social and political implications of a major, contemporary issue area. Two hours per week. A subtitle will be added each time the course is offered. The course may be taken twice under different subtitles **Pass-Fail only.**

101. Introduction to American Politics. 3 cr. Nature of politics; the Constitution and civil liberties; executive, legislative, and judicial branches; parties, elections, and interest groups; political socialization; belief systems and public opinion; conceptions of elite-mass relationships; civil disobedience and political violence.

102. American Policy Making. 3 cr. Introduction to analysis of governmental policy making; emphasis on the roles of institutions in the policy process and their effect upon policy outcomes.

206. Introduction to Comparative Politics. 3 cr. Theories of comparative government and the political systems of selected Western, non-Western and Communist countries. Prereq: so st.

212. Introduction to Law and Legal Systems. 3 cr. The nature of law and legal processes as instruments of social control. Prereq: So st.

242. Survey of State and Local Government. 3 cr. An introduction to political structure, functions, and behavior at the subnational level; examination of empirical theories which seek to explain political behavior in the states and communities; emphasis on Wisconsin. Prereq: So st.

250. Introduction to Public Administration. 3 cr. Theory and practice of public administration in the United States. Prereq: So st.

270. Introduction to Political Theory. 3 cr. Critical survey of literature, problems and solutions in political theory; nature of political man, purposes and conceptions of government, and viability of government as a social control device. Prereq: So st.

280. Introduction to International Relations. 3 cr. A survey of the general principles of international relations and organizations. Prereq: So st.

301. Introduction to American Politics. 3 cr. Nature of politics, the Constitution and civil liberties; executive, legislative and judicial branches; parties, elections and interest groups; political socialization; belief systems and public opinion; conceptions of elite-mass relationships; civil disobedience and political violence. Credit may not be earned in both 101 and 301.

304/504. Politics and the Environment. 3 cr. Analysis of the "new politics of ecology"; including an examination of the eco-political movement, the role of the scientific community, and the response of the national government.

308. Political Socialization and Public Opinion. 3 cr. Factors and processes in the inculcating and shaping of attitudes toward the political system and political issues (emphasizing American); nature and formation of public opinion and its importance for political decision-making and public policy.

310. The American Presidency. 3 cr. An analysis of the development of the American chief executive, with primary emphasis on the twentieth century presidents; the nature of presidential power, its effectiveness and its limitations.

313. The Judicial Process. 3 cr. The nature and role of law and of the Judiciary in American democracy; basic American judicial concepts; judicial organization, selection, tenure, and procedure. Prereq: 212 or cons instr.

314/514. Selected Issues in Public Policy. 3 cr. An intensive analysis of selected national political issues in public policy; their origin, development, proposed solution, and political impact.

315. Minority Group Politics. 3 cr. Political behavior and impact of ethnic, religious, racial and ideological minority groups in the United States.

316. Political Parties and Elections. 3 cr. A description and critical examination of political parties and voting behavior in the United States.

317. Political Woman. 3 cr. An analysis of the development and changing status of women in American politics; comparison of the political behavior of women with other segments of society; the future of the political woman.

320. The Legislative Process. 3 cr. An analysis of the forces and procedures that determine the formation of law and public policy in the United States.

322. Interest Groups in Politics. 3 cr. The nature and influence of pressure groups in American politics; a critical analysis of their effect upon the democratic way of life.

341. Urban Politics. 3 cr. Analysis of urban government in the United States; special attention to governmental structure, powers, and political patterns; problems unique to urban govenment; emphasis on Wisconsin. Prereq: 242 or con instr.

342. Government and Politics of Metropolitan Areas. 3 cr. Investigation of the interrelationships among governments in metropolitan areas with emphasis on regional cooperation, suburban politics, and regional planning. Prereq: 242 or cons instr.

344. Intergovernmental Relations. 3 cr. Problems resulting from overlapping governmental units; analysis of past and current devices of intergovernmental cooperation and sources and areas of conflict; political-governmental implications of intergovernmental relations; consideration of new proposals for meeting problems of intergovernmental relations. Prereq: 242 or cons instr.

350. Comparative Public Administration. 3 cr. Administrative systems of selected North American, European, African, Asian, and Latin American countries on a comparative basis. Emphasis on the administrative recruitment, development, and policy-making; developmental planning; and institution building.

351. Organization Theory and Practice. 3 cr. Analysis of organization theories and the role of organizations in contemporary society; processes and environment of administration with emphasis on examining the administrative processes and decision-making in governmental organizations.

354. Public Personnel Administration. 3 cr. Problems and practices of selection, training, and organization of personnel administration; emphasis on Wisconsin.

356. Fiscal Aspects of Government. 3 cr. The ways in which the U.S. national, state, and local governments determine their fiscal policies; emphasis on the governmental institutions and agencies involved, legislation and regulations, and the pattern of relationships affecting them. Case studies (e.g. Revenue

Sharing) focusing on the consequences considered, and related to the budgetary process.

358. The Budgetary Process. 3 cr. Determination and execution of public agency budgets; emphasis on preparation, authorization, and political considerations of the government agency budget; emphasis on Wisconsin.

361. Major Governments of Western Europe. 3 cr. Comparative study of the governments and politics of the United Kingdom, France, and the Federal Republic of Germany.

364/564. Government and Politics of the Soviet Union. 3 cr. Russian national and Marxist influences on the development of the Soviet state and Soviet concept of democracy, the role of the Communist Party and the formal, institutional machinery of government; a critical analysis of the Leninist, Stalinist, and post-Stalinist periods.

370. Governments and Politics of South Asia. 3 cr. A comparative study of the political systems of India, Pakistan, and Bangledesh.

380. International Politics: The Foreign Policy of the United States. 3 cr. International and internal forces underlying the foreign policy of the United States; relating U.S. aims and policies to other important states and regions of the world.

382. International Organizations and Law. 3 cr. A survey of the proposals and experiments in international organizations; the League of Nations and the United Nations.

384. International Politics: The Foreign Policy of the Soviet Union. 3 cr. An analysis of the Russian national and Marxist bases of the foreign policy of the Soviet Union.

391. American Political Thought to 1865. 3 cr.

392. American Political Thought since 1865. 3 cr.

393. Early Western Political Theory. 3 cr. A critical analysis of selected political thinkers of the Western World from the pre-Socratics through the Medieval Period, such as Protagoras, Socrates, Plato, Aristotle, Cicero, St. Augustine, St. Thomas, and Machiavelli.

394. Modern Western Political Theory. 3 cr. A critical analysis of selected political thinkers of the Western World from the Reformation to the Contemporary period, such as Luther, Calvin, Bodin, Montesquieu, Hobbes, Locke, Rousseau, Burke, Hume, Bentham, Mill, Hegel, Marx, and Lenin.

395. Contemporary Political Theory. 3 cr. Critical analysis of political thinkers of the contemporary Western World, such as Russell, Lippmann, Neibuhr, Maritain, Camus, Fromm, Sartre, Marcuse, Moore, Bay, Strauss, and Mills, as well as ideas of currently influential political figures.

396/596. Militant Non-violence. 3 cr. An advanced study of Gandhi's ideal community (sarvodaya), theory of social conflict, and moral equivalents of war.

411. American Constitutional Law I. 3 cr. Topical treatment of American Constitutional development as exemplified by Supreme Court decisions detailed examination of selected judicial decisions interpreting the Constitution with consideration of the political and governmental implications of such decisions; constitutionalism and judicial review; the commerce clause; the powers of the national executive, legislative, and judicial branches.

412. American Constitutional Law II. 3 cr. Same as Political Science 411, covering civil liberties and civil rights; due process of law; equal protection of the laws.

454. Problems of Local Government Administration. 3 cr. Theory and practice of local government administration; contrasts and comparisons with state and national public administration; emphasis on Wisconsin. Prereq: 242 or cons instr.

455. Internship in Government. 1 to 6 cr. The student will spend the bulk of his time working with a local, regional, state, or federal agency under the supervision of the instructor; a research paper on a topic previously agreed on with the instructor will be completed. Number of credits will be determined by the instructor.

490. Selected Problems in Political Science. 3 cr. Intensive examination of problems in political thought or political activities. Topics will be announced each semester. Open to Political Science majors with consent of instructor, and to others with consent of the chairman; may be repeated with consent of the chairman. Enrollment limited to 12 students.

497. Scope and Methods of Political Science. 3 cr. Examination of political science as a discipline through consideration of the materials, approaches, methods, and modes of presentation used in contemporary research.

499. Special Work. 1 to 3 cr. Upper class students majoring or minoring in Political Science may, by agreement with the chairman of the Political Science Department, arrange for special out-of-class work for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

796. Special Work. 1 to 3 cr. Graduate students may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

PSYCHOLOGY (College of Letters and Science)

Wayne Lerand, chairman.

A. **A major in Psychology** consists of 31 credits, including Psychology 200, 250, 300, 301, 375, 389, 400, and at least nine additional elective credits in psychology, to be selected with the advice of an adviser in psychology. The student is encouraged to build background, including courses in biology, philosophy, computer science, sociology and anthropology.

A minor in Psychology consists of 18 credits in psychology, including Psychology 200.

Students wanting certification for a **teaching minor** in Psychology must elect Psychology 200, 250, 300, 301, 375, 389, 400, and 452. This is a 25 credit minor.

100. Personal Effectiveness, Study Skills, and Adjustment to College. 3 cr. Assessment and development of learning skills, motivation, and adjustment to college. Two hrs lec, one hr lab per week.

101. Reading and Study Skills Laboratory. 1 cr. Development of reading speed and comprehension, reading flexibility, lecture-note-taking, textbook reading and note-taking, study schedules, preparations for examinations, and systematic methods of study. Seven hours of small group instruction, 24 hours of laboratory practice per semester. Does not count toward the major in Psychology or toward the general degree requirements in social science.

200. General Psychology. 3 cr. The study of experience and behavior. Prereq: So. st.

240. Psychology of Women. 3 cr. Research and theory concerned with women's personality, roles, and capacity; emphasis on socialization and sex role development. Prereq: 200.

250. Psychology of Adjustment. 3 cr. Nature of adjustment and the conditions related to mental health in normal persons. Prereq: 200.

260. Psychology of Childhood. 3 cr. Child behavior and development and their implications for child-adult relationships; experiences in child study methods. Prereq: 200.

270. Industrial Psychology. 3 cr. Employee morale, job analysis, selecting and training of workers; working conditions, production, supervision, merit rating, and occupational adjustment. Prereq: 200.

300/500. Statistics for Psychologists. 4 cr. Calculation and interpretation of measures of central tendency, variability, correlation, and regression in psychological research; hypothesis testing and estimation from large and small samples; analysis of variance and covariance; forms of experimental design. Three hrs lec, two hrs lab per week. Prereq: 200.

301. Theories of Personality. 3 cr. Contemporary approaches to the study of behavior; clinical and experimental contributions to the understanding of the personality and its structure. Prereq: 200.

310/510. Cognitive Processes. 3 cr. The role of hypothesis formation in memory, verbal learning, concept formation and attainment, problem solving, and language with special emphasis on human learning. Prereq: 200; 370/570 or 375/575 is required for graduate students and is recommended for all students.

315. The Psychology of Adolescence. 3 cr. Behavior of adolescents; emphasis on the physiological and cultural determinants of personality and consideration of the problem of adjustment encountered by youth in society. Prereq: 200.

320. Social Psychology. 3 cr. Social learning and habits in relationship to the development of the social self in groups; interaction, perception, motivation, attitudes, values, communication, roles in interpersonal relations. Prereq: 200.

325. Neuropsychology. 3 cr. Neurological basis of behavior; emphasis on the principles of central nervous system activity that underlie perception, motivation, learning, and cognition. Prereq: 200.

330. Perception. 3 cr. Fundamental concepts of perception, with special emphasis on vision; experimental findings, theoretical interpretations, and demonstration of the ways in which man perceives his environment. Prereq: 200.

340. Comparative Psychology. 3 cr. Similarities and differences in animal behavior among phyla, especially as they relate to human behavior; instincts, learning, sensation, and functional organization of the nervous system compared phylogenetically. Prereq: 200.

350/550. Theory of Psychological Testing. 3 cr. Characteristics of psychological tests; study of the most widely used intelligence, aptitude, interest, and personality tests. Prereq: Two courses in Psych or cons instr.

351. Abnormal Psychology. 3 cr. Behavior disorders, including the psychoses, neuroses, character disorders, and mental deficiencies. Prereq: 250, or cons instr.

360/560. Behavior Problems in Children: Prevention and Modification. 4 cr. Nature and origin of behavior problems in children, and an examination of strategies for their prevention and modification; practicum experiences with handicapped children. Prereq: 260 or cons instr.

370/570. Applied Theories of Learning. Major theories of learning, principles of conditioning, task variables in learning, perceptual learning, behavior modification, and the current applications of learning theory. Prereq: 200.

375/575. Learning. 3 cr. Simple and complex learning, including conditioning, sensory-motor learning, language learning, problem-solving, with emphasis on contemporary theories. Prereq: 200.

389. Introduction to Experimental Psychology. 2 cr. Procedures and methods for collecting and evaluating psychological data. One hr lec, two hrs lab per week. Prereq: 300, or cons instr.

399. Special Work. Upper class students majoring or minoring in Psychology may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

400. Experimental Psychology. 4 cr. Theory of measuring human behavior; research techniques and methodology; experimental approaches to sensation, perception and learning. Three hrs lec, three hrs lab per week. Prereq: 389, or cons instr.

401/601. Introduction to Counseling and Psychotherapy. 3 cr. Major approaches to counseling and psychotherapy; theory, research, evaluation, and demonstration. Prereq: 250, or cons instr.

402/602. Practicum in Counseling and Psychotherapy. 3 cr. Supervised field work in counseling and psychotherapy. Prereq: 401 or cons instr.

451. Motivation and Emotion. The nature and development of emotion, attitude, motive and the role of these processess in thinking and behavior. Prereq: 200.

452. Contemporary Viewpoints. 3 cr. Major systems of psychology including structuralism, behaviorism, gestalt, and psychoanalysis; current trends in theory. Prereq: 400, and 375 or 451 and cons. instr.

460/660. Developmental Psychology Seminar. 3 cr. Research experiences in physiological, perceptual, cognitive, emotional, and social development; emphasis on human behavior from infancy to adulthood. Prereq: 260, or cons instr.

480/680. Behavior Modification. 3 cr. Clinical application of behavior theory and research in the treatment of phobias, anxiety, depressions, delinquencies, psychosis, language and other behavior disorders, including such topics as desensitization therapies, assertive training, token economics, biofeedback, and self control. Prereq: 200.

482/682. Practicum in Behavior Theory. 3 cr. Clinical application of behavior modification principles in the treatment of behavior disorders. Prereq: 480 or cons instr.

490. Seminar: Fields of Psychology. 2 or 3 cr. Discussion of theory and research in psychology as they apply to general and special areas of study. A subtitle indicating the subjects will be added each time the course is offered; may be taken for credit more than once as subject matter changes. Prereq: 200 and cons instr.

491/691. Workshop. 1 to 5 cr. A subtitle will be added to

describe the area considered each time the course is offered. May be repeated for credit under different subtitles.

796. Special Work. Graduate students may, by prior agreement with the instructor, the chairman and the chairman of the student's major department, arrange for special study for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

PUBLIC ADMINISTRATION (College of Letters and Science)

Public Administration is an interdepartmentaal minor administered by the Political Science department. It is designed to prepare students for future entrance into public service. The program also meets the needs of the student who plans to enter a graduate school in the fields of Public Administration and Public Policy in order to undertake a more professional course of study.

As part of the program, the Internship in Government is designed to give the student practical experience in a public agency in his junior or senior year. This program also provides additional training for those with governmental experience and in public agencies.

A minor in Public Administration consists of a minimum of 30 credits, including:

1. Political Science 101 or 102 and 242.
2. Political Science 250, 351, 354, 356 and 358.
3. Political Science 341 or 342 or 344 or 454.
4. Economics 311 or 315 or 328 or 345 or 346.
5. Sociology 310 or 315 or Psychology 320.

In addition to the above requirements, the following courses are

HIGHLY RECOMMENDED:
Poltical Science 102, 206 or 361, 212, 313, 314, 342, 344, 350, 412, 454, 455.
Business 210.
Economics 200, 201.
Sociology 250, 356, 359.
Sociology 351 or Psychology 300 or Economics 330 or Mathematics 355.

RECOMMENDED:
Political Science 304, 497, 499.
Business 370, 380.
Communication 106, 217, 336, 340, or 341.
Computer Science 106, 107 or Business 320.
Economics 315, 328, 345, 346.
Forestry 427.
Natural Resources 370, 371, 393, 473.
Sociology 260, 270 or Political Science 315.

The student should consult the program coordinator in choosing any of the above related courses in order to prepare a good program of study and to enrich his specific area of study or interest.

RELIGIOUS STUDIES (College of Letters and Science)

Courses in Religious Studies are administered by the Philosophy Department. They may be used to fulfill the Humanities requirement for a degree.

A minor in Religious Studies consists of 18 credits (22 credits for teacher certification) as specified in 1. or 2., below:

1. A minimum of 18 credits including:
   a. At least one course selected from each of the following three groups:
      a.1. Non-Western religious traditions (RS 100, 316; Philosophy 105).
      a.2. Western Religious traditions (RS 101, 103, 104, 300, 320).
      a.3. Religion in human life and culture (RS 102, 210, 215, 301, 302, 315).
   b. At least nine additional credits from Religious Studies courses and collateral courses* to be selected with the advice of the director

OR

2. A minimum of 22 credits (for teacher certification) including:
   a. Five courses distributed as follows among three groups:
      a.1. Non-Western religious traditions (RS 100 or Philosophy 105).
      a.2. Western religious traditions (RS 101, plus either 103 or 104).
      a.3. Religion in human life and culture (RS 102, plus either 210 or 215).
   b. At least seven additional credits at the 300- or 400-level from Religious Studies courses and collateral courses* to be selected with the advice of the director.

*Collateral courses may be selected from the following: Anthropology 430; Comparative Literature 240; History 309, 316; Philosophy 105, 207, 320, 335, 337; Sociology 431.

100. Religions of the World: Eastern. 3 cr. A survey of the ideas and practices of the major Eastern Religions such as Hinduism, Buddhism, Confucianism, Taoism.

101. Religions of the World: Western. 3 cr. A survey of the ideas and practices of the major Western religions such as Zoroastrianism, Judaism, Christianity, Islam.

102. Varieties of Religious Experience. 3 cr. An examination of various forms of religious experience and expression, such as the sense of the "holy", ritual activities, and myth, to discover the meaning of these phenomena in and for human life.

103. God and Man in the Old Testament. 3 cr. An introduction to the origin, content, and enduring significance of the major religious themes and moral values developed in Biblical Israel.

104. The New Testament and Early Christianity. 3 cr. An introduction to the origin, content, and enduring significance of the major religious themes and moral values developed in Early Christianity.

210. (Formerly 310) **Religion and Moral Problems.** 3 cr. Principles of religious ethics and their application to specific moral problems, such as birth control, abortion, war, civil disobedience, and violence. Prereq: So st.

215. Religion in America. 3 cr. A consideration of the interdependence and mutual influence of religion and culture in American history. Prereq: So st.

300. The Development of Christian Thought. 3 cr. Development of major themes in Christian thought, such as the doctrine of Christ, the authority of the church, the use of the Bible, and the relationship between church and state, through the nineteenth century.

The former **301** has been subdivided into **301** and **302.**

301. (Formerly part of 301) **Contemporary Religious Thought I: The Nature and Destiny of Man.** 3 cr. A consideration of the significant interpretations of human existence in contemporary religious thought.

302. (Formerly part of 301) **Contemporary Religious Thought II: The Reality of God.** 3 cr. A consideration of interpretations in contemporary religious thought of the problems posed and the possibilities afforded in in contemporary culture for conceiving and affirming the reality of God.

The former **310** is now **210.**

315. Religion and Literature. 3 cr. A study of basic patterns of religious experience and belief, such as mysticism, evil and guilt, death and rebirth, cosmos and chaos; and their role in works of contemporary writers, such as Conrad, Camus, Golding, and Hesse.

316. Native American Religions. 3 cr. An examination of the religious ideas and practices of selected Native American tribes.

320. Selected Topics in Biblical Studies. 3 cr. Major issues in biblical interpretation, such as the covenants between God and man, the nature of prophecy, the quest of the historical Jesus. The specific content of the course will be indicated by a subtitle. Prereq: 103 or 104.

399. Independent Study. 1 to 3 cr. Individual work in religious studies on a special problem, theme, thinker, or period of particular interest to the student may be arranged with an instructor in the program, in consultation with the chairman of the Philosophy department. Number of credits will depend on the scope of the project.

RESOURCE MANAGEMENT

See **Natural Resources** for the descriptions of the major and minor in Resource Management.

ROTC (RESERVE OFFICERS TRAINING CORPS)

See **Military Science.**

RUSSIAN

Courses in **Russian** are listed under **FOREIGN LANGUAGES.**

RUSSIAN AND EAST CENTRAL EUROPEAN STUDIES (College of Letters and Science)

Waclaw Soroka, Adviser.

A. A major in Russian and East Central European Studies consists of at least 34 credits:

1. At least 24 credits shall be selected from the following content courses in at least three fields: **Geography** 330 (The Soviet Union,) **History** 337 and 338 (Russian History and Civilization), 339 and 340 (Eastern and Central Europe); **Philosophy** 331 (History of Pre-Revolutionary Russian Philosophy,), 332 (Development of Soviet Ideology); **Political Science** 364 (Government and Politics of the Soviet Union); 384 (Foreign Policy of the Soviet Union) **Russian and East Central European Studies** 399 (Special Work—one to three credits).
2. The remainder of the 34 credits shall be in related courses chosen in consultation with the Russian and East Central European Studies adviser.
3. Four semesters of Russian, or any other language of the area, beyond the first year level, are required.

B. A minor in Russian and East Central European Studies consists of at least 24 credits:

1. At least 16 credits selected from among the content courses.
2. The remaining credits shall be in related courses chosen in consultation with the Russian and East Central European Studies adviser.
3. Eight credits of Russian, or any other language of the area, are strongly recommended.

A student planning to earn a major in Russian and East Central European Studies as well as a major in a traditional discipline should expect to have to earn from 10 to 15 credits beyond the minimum of 120 (plus required Physical Education) required for a degree.

297. Soviet Seminar. 3 cr. The Soviet Union and East Central Europe. Open to students who are going to participate in the trip to Eastern Europe within the framework of the Soviet Seminar. Prereq: So st.

397. Soviet Seminar. 3 cr. Same as 297, except offered at the junior-senior level.

399. Special Work. Upper class students majoring in Russian and East Central European Studies may, by agreement with the Russian and East Central European Studies adviser, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project.

SOCIAL SCIENCE (College of Letters and Science)

Guy Gibson, adviser.

A Social Science major may be earned in either of two ways, as indicated below. Those students working toward teacher certification should select plan B, in order to meet Wisconsin certification requirements for high school Social Studies teachers.

A. A Social Science major (for those not working toward teacher certification consists of the following:

1. Meeting requirements for the minor in one of the following fields:
   a. Economics.
   b. History.
   c. Political Science.
   d. Sociology and Anthropology.
2. Six or more credits in each of three Social Science fields as listed below, but not to include the field selected under point 1., above:
   a. Economics.
   b. Geography (human), consisting of Geography 110, plus three credits in human Geography courses numbered 300 or above.
   c. History (in addition to the six credits of History necessary to meet the general requirements of Letters and Science).

d. Political Science.
e. Psychology.
f. Sociology and Anthropology.

3. Sufficient additional credits to total 45 or more, with at least 15 of the total in courses numbered 300 or above.

B. A Broad Field Social Science major for teacher certification (for teaching in grades 7-12) consists of:

1. A minimum of 54 credits in Social Sciences in the following subjects, to be selected as indicated below: Economics, Geography (human), History, Political Science, Psychology and Sociology and Anthropology.

   a. Alternative A:

      (1) A major (a minimum of 34 credits) in one of the subject areas listed in paragraph B.1., above; and
      (2) A minimum of 20 credits distributed over at least two of the other Social Science subjects.
      (3) At least 12 credits must be in History and/or Political Science.

   b. Alternative B:

      (1) A minor (a minimum of 22 credits) in one of the Social Science subjects listed in paragraph B.1., above; and
      (2) A minimum of 32 credits distributed over at least three of the other Social Science subjects.
      (3) At least 12 credits must be in History and/or Political Science.

This "Broad Field" Social Science major will permit teaching in only the major field, the minor field, and the fusion courses. (The fusion courses are those drawn from several of the Social Science disciplines and, therefore, require a composite preparation in Social Science. Fusion courses include civics, social problems, American problems, area studies, vital issues, etc.)

For certification in the "Broad Field" Social Sciences, statutory requirements include instruction in Conservation and Cooperatives. These requirements (normally Economics 200 or 323, and Natural Resources 370) are described in the earlier section of the catalog under the heading "Major-Minor Options in Secondary Education" (College of Professional Studies).

C. A minor in Social Science consists of 24 credits, including at least one full year of course work in Economics, human Geography, Political Science, and Sociology and Anthropology, as indicated below:

1. Economics: Required—Economics 200; Elective—Economics 201 or any three-credit course numbered 300 or above approved by the Social Science adviser.

2. Geography: Required—Geography 110; Elective—any three-credit course in human Geography numbered 300 or above, approved by the Social Science adviser.

3. Political Science: Required—Political Science 101; Elective—any three-credit course numbered 300 or above approved by the Social Science adviser.

4. Sociology and Anthropology: Required—Sociology 101; Elective—any three-credit course numbered 300 or above approved by the Social Science adviser.

This minor will not be approved for teacher certification; it does not meet Wisconsin certification requirements for Social Studies teachers.

D. Certification for the teaching of **Civics** (grades 7-12) will be granted on completion of one of the following three alternatives:

1. The requirements for the Broad Field Social Science major (paragraph B., above).

2. The Political Science minor (a minimum of 22 credits).

3. A minimum of 42 credits in Social Science in the subjects listed below:

   a. History: Same as the stated minor in History (24 credits) with History 211 and 212 to contribute to the fulfillment of the requirement.
   b. Economics: six credits.
   c. Political Science: six credits.
   d. Sociology and Anthropology: six credits.

E. Certification for teaching of **Social Problems** (grades 7-12) will be granted on completion of one of the following two alternatives:

1. The requirements for the Broad Field Social Science major (paragraph B., above.)

2. A minimum of 42 credits in Social Science in the subjects listed below:

   a. History: Same as the stated minor in History (24 credits) with History 211 and 212 to contribute to the fulfillment of the requirement.
   b. Economics: six credits.
   c. Political Science: six credits.
   d. Sociology and Anthropology: six credits.

SOCIOLOGY AND ANTHROPOLOGY

(College of Letters and Science)

John Moffatt, chairman.

A. A major in Sociology and Anthropology consists of 34 credits, 18 of which will be in courses numbered 300 or above, including Sociology 101 or 102; Anthropology 111 or 112; and either the specialization core in Sociology or the specialization core in Anthropology:

1. **In Sociology:** Sociology 250; Sociology 310 or Anthropology 312; Sociology 351, 446.

2. **In Anthropology:** Sociology 250 or Anthropology 450; Anthropology 330 or 343 or 430; 350 or 440; 370 or 371.

B. A minor in Sociology and Anthropology consists of 22 credits, at least nine of which will be in courses numbered 300 or above, including Anthropology 111 or 112; Sociology 101 or 102; Sociology 305; Sociology 310 or Anthropology 312; Sociology 250 or 446 or Anthropology 450.

C. A minor in Sociology consists of 22 credits in Sociology, at least nine of which will be in courses numbered 300 or above; Sociology 101 or 102, and 250 or 446 are required.

D. **A minor in Anthropology** consists of 22 credits in Anthropology, at least nine of which will be in courses numbered 300 or above; Anthropology 111 and 112, and at least three credits in courses other than those numbered 334 through 339 are required.

E. Students with interest in preparing for specialized graduate studies, professional schools, or careers should request assignment to advisers concerned with revelant sequence or course concentrations.

For all majors and minors described above, any other courses in Sociology or Anthropology and/or Latin American Studies 423 and/or Economics 328 will be counted.

Course concentrations for exploration of career possibilities or graduate study should be worked out with appropriate advisers. (Brochure on concentrations available on request.)

A minimum grade point average of 2.00 in the major field is a requirement for acceptance of the student as a major at the start of his junior year. The minimum 2.00 grade point average in the major is also a requirement for the student's retention as a major during his junior and senior years and for department approval of the major or minor for graduation. The chairman of the department may allow exceptions to this standard on a conditional basis.

Courses may be taken out of normal class-level order only through consent of adviser and instructor.

Courses in **Anthropology** are listed under the heading **Anthropology,** following Sociology in this seciton of the catalog.

Sociology

101. Introduction to Sociology. 3 cr. Sociology as a special field of social science, social relations, and social systems; the organization of societies and other human groupings; fundamentals of sociological investigation, dealing with the underlying premises, concepts, logic, and methods of sociology.

102. Social Problems. 3 cr. Theories explaining social and personal disorganization and deviation; selected contemporary problems analyzed and related to their social contexts.

224. Sociology of Childhood and Adolescence. 2 or 3 cr. Social influences on child and adolescent behavior; societal reaction to problems of childhood and adolescence; child welfare practices. Prereq: 101 or 102.

230. Criminology. 2 or 3 cr. Analysis of crime as an institution, with reference to the behavior of those who define, engage in, or become the victims of criminal behavior. Prereq: 101 or 102.

240. Marriage and the Family. 2 or 3 cr. Institutional variations of marriage and family; the contributions of behavioral sciences to understanding the processes of courtship and marriage interaction. Prereq: 101 or 102 and So st.

250. Methods of Sociological Inquiry. 2 or 3 cr. The scientific method and its application to society; techniques of social investigation. Prereq: 101 or 102.

260 Population Problems. 3 cr. Demography, population theory, trends, and analysis; United States and world population. Prereq: 101, 102, or Econ. 200.

270. Minority Groups. 2 or 3 cr. The role of minorities in society, their influence, impact, and relationship to the larger society. Prereq: 101 or 102.

300. The American Community. 2 or 3 cr. Community organization and the social processes influencing community behavior and change. Prereq: 101 or 102.

302. Political Sociology. 3 cr. Empirical and theoretical analysis of the social bases, distribution, and management of political power in industrial societies. Prereq: 101, 102, or cons instr.

305. Minority Relations. 1 cr. Lectures and discussions by faculty and guest lecturers; emphasis on awareness and understanding of values, life styles, and contributions of various minority groups, including women. Not to be counted toward a major in Sociology and Anthropology. Prereq: Jr st or consent of the chairman.

308. Sociology of Medicine. 3 cr. Analyses of the social organization of medicine and health care delivery systems, including the social processes and conditions of disease and health, such as adaptations to illness, the sick role, and the doctor-patient relationship. Prereq: 101 or 102 or cons instr.

310. Social Psychology. 3 cr. Social learning and social habits in relationship to the development of the social self in groups: interaction, perception, motivation, attitudes, values, communication, roles in interpersonal relations. Prereq: 101, 102, or cons instr.

311. Collective Behavior. 2 or 3 cr. The sociology of organized and unorganized social actions; the mob, crowd, mass behavior and social movements; the dynamics of mass persuasion. Prereq: 101, 102, or cons instr.

312. Propaganda and Public Opinion. 3 cr. Theories and facts regarding propaganda and public opinion, mass communication and censorship, and a study of measurement and control of public opinion. Prereq: 101, 102, or cons instr.

315. Group Dynamics. 3 cr. Analysis of small groups including leadership and group interaction; research techniques. Prereq: 101 or cons instr.

322. Culture and Personality. 3 cr. Development of personality in relation to patterns of cultures and sub-cultures in which one grows up; materials will be drawn from literate and non-literate cultures. Credit may not be earned in both 322 and Anthro 312.

332. Juvenile Delinquency. 3 cr. Definition, scope, types and sociological explanations of juvenile delinquency in regard to both its lone and gang forms, and a study of delinquency control techniques. Prereq: 101, 102, or cons instr.

333. Corrections. 2 or 3 cr. Analysis of the institutionalized responses to criminal behavior through which society attempts to control and treat offenders. Prereq: 230 or 332.

340. Field Work and/or Community Research. 2 to 4 cr. Research or field work planned and carried out by a class (not individual research) under close supervision of the instructor. Topic will be announced each time the course is offered. Prereq: 250 or cons instr.

343. The Family: Cultural Perspectives. 2 or 3 cr. The family as a social institution, its place in different cultures and social strata, the impact of industrialization and urbanization. Credit may not be earned in both 343 and Anthro 343. Prereq: 101, 102, or cons instr.

351. Social Statistics 4 cr. Types of social statistics, sources of data, frequency distributions, averages, dispersions, probability, chi-square, correlation; application in sociological and anthropological research. Three hours lec, two hrs lab per week. Prereq: 250 or cons instr.

356. Urban Sociology. 3 cr. Comparative and historical approach to cities; urban spatial structure, temporal patterns

and population characteristics; ecological factors; the social structure and psychological aspects of urban metropolis; implications for policy and planning. Prereq: 101, 102, or cons instr.

357. Sociology of Planning. 3 cr. Social context of policy making and planning processes: structure of service systems and service delivery characteristics; planner's roles and potential for changing society; social planning at broad levels vs. advocacy planning for minorities. Prereq: 101, 102 or cons instr.

358. Regional Sociology. 2 or 3 cr. Area based statistical indices and characteristics, rural patterns and limits of urban dominance, evidence of continuing historic and ethnic tradition, as used by sociologists and anthropologists to develop convenient units for social, cultural, and sub cultural analyses. Prereq: 101, 102, or cons instr.

359/559. Social Organization. 3 cr. Theory and research literature on structures and processes of large scale formal organizations; analysis of bureaucratic and informal social systems in Western society. Prereq: 9 cr in the Social Sciences or cons instr.

360. Introduction to the Field of Social Welfare. 3 cr. The development of social welfare; contemporary public and private programs and appropriate settings; philosophy and principles of social work. Prereq: 9 cr in Social Science or cons instr.

361. Basic Methods of Social Work. 3 cr. The elements of interviewing, concepts and practice of case work with individuals and families; analysis of group work; methods of community organization and generic approach to social problems and action. Prereq: 360.

366. Sociology of Aging. 2 or 3 cr. Growth of the aged population; a comparative view of aging in various societies; factors that account for the changing position of the aged in society; problems of the aged and proposed solutions. Prereq: 101, 102, or cons instr.

368/568. Sociology of Mental Health. 3 cr. Sociological perspectives and interpretations in the nature and causes of mental disorders. Theories of controlling mental illness, the development of mental health policies in the United States and strategies of preventive and community psychiatry. Prereq: 101 or 102 or cons instr.

370. Socio-cultural Change in Emergent Countries. 3 cr. Study of the problem and processes of development in emerging countries. Credit may not be earned in both 370 and Anthro 370. Prereq: 101, 102, or cons instr.

375. Social Structure and Change in East Asia. 2 or 3 cr. Background analysis, demographic characteristics, and institutions; comparative study of recent change and development in China, Japan, and Korea. Prereq: 101, 102, or cons instr.

402/602. Sociology in Education. 2 or 3 cr. Cultural change and education; a study of social forces which influence the direction of knowledge and education. Prereq: 9 cr in the Social Sciences or cons instr.

421/621. Social Stratification. 3 cr. Caste, estate, and class systems and their relation to occupations and subcultures. Prereq: 9 cr in the Social Sciences or cons instr.

431/631. Sociology of Religion. 3 cr. A description and analysis of the structure and function of religion as a universal institution, with emphasis on the interaction of the religious system and the social structure, contemporary trends in religion related to the changing institutions of American Society. Prereq: 9 cr in the Social Sciences or cons instr.

445/645. Development of Social Thought. 3 cr. To the nineteenth century. Prereq: 9 cr in the Social Sciences or cons instr.

446/646. Sociological Theory. 3 cr. From Comte to the present. Prereq: 9 cr in the Social Sciences or cons instr.

452/652. Laboratory in Social Research. 2 or 3 cr. The conduct of advanced sociological inquiry, individual research or group projects approved by the instructor. Prereq: 250 and 351; or consent of the chairman.

467/667. Social Gerontology. 3 cr. Critical issues in social gerontology; emphasis on industrialized societies; analysis of techniques for implementing programs and policies relating to the older population. Prereq: 9 cr in the Social Sciences, including Soc 366, or cons instr.

468/668. Problems in Family Living. 3 cr. Examination of contemporary problems relating to the family field. Prereq: 9 cr in the Social Sciences or cons instr.

490/690. Seminar: Fields of Sociology. 2 or 3 cr. Theory and research in sociology as it applies to general and special areas of study. A subtitle indicating the subjects will be added each time the course is offered; may be taken for credit more than once as subject matter changes. Primarily for majors. Prereq: 9 cr in the Social Sciences or cons instr.

497-499. Special Work. Each 1 to 3 cr. Upper class students majoring or minoring in Sociology and Anthropology may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. Each may be repeated up to a maximum of six credits.

Normally, students will not be permitted to present more than six credits in special work.

497. Sociological Analysis and Research;

498. Social Work and Social Administration;

499. Sociology of Knowledge.

702. Intergroup Relations. 3 cr. Advanced study of conflict and cooperation in human groups, with emphasis on contemporary problems of cultural minorities. Prereq: 9 cr in the Social Sciences or cons instr.

748. Theories of Society. 3 cr. Major theoretical contributions to understanding social organization and the social system. Prereq: 9 cr in the Social Sciences and cons instr.

796. Independent Study. 1 to 3 cr. Designed to enrich and supplement the student's preparation in his area of specialization. Prereq: 9 cr in the Social Sciences and consent of the chairman.

799. Thesis. 2 to 6 cr.

Anthropology

111. Prehistoric Man. 3 cr. Human paleontology and evolution, prehistoric development of man and culture, subspecification of Homo Sapiens, introduction of archaeological methodology.

112. Man, Culture, and Society. 3 cr. Anthropological principles, theories of culture and personality, theories of culture, analysis of ethnographic studies.

280. Culture and Language. 3 cr. Basic anthropological linguistics, ethnolinguistics, language and thought, comparative and historical approaches. Prereq: So st.

290. Introduction to World Prehistory. 3 cr. Development of culture from its beginnings to the historic period, as revealed by archaeological studies. Prereq: 111 or 112 or cons instr.

310. Ways of Mankind. 3 cr. Theories of man's pre-history, language, and culture; ethnographic approach to the cultures of several non-literate folk, and urban-industrial societies. Students may not have credit both in 310 and in 111 or 112.

312. Culture and Personality. 3 cr. Development of personality in relation to patterns of cultures and sub-cultures in which one grows up; materials will be drawn from literate and non-literate cultures. Credit may not be earned in both 312 and Soc 322.

330. Anthropology of Politics. 3 cr. Comparative approaches to aspects of power, social coordination, conflict and dispute settlement at various levels of cultural complexity. Prereq: 112; or Soc 101; or cons instr.

334-339. Area and Regional Studies in Ethnology. Each 2 or 3 cr. Ethnological survey of various societies in each region; emphasis on the cultural organization of societies and the significance of social change. Prereq: 112 or 310, or Soc 101, or cons instr.

334. Peoples of Europe; **355.** of Central and South America; **336.** of Africa; **337.** of Asia; **338.** of the Pacific; **339.** Indians of North America.

340-S. Field and Laboratory Techniques in Archaeology. 4 to 8 cr. Techniques, methods, and procedures of field and laboratory archaeology discussed and practiced in actual working conditions on archaeological excavation. Offered in summer only. Prereq: cons instr.

342. Environmental Archaeology. 2 or 3 cr. Interrelationship between historic culture and environment, emphasizing the palio-environment and cultural adaptation. Two hours lec per week for two credits; two additional hours lab for third credit. Prereq: 111 or 112 or cons instr.

343. The Family: Cultural Perspectives. 2 or 3 cr. The family as a social institution, its place in different cultures and social strata, the impact of industrialization and urbanization. Credit may not be earned in both 343 and Soc 343.

350. Cultural Ecology. 3 cr. Adaptive interactions between cultures and their material and social environments. Prereq: 112; Soc 101; or cons instr.

370. Socio-Cultural Change in Emergent Countries. 3 cr. Problems and processes of development in emerging countries.

371. Native North American Culture Change. 3 cr. Twentieth century sociocultural continuities and changes among selected Native North American Societies.

430. Primitive Religion. 3 cr. Relationships between religion and other institutions in preliterate and peasant societies, and the impact of religion on the individual. Prereq: 112 or Soc 101 or cons instr.

440. Economic Anthropology. 3 cr. Comparison of economic organizations and problems in primitive and peasant societies. Prereq: 112 or Soc 101, or cons instr.

450/650. Anthropological Theory. 3 cr. The development of anthropology theories from the early nineteenth century to the present. Prereq: Anthropology 111 or 112 or nine credits in the social sciences.

499. Special Work. 1 to 3 cr. Upper class students majoring or minoring in Sociology and Anthropology may, by agreement with the chairman, arrange for special out-of-class work, for which credit may be allowed on the basis of one credit for each week, or its equivalent, devoted exclusively to a special project. The course may be repeated for a maximum of six credits.

SOIL SCIENCE

For the description of the major and minor and for course listings in Soil Science, see the section headed **Natural Resources** earlier in the catalog.

SPANISH

For the description of the major and minor and for course listings in Spanish, see the section headed **Foreign Languages and Comparative Literature** earlier in the catalog.

SPECIAL LEARNING DISABILITIES

(College of Professional Studies)

Darvin Miller, coordinator.

A minor in Special Learning Disabilities is a certification program for teachers of learning handicapped children. It prepares students with the competencies necessary to serve as resource teachers for the regular classroom, to teach in special education resource rooms, or to teach in self-contained classrooms for learning disabled children. Completion of either the undergraduate or graduate curriculum leads to certification in special learning disabilities, Certificate 811.

Practicums for the sequence courses in the area of specialization and student teaching are conducted in public schools with certified special learning disabilities teachers. The student teaching assignment is half days for one semester or full days for eight weeks.

Applicants to the program are required:

1. To have an interview with the program coordinator and complete an admission form.
2. To be admitted to the School of Education or Graduate College.

Because of limitations of instructional personnel and approved practicum settings, the university must limit the number and sizes of classes in this program. Also, an applicant will be evaluated primarily on the basis of competencies developed through the curriculum; these competencies will be listed in the student's placement file.

A. Undergraduate Curriculum

1. General Professional Training
   a. Completion of the curriculum for the Bachelor of Science Degree in Elementary Education leading to certification in one of the following: K-3, Primary, Intermediate, K-8, 1-8. Early Childhood Education majors in the School of Education are required to complete, in addition to their prescribed curriculum: Education 304, 308, Mathematics 229, and Mathematics Education 229.
   b. Background courses required in addition to a. are Education 326 and necessary prerequisite courses for the curriculum. Elective courses:

Communicative Disorders 365, Education 354, 365, Psychology 310 and 480.

c. Area of Exceptional Education (seven credits). **Education** 351 (The Exceptional Child), **Psychology** 360 (Behavior Problems in Children: Prevention & Modification).

2. Area of Specialization: Special Learning Disabilities (17 credits): **Education** 353 (Nature & Needs of Children with Learning Disabilities), 363 (Diagnostic Procedures in Specific Learning Disabilities), 364 (Methods & Materials for Children with Learning Disabilities), 398 (Student Teaching: Learning Disabilities); **Communicative Disorders 366** (Programs and Methods of Language Learning Disabilities).

B. Graduate Curriculum

1. General Professional Program

a. Certification in elementary education, K-3, Primary, Intermediate, K-8, 1-8. Certification in nursery school and kindergarten according to School of Education curriculum with the following additional courses required: Education 304, 308, Mathematics 229, and Mathematics Education 229.

b. Students certified in areas of special education are required to complete, in addition, the following general professional training courses: Psychology 260, Education 304, 308, 383, 398 (8 weeks), Mathematics 229, Mathematics Education 229. Background courses required in addition to the above requirements are Education 747 and necessary prerequisite courses for the curriculum. Elective courses: Communicative Disorders 565, Education 554, 565, Psychology 510, and Psychology 680.

c. Area of Exceptional Education (seven credits): **Education** 551 (The Exceptional Child); **Psychology** 560 (Behavior Problems in Children: Prevention and Modification).

2. Area of Specialization: Learning Disabilities (17 credits): **Education** 553 (Nature & Needs of Children with Learning Disabilities, 563 (Diagnostic Procedures in Specific Learning Disabilities), 780 (Curriculum & Educational Programming in Special Learning Disabilities), 781 (Professional Teaching & Practicum in Special Learning Disabilities); one of the following courses in **Communicative Disorders:** 566 (Programs and Methods for Language Learning Disabilities) OR 736 (Advanced Study of Language Learning Disabilities).

The Graduate Curriculum in SLD may be taken as an area of emphasis in the MST Elementary Degree Program.

SPECIAL STUDIES

301. Travel Study. For each course in Travel Study which is organized, the number of credits and details of description will be approved through regular Curriculum Committee and faculty action.

310. Outdoor Education Workshop. 6 cr. A summer session course designed to acquaint students with the opportunities for using the outdoors as a laboratory in teaching. Such things as school camping, field trips, crafts, nature study, conservation of natural resources, and special projects will be included. Staff members from various departments will share responsibility for conducting the workshop. A statement of the content of the course will be filed each time the course is offered. The workshop will meet three hours daily. In addition, there will be some all day field trips and two all night campouts. A laboratory fee is charged to cover transportation costs and miscellaneous expenses.

SPEECH

See **Communication.**

SPEECH PATHOLOGY AND AUDIOLOGY

See **Communicative Disorders.**

THEATRE ARTS

Seldon Faulkner, chairman.

The department of Theatre Arts administers a major and minors in **Drama,** and minors in **Dance.**

Courses are offered in **Dance, Dance Education, Drama,** and **Drama Education.**

For descriptions of courses, majors, and minors, see the sections appearing earlier in the catalog under those headings.

WATER RESOURCES

For the description of the major and for course listings in Water Resources, see the section headed **Natural Resources** earlier in the catalog.

WILDLIFE

For the description of the major and for course listings in Wildlife, see the section headed **Natural Resources** earlier in the catalog.

WOMEN'S STUDIES

Donna Garr, co-ordinator.

101. Introduction to Women's Studies I. 3 cr. An interdisciplinary, cross-cultural examination of selected women and groups of women designed to illustrate the various roles which women have played in human society.

102. Introduction to Women's Studies II. 3 cr. Present and future roles of women in the social/individual, cross-cultural perspective including role expectations and vocational opportunities in humanities, sciences, arts, professions.

490. Seminar. 3 cr. The changing status of women in contemporary society; investigation of selected aspects of woman's role, e.g., in government, education, law, the family, the community; research involving reading and direct research projects, producing significant data or a seminar paper.

499. Special Work. 3 cr. Students minoring* in Women's Studies may, by agreement with the Women's Studies coordinator, arrange for special work. Research will involve reading and direct research project, producing significant data or a seminar paper. (*The proposed minor is in the works.)

FACULTY and ACADEMIC STAFF

*Indicates part-time appointment.

Date indicates beginning year of continuous service at the University of Wisconsin—Stevens Point.

This listing is as of the 1975-76 school year.

Marjorie V. Aber, Associate Professor of Music, 1967 ■ B.M., Oberlin College; M.A., Columbia University.

David Abrams, Instructor in Music, 1974 ■ B.M., M.A., Eastman School of Music, University of Rochester.

Richard C. Ackley, Assistant Professor of Sociology and Anthropology, 1967 ■ B.S., Western Michigan University; M.A., University of Michigan.

Betty Jean Allar, Associate Professor of Education, 1966 ■ B.S., University of Wisconsin—River Falls; M.S., University of Wisconsin—Madison; Ed.D., University of Northern Colorado.

Calvin Young Allen, Instructor in Communication, 1969 ■ B.A., University of Evansville; M.A., Ohio University.

Rene C. Alltmont, Associate Professor of History, 1966 ■ A.B., A.M., George Washington University; Ph.D., University of Delaware.

Don J. Amiot, Instructor in Health, Physical Education, Recreation, and Athletics, 1971 ■ B.S., Mayville State College; M.S., South Dakota State University.

Raymond K. Anderson, Professor of Wildlife, College of Natural Resources; 1966 ■ B.S., University of Wisconsin—Stevens Point; M.A., University of Michigan; Ph.D., University of Wisconsin—Madison.

Robert T. Anderson, Associate Professor of Geography, 1953 ■ B.S., University of Wisconsin—Eau Claire; M.S., University of Wisconsin—Madison.

Oliver A. Andrews, Associate Professor of Chemistry, 1960 ■ B.S., University of Wisconsin—Stevens Point; M.S., University of Wisconsin—Madison.

Robert Artigiani, Assistant Professor of History, 1968 ■ B.A., University of Maryland; M.A., Ph.D., American University.

M. Roberto Assardo, Associate Professor of Foreign Languages and Comparative Literature, 1973 ■ B.A., M.A., Indiana University; Ph. D., University of California—Los Angeles.

Donald L. Aylesworth, Associate Professor of Communicative Disorders, 1969 ■ B.S., Western Michigan University; M.A., Ph.D., Michigan State University.

Martha J. Bablitch*, Adjunct Assistant Professor of Political Science, 1976 ■ B.A., Lawrence University; J.D., University of Wisconsin—Madison.

John D. Bailiff, Professor of Philosophy, 1966 ■ A.B., Stanford University; M.A., Ph.D., Pennsylvania State University.

Sandra L. Bainbridge, Instructor in Communication, 1975 ■ B.A., University of California—Santa Barbara; M.A., University of Nebraska—Lincoln.

Monica E. Bainter, Professor of Physics and Astronomy, 1947 ■ A.B., College of St. Teresa; M.A., University of Minnesota; Ph.D., University of Wisconsin—Madison.

Mary Ann Baird*, Instructor in Home Economics, 1962 ■ B.S., University of Wisconsin—Stout; M.S.T., University of Wisconsin—Stevens Point. (lv)

John W. Barnes, Associate Professor of Biology, 1956 ■ B.S., Ohio University; M.S., University of Minnesota.

Allen F. Barrows, Instructor in Learning Resources Center; Director of Public Services; 1969 ■ B.S., University of Wisconsin—Stevens Point; M.L.S., Indiana University.

Anita O. Barsness*, Instructor in Home Economics, 1971 ■ B.A., St. Olaf College; M.S., University of Wisconsin—Stevens Point.

Wallace B. Bartosz, Assistant Director, Conferences and Reservations, 1975 ■ B.S., University of Wisconsin—Stevens Point; B.M., M.M., University of Hartford.

Robert Baruch, Associate Professor of Theatre Arts, 1967 ■ B.A., North Texas State University; M.A., University of Colorado; Ph.D., University of Minnesota.

Nancy E. Bayne, Assistant Professor of Psychology, 1975 ■ B.S., M.S., Ph.D., Iowa State University.

David H. Beadle, Instructor in Music, 1973 ■ B.M., University of Wisconsin — Madison; M.M., Eastman School of Music, University of Rochester.

Lloyd H. Beck, Professor of Psychology, 1964 ■ A.B., A.M., Oberlin College; Ph.D., Brown University.

George C. Becker, Professor of Biology, 1957 ■ B.A., M.S., M.S., Ph.D., University of Wisconsin—Madison.

Sylvia H. Becker*, Faculty Assistant in English, 1971 ■ B.S., University of Wisconsin—Milwaukee.

Leon E. Bell, Jr., Emeritus; Executive Secretary to the Chancellor, 1963 ■ B.S., Virginia Military Institute. (Sem I)

Donald A. Benz, Professor of Education, 1966 ■ B.E., University of Wisconsin — Stevens Point; M.A., Ph.D., George Peabody College for Teachers.

John M. Bernd, Professor of Education, 1964 ■ B.S., University of Wisconsin — LaCrosse; Ph.M., Ph.D., University of Wisconsin—Madison.

Rudolf Besmer, Instructor in Sociology and Anthropology, 1975 ■ B.S., M.S.S.W., University of Wisconsin—Milwaukee.

Mary Lou Biddlestone, Instructor in Health, Physical Education, Recreation, and Athletics, 1963 ■ B.S., Slippery Rock State College; M.S., University of Minnesota.

Barbara A. Bieler, Assistant Professor of Home Economics, 1974 ■ B.S., M.H.Ec., Oregon State University.

John R. Billings, Associate Professor of Philosophy, 1966 ■ B.S., Lehigh University; M.A., Brown University; Ph.D., Syracuse University.

E. Sherwood Bishop, Assistant Professor of Sociology and Anthropology, 1972 ■ B.A., Lakeland College; M.A., University of Wisconsin—Milwaukee; Ph.D., Florida State University.

Lynn A. Blair, Assistant Professor of Health, Physical Education, Recreation, and Athletics, 1965 ■ B.S., MacMurray College; M.S., University of Southern Mississippi.

Theodore R. Blasche, Captain, Armor, U.S. Army; Assistant Professor of Military Science, 1973 ■ B.S. Geneva College; M.A., The William Paterson College.

Allen F. Blocher, Associate Professor of Physics and Astronomy, 1958 ■ B.S., McPherson College; M.S., University of Nebraska.

Melvin Bloom, Associate Professor of Foreign Languages and Comparative Literature, 1966 ■ B.S., Ohio State University; M.A., Universidad de las Americas (Mexico City College); Ph.D., Universidad Interamericana.

Patricia Ann Bloom*, Lecturer in English, 1968 ■ B.A., M.A., Ohio University.

Ruthann Bloom*, Lecturer in Foreign Languages and Comparative Literature, 1975 ■ B.Sc., Ohio State University; M.S.T., University of Wisconsin—Stevens Point. (Sem I)

Thomas K. Bloom, Assistant Professor of English, 1968 ■ A.B., M.A., Ph.D., Ohio University.

Henry E. Booke, Wisconsin Cooperative Fishery Unit, College of Natural Resources; 1973 ■ B.S., Cornell University; M.S., Michigan State University; Ph.D., University of Michigan.

Norma Booke*, Instructor in Home Economics, 1975 ■ B.S., Oregon State University; M.S., Cornell University. (Sem I)

Jon T. Borowicz, Assistant Professor of Music, 1975 ■ B.M., M.M., The Cleveland Institute of Music.

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Elroy Zocher*, Lecturer in Business and Economics, 1974 ■ B.B.A., University of Wisconsin—Madison; M.B.A., Marquette University.

Emeritus Faculty

Dates indicate years of service.

William C. Hansen, President (1940—1962)

Frederick M. Baumgartner (1965—1975)

Leon E. Bell (1963—1974)

Kenneth W. Boylan (1947—1971)

Edna Carlsten (1923—1961)

T.K. Chang (1956—1975)

William H. Clements (1955—1975)

Susan E. Colman (1931—1952)

Mildred Davis (1928—1970)

Elizabeth Pfiffner DeBot (1940—1965)

Arol C. Epple (1946—1972)

Donald W. Ferguson (1963—1974)

Bertha Glennon (1940—1969)

Gertie Hansen Halsted (1920—1953)

Albert E. Harris (1941—1975)

Warren G. Jenkins (1934—1972)

Nelis R. Kampenga (1941—1974)

Lulu O. Kellogg (1953—1970)

Vivian A. Kellogg (1953—1970)

Marjorie E. Kerst (1948—1970)

Syble E. Mason (1930—1969)

Phyllis A. Ravey (1952—1975)

Mary S. Samter (1943—1973)

Gordon D. Shipman (1966—1971)

Harry H. Smith (1963—1974)

Mary Elizabeth Smith (1950—1974)
(Died November 7, 1975)

Edith S. Treuenfels (1957—1975)

Gladys Van Arsdale (1934—1958)

Mildrede L. Williams (1940—1966)

Emily Wilson (1921—1960)

ADMINISTRATIVE OFFICERS and STAFF

The University of Wisconsin System

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Central Administration

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The University of Wisconsin—Stevens Point

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Most administrative officers are listed in the portions of the catalog which relate to their responsibilities and functions. The following have not been previously identified: **Archivist, University,** William G. Paul; **Arts and Lectures,** William J. Hanford, Director; Carol Hopper, Assistant Director; **Budget Planning and Analysis,** Paul Kelch, Director; **Computer Services,** Robert P. Schmidt, Director; Frederick M. Hilpert, Associate Director (Academic Computing); **Museum of Natural History,** Charles A. Long, Director; **News and Publications,** John E. Anderson, Director; **Office of Management Information and Institutional Research,** Paul C. Holman, Director; **Personnel Services,** Roland W. Juhnke, Director; **Systems Analyst, University** John F. Sundstrom.

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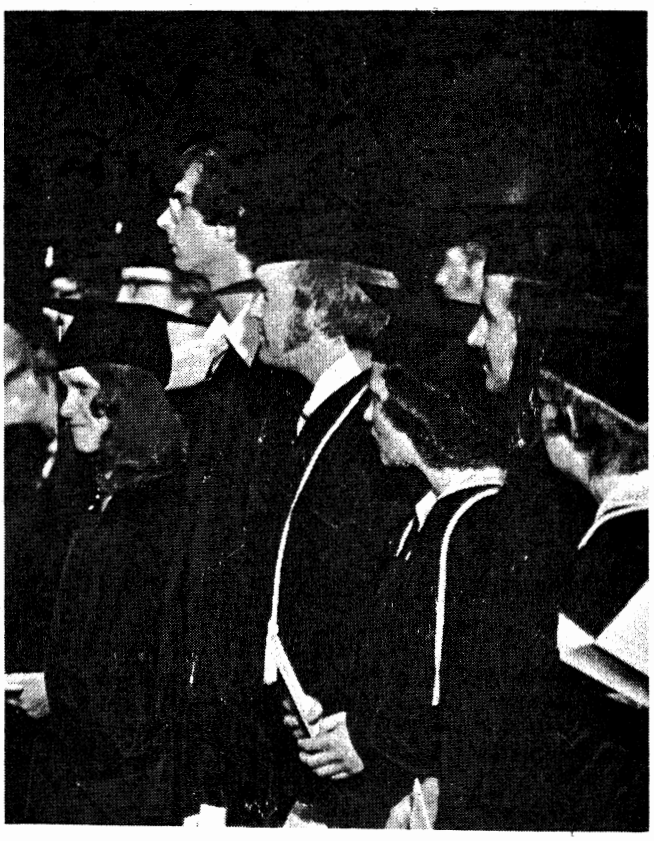
Forestry: Ulrich Ammer, Ph.D., Anton Hammer, Ph.D., Ministerium fur Ernahrung, Landwirtschaft, und Umwelt, Stuttgart, Germany; Hans Nienstaedt, Ph.D., U.S. Forest Service, Rhinelander.

Home Furnishings and Design: Kathryn Harle, B.S., M.A., U.W. Extension Specialist.

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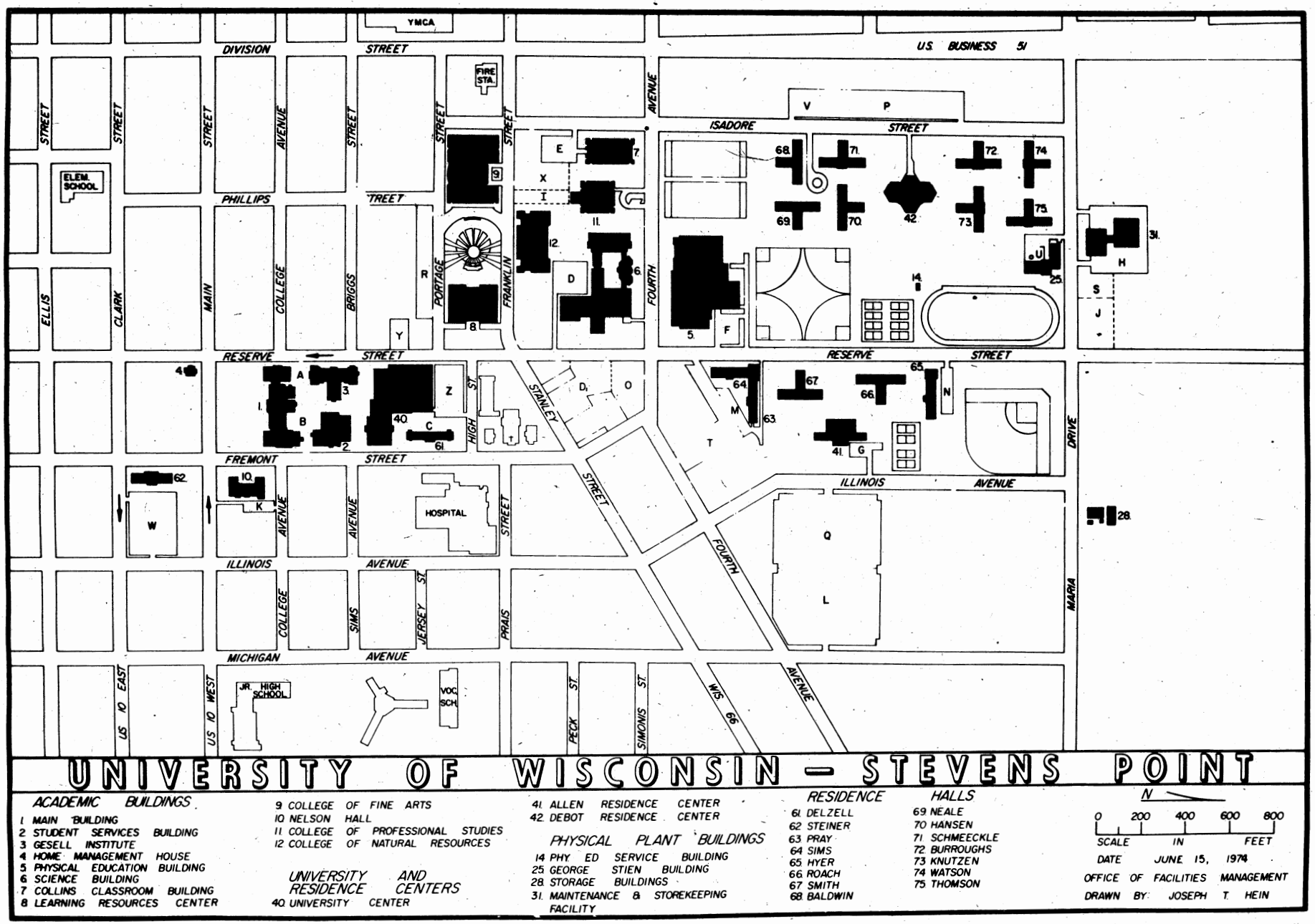


Calendar

First Semester	**1976-77**	**1977-78** (tentative)
Official opening	Aug 23 (Mon)	Aug 22 (Mon)
Faculty Orientation	Aug 25 & 27 (Wed & Fri)	Aug 24 & 26 (Wed & Fri)
Registration (09:00-14:00)	Aug 26 (Thu)	Aug 25 (Thu)
Classes begin 08:00	Aug 30 (Mon)	Aug 29 (Mon)
Labor Day Holiday	Sep 6 (Mon)	Sep 5 (Mon)
Last day for registration or adding a course	Sep 7 (Tue)	Sep 6 (Tue)
Thanksgiving Recess begins at 11:50	Nov 24 (Wed)	Nov 23 (Wed)
Classes resume	Nov 29 (Mon)	Nov 28 (Mon)
Registration for second semester; **ONLY** for students registered first semester; classes are cancelled.	Dec 6 (Mon)	Dec 5 (Mon)
Study Day	Dec 14 (Tue)	Dec 15 (Thu)
Final Examinations	Dec 15-20 (Wed-Mon)	Dec 16-22 (Fri-Thu)
Commencement	Dec 19 (Sun)	Dec 18 (Sun)
Semester ends; Winter Recess begins at 17:00	Dec 20 (Mon)	Dec 22 (Thu)

Second Semester		
Official opening	Jan 10 (Mon)	Jan 9 (Mon)
Faculty Orientation	Jan 12 & 14 (Wed & Fri)	Jan 11 & 13 (Wed & Fri)
Registration (09:00-13:00)	Jan 13 (Thu)	Jan 12 (Thu)
Classes begin 08:00	Jan 17 (Mon)	Jan 16 (Mon)
Last day for registration or adding a course	Jan 24 (Mon)	Jan 23 (Mon)
Spring Recess begins at 11:50	Mar 12 (Sat)	Mar 18 (Sat)
Classes resume	Mar 21 (Mon)	Mar 27 (Mon)
Easter Recess	Apr 8-11 (Fri-Mon)	(Mar 26 Sun)
Registration for first semester next year; **ONLY** for students registered second semester; classes are cancelled.	May 2 (Mon)	May 1 (Mon)
Study Day	May 7 (Sat)	May 8 (Mon)
Final Examinations	May 9-13 (Mon-Fri)	May 9-13 (Tue-Sat)
Commencement	May 14 (Sat)	May 14 (Sun)

Summer Session	**1977**	**1978**
Registration	Jun 13 (Mon)	Jun 12 (Mon)
Classes begin	Jun 14 (Tue)	Jun 13 (Tue)
Holiday	Jul 4 (Mon)	Jul 4 (Tue)
Commencement; Session ends	Aug 5 (Fri)	Aug 4 (Fri)



UNIVERSITY OF WISCONSIN — STEVENS POINT

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10 NELSON HALL
11 COLLEGE OF PROFESSIONAL STUDIES
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SCALE IN FEET

DATE JUNE 15, 1974

OFFICE OF FACILITIES MANAGEMENT

DRAWN BY: JOSEPH T. HEIN

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