



University of Wisconsin - STEVENS POINT 1974-75 Undergraduate/Graduate Catalog

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UNIVERSITY OF WISCONSIN  
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# UW-Stevens Point 1974-75 Catalog

Undergraduate/Graduate

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A record of academic offerings, university policies, faculty and administration as of January 1, 1974.

Published quarterly by the Board of Regents of the University of Wisconsin System. Second class postage paid at Stevens Point, Wisconsin 54481.

University of Wisconsin-Stevens Point Bulletin Catalog Series/Undergraduate/Graduate Catalog 1974: 2, June 1974.

# Calendar

## First Semester

Faculty members report  
 Faculty Orientation  
 Registration (9:00 a.m. to 2:00 p.m.)  
 Classes begin  
 Labor Day Holiday  
 Fall Recess  
 Thanksgiving Recess begins at 11:50 a.m.  
 Classes resume  
 Registration for second semester;  
**ONLY** for students registered first semester; classes are cancelled.  
 Final Examinations  
 Reading Day (No exams!)  
 Commencement

## 1974-75

Aug 21 (Wed)  
 Aug 21 & 23  
 Aug 22 (Thu)  
 Aug 26 (Mon)  
 Sep 2 (Mon)  
 \_\_\_\_\_  
 Nov 27 (Wed)  
 Dec 2 (Mon)

## 1975-76

Aug 20 (Wed)  
 Aug 20 & 22  
 Aug 21 (Thu)  
 Aug 25 (Mon)  
 Sep 1 (Mon)  
 Oct 13-14 (Mon-Tue)  
 Nov 26 (Wed)  
 Dec 1 (Mon)

Dec 3 (Tue)  
 Dec. 10-17 (Tue)  
 Dec 14 (Sat)  
 Dec 15 (Sun)

Dec 2 (Tue)  
 Dec 13-19 (Sat-Fri)  
 Dec 16 (Tue)  
 Dec 21 (Sun)

## Second Semester

Faculty members report  
 Registration (9:00 a.m. to 1:00 p.m.)  
 Department meetings  
 Classes begin  
 Spring Recess begins after last class on  
 Classes resume  
 Easter Recess begins after last class on  
 Classes resume  
 Registration for first semester next year;  
**ONLY** for students registered second semester; classes are cancelled.  
 Final Examinations  
 Reading Day (No exams!)  
 Commencement

Jan 9 (Thu)  
 Jan 9 (Thu)  
 Jan 10 (Fri)  
 Jan 13 (Mon)  
 Mar 22 (Sat)  
 Apr 1 (Tue)  
 \_\_\_\_\_  
 \_\_\_\_\_

Jan 14 (Wed)  
 Jan 15 (Thu)  
 Jan 16 (Fri)  
 Jan 19 (Mon)  
 Mar 27 (Sat)  
 Apr 5 (Mon)  
 Apr 15 (Thu)  
 Apr 20 (Tue)

Apr 28 (Mon)  
 May 7-14 (Wed)  
 May 10 (Sat)  
 May 11 (Sun)

May 10 (Mon)  
 May 15-21 (Sat-Fri)  
 May 18 (Tue)  
 May 23 (Sun)

## Summer Session

Classes begin  
 Independence Day Holiday  
 Final Examinations  
 Commencement

## 1974

June 10  
 Jul 4-5  
 Aug. 2-3  
 Aug 3 (Sat)

## 1975

June 9  
 Jul 4  
 Jul 31-Aug 1  
 Aug 1 (Fri)

## 1976

June 14  
 Jul 5 (Mon)  
 Aug 5-6  
 Aug 6 (Fri)

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### **Affirmative Action**

Chancellor Lee S. Dreyfus affirms UW-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.

Anyone who feels he or she has been discriminated against or who believes a university practice is discriminatory is invited to contact the appropriate Affirmative Action Officer at 240 Main: Nancy Moore for women and Gordon Haferbecker for minorities (715) 346-2002.

# The Mission of the University

## **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 programs 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.

**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, business education, communicative disorders, drama, food and nutrition (including dietetics), 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.

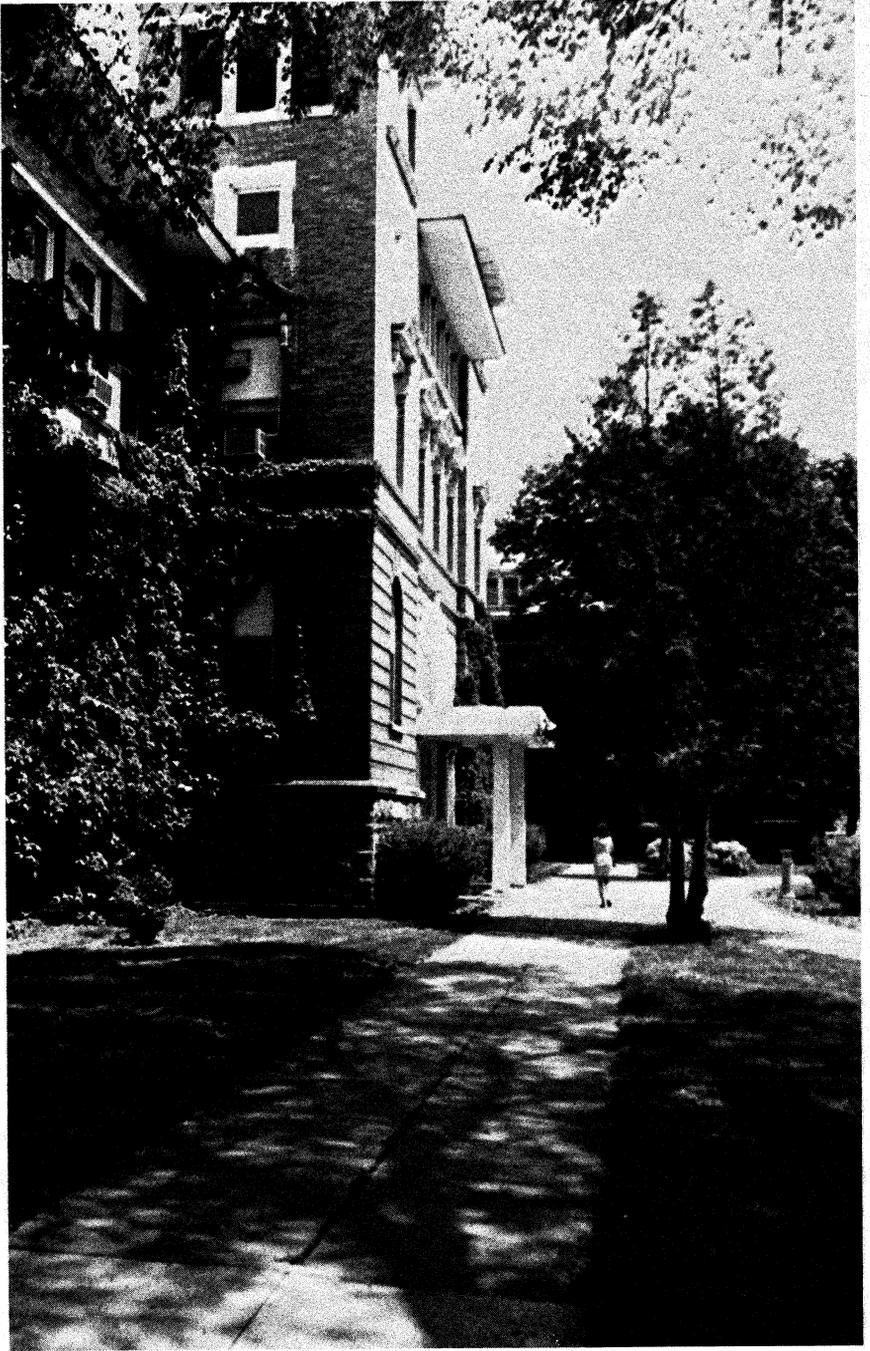
# The Student's Responsibility



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 form as will be of help to the student as he goes through the university.



# The Campus

## **The University**

The University of Wisconsin-Stevens Point opened in the fall of 1894 as Stevens Point Normal School. In the intervening years, the Normal School, which was originally established for the education of teachers, became Central State Teachers College, Wisconsin State College, Wisconsin State University-Stevens Point; in 1971 it was designated as The University of Wisconsin-Stevens Point. About 7200 students are expected in the fall of 1974.

## **Location**

Stevens Point is located in central Wisconsin 110 miles north of Madison at the intersection of north-south highway U.S. 51 and east-west highway U.S. 10. 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 Air Commuter Service.

The city's population is approximately 23,500, and the metropolitan area has a population of about 32,000. The campus is about one mile east of the downtown business district. Originally located on a five acre site, it has now expanded to include over 250 acres.

## **Buildings**

### **Old Main**

The Main Building, the central portion of which is the original building opened in 1894, includes administrative offices, an auditorium, general classrooms, offices and laboratories for the department of communication, and general service functions, such as duplicating and mail rooms, to serve the total university.

### **Nelson Hall**

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.

### **Science Building**

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, facilities for radiation research, weather panel with remote recording instruments, and

## The Campus

a cartographic reproduction center. An addition expanding these departments opened in the fall of 1973, and includes two lecture halls, a synoetics laboratory, and an operating room for experimental psychology.

### **Classroom Center**

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.

### **School of Health, Physical Education, Recreation, and Athletics Building**

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 Gymnasium, an indoor practice area, swimming pool, and classrooms. An addition to the building, which more than doubled its size, was completed in 1969. Included in the addition are the Quandt Gymnasium, handball court, larger indoor practice areas, and other specialized facilities.

### **College of Fine Arts Building**

The College of Fine Arts Building, opened in the fall of 1970, is located between Portage and Franklin Streets at Isadore Street. It houses the departments of art, drama 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.

### **College of Natural Resources Building**

Opened in the fall of 1973, 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.



### **College of Professional Studies Building**

The College of Professional Studies Building, located on Fourth Avenue between the Science Building and the Collins Classroom Center, opened in the fall of 1971. It 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.

### **Learning Resources Center**

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 and Instructional Media.

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 learn the fundamentals of audio-visual equipment operation. Two television studios provide for the production of video tapes and interaction analysis through micro-teaching sessions. Audio instructional tapes will be transmitted from the Media Service area to listening carrels throughout the Learning Resources Center.

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 **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 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 for faculty and graduate students and sends for photo-duplication of materials for faculty and students.

### **Student Services Center**

The Byron B. Park Student Services Center is located in the former Library building 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 Data Processing, and the offices and facilities of the Military Science Department.

## **The Campus**

**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.

### **Aquatic Research Center**

This specialized research center is 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 stream-beds, fish tanks, and aquariums.

### **Maintenance and Central Stores**

Opened in 1973, the Maintenance and Central Stores Building houses the maintenance shops for each of the trades. The Purchasing Department is located here, in addition to a large Central Stores facility.

### **Heating Plant**

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 Director of Physical Plant, the purchasing office, the protection and security office, and the switchboard are also located in this building.

### **Home Management House**

The Home Management House across from the Main Building on Main Street gives home economics majors an opportunity to live in a family unit. Several young women live there each semester with a member of the department and manage the house as a family group.

### **University Center**

The University Center is located between Fremont and Reserve Streets just north of the Student Services Center. It is a community center organized for students, faculty, alumni, and friends of the university. The building includes dining facilities, snack bar, games room, television lounge, University Book Store, offices for major student organizations, publications offices, and several meeting rooms available for use by student and faculty groups.

### **Memorial Forum**

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

### **Residence Halls**

Twelve residence halls are homes for approximately 3,000 students. The halls are financed on a self-liquidating program with all costs being met by fees paid by the students. No tax money is used in their construction or maintenance. The halls provide study, sleeping, and living accommodations for each student. In addition, lounge and recreational facilities are provided in each building. These facilities are used extensively for educational, social, and recreational activities.

### **Residence Centers**

Residence Center facilities are provided in each residence hall complex serving the students living in that complex. DeBot and Allen Centers serve the respective complexes. Food service, snack bars, lounges, study rooms, student offices, and



private dining rooms provide facilities for student programming. The student programs are of an educational, social, and cultural nature and include such activities as films, art exhibits, dances, faculty discussions. Residence Center programming groups consist of representatives from each of the respective residence halls. This program is under the direction of the Housing Office.

The center buildings are financed on a self-liquidating program with all costs being met by fees paid by the students that are served by the respective center building. No tax money is used in their construction or maintenance.

### **Parking**

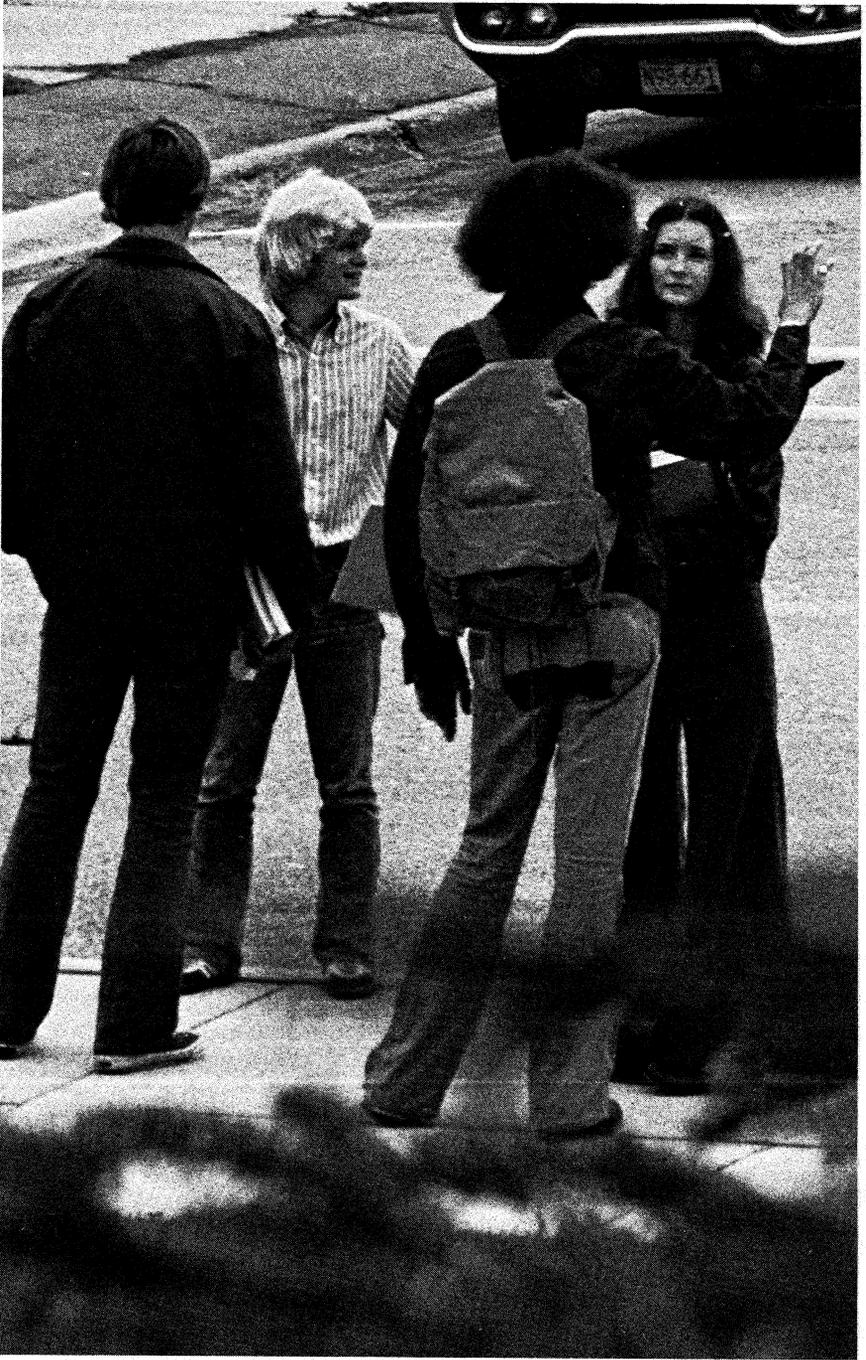
Limited parking facilities are available for faculty, staff, and students, both resident and commuting. To park on any of the off-street parking areas provided by the university, it is necessary to display a parking permit sticker on the vehicle. This sticker may be obtained for a fee by making application at the Office of Protection and Security, and after receiving approval, making payment of the fee at the cashier's office.

Students living in residence halls must receive initial parking lot assignments through their residence hall director. Faculty and staff will be assigned lots as close to their class and office locations as space permits. A copy of specific parking regulations may be obtained at the Office of Protection and Security.

Although new parking lots have been developed, resident upperclassmen will continue to have priority in close-proximity lots. Other students may be assigned to lots at greater distances from their residences.

### **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 p.m. 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.



# Student Life, Activities, Services

## **Where Students Live**

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.

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.



## **Student Life, Activities, Services**

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 21 meals per week at one of the residence centers. Residence hall contracts, which include room and board, are for the entire academic year.

A complete list of available facilities may be obtained from the Housing Office. Under the approved housing agreement, the householders promise to meet specific standards of health, safety, furnishings, etc. The standards required by the university meet or exceed the standards provided in the Stevens Point Municipal Housing Code. Students living in approved housing may expect direct university assistance if these standards are not met. Off-campus housing contracts are for the semester or the academic year. Approved housing is located through the community. The facilities vary in size from accommodations for one student to 100 students. These accommodations can be single or multiple rooms, apartments, etc. and may or may not include cooking facilities. Students residing off-campus may purchase a meal ticket for a semester or academic year and eat at one of the centers.

Students eligible for accommodations other than residence halls may obtain a list of available facilities from the Housing Office. The landlords listed must be licensed by the city of Stevens Point, and must have signed a statement agreeing not to discriminate on the basis of race, religion, or national origin. These are the **ONLY** agreements between these unsupervised facilities and the University of Wisconsin-Stevens Point. Students with upperclass status (junior-senior) may select facilities from this listing. It should be clearly understood that these accommodations are not inspected or regulated by the university. The list is maintained only as a service for students seeking these accommodations. Only **APPROVED** housing is under contract with the university.

### **University Health Service**

The main purpose of the University Health Service is to serve the student in health matters, so as to allow the least restricted and most educated pursuit of learning. This includes the prompt treatment of illness and injury. It also includes promotion of information and techniques to (a) maintain good health; (b) prevent ill health; (c) adapt to altered health states.

As required by state law, services such as medical record filing, T.B. testing, and immunizations are available to faculty and staff. The Health Service staff includes the services of four physicians (including a consulting psychiatrist), a consulting pharmacist, five registered nurses one of whom is Health Educator, two medical technologists, two secretaries, and one doctor's aid. It is located on the lower level

of Nelson Hall. Hours are from 7:45 a.m. to 4:30 p.m. Monday through Friday. The telephone number is 346-4646. During the hours the Health Service is not open, information regarding emergency care may be obtained through the office of protection and security, phone 346-2368.

All graduate and undergraduate students registered on the Stevens Point campus who have paid the activity fee and who have their health examination forms on file at the Health Service are eligible for care while the university is officially in session. Services, medications, and lab tests obtained at the Health Service incur no additional expense for the student. However, expenses for health care obtained outside of the Health Service, must be covered by the student or some health insurance program of his own. Such things would include x-rays, unusual laboratory tests obtained at the hospital or prolonged or uncommon medications. Immunizations are available to faculty and staff at cost. An excellent health insurance policy which takes over where the University Health Service leaves off is available through the Student Senate. Forms may be obtained at the Student Senate office or at the Student Activities office.

During hours the Health Service is not open, information may be obtained from the Emergency Room at St. Michael's Hospital. 344-4400.

### **Center for Communicative Disorders**

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.

### **Counseling Center**

Counseling services are available for all students at the Counseling Center located in 014 Nelson Hall. Professionally-trained counselors 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.

Counselors are available from 8 a.m. to 4:30 p.m. on Monday through Friday. The telephone number is 346-3553. Students are encouraged to use the occupational information library at their leisure. All services are free to any undergraduate or graduate student enrolled in the university.

## **Student Life, Activities, Services**

### **University Placement Center**

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.

### **New Student Orientation**

During the summer months prior to his entrance as a freshman, the accepted applicant and his parents are expected to participate in a **two-day** orientation program. This 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.

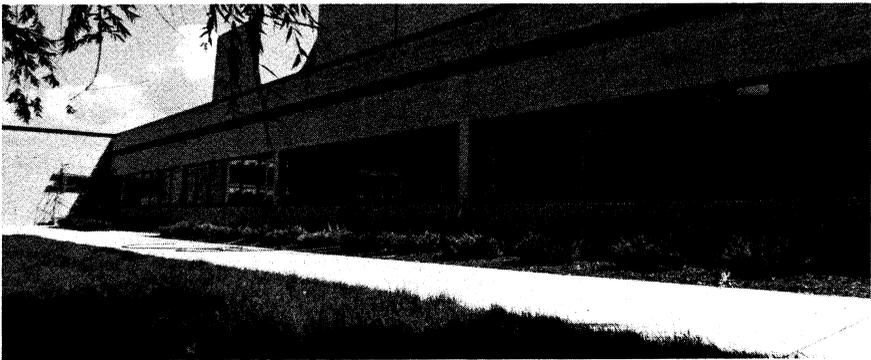
### Student Conduct

The following statement concerning rights and rules of conduct for students of Chapter 37 Units of the University of Wisconsin System was promulgated by the Board of Regents in Resolution # 3054, adopted on January 18, 1968 and amended on June 13, 1969, and on September 26, 1969.

Although the Wisconsin State University system is committed to the full support of the constitutional rights of its students, including due process in student disciplinary matters, it also has an equal obligation to protect its educational purpose and the interests of its study body. Each university must, therefore, at all times be concerned with the actions of individuals or groups that are in conflict with the welfare and integrity of the institution or in disregard of 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 State of Wisconsin extends the benefits of admission to its institutions of higher education to those persons who meet certain academic qualifications and standards of health, character and prior conduct. Admission to a university confers benefits beyond those available to all citizens, but commensurate with these are additional responsibilities.

When a student enters the Wisconsin State University system it is assumed that he has serious purpose and a sincere interest in his own social and intellectual development. He is expected to learn to cope with problems with intelligence, reasonableness and consideration for the rights of others; to obey laws and ordinances of the nation, state and community of which he, as well as his university, is a part; and to conduct himself peaceably in espousing changes he may consider necessary. As he prizes rights and freedoms for himself, he is expected to respect the rights and freedoms of others.



## **Student Life, Activities, Services**

Students are subject to federal, state and local laws as well as university rules and regulations. A student is not entitled to greater immunities or privileges before the law than those enjoyed by other citizens generally. Students are subject to such reasonable disciplinary action as the president of the university may consider appropriate, including suspension and expulsion in appropriate cases, for breach of federal, state or local laws or university rules or regulations. This principle extends to conduct off campus which is likely to have adverse effect on the university or on the educational process or which stamps the offender as an unfit associate for the other students.

The universities recognize the right of the individual student or of student groups to disagree with national, state, local and administrative or faculty policies and positions. Students have the right, furthermore, to express their disagreement on issues which have captured their interest, and to assemble peaceably for that purpose, subject to reasonable restrictions as to place and time.

However, the following actions, among others, are specifically prohibited:

- a. Interference with accepted functions or activities of the university or with its educational or service programs either by breach of the peace, physical obstruction, or coercion, threats or intimidation, or by noise, tumult or other disturbances, whether the act of interference be done on or off the campus.
- b. Unauthorized occupancy of university facilities or blocking access to or from such areas.
- c. Interference with approved university traffic (pedestrian or motor vehicle).
- d. Infringement of the rights of students, faculty, staff, and/or other authorized persons to gain access to any university facility for the purpose of attending classes, participating in interviews, university conferences and/or other university activities.
- e. Picketing, or demonstrating, with the use of obscene or indecent language, or with signs or banners containing such language or of such size, material or construction as to create a hazard to persons or property.
- f. Interference, whether physical or otherwise, with any disciplinary procedures of any university, branch campus, summer session or other facility of the Wisconsin State University System, or intimidating, threatening or assaulting any proposed witness, administrative officer or faculty member of said System in the performance of his duties, or to influence his official action except by evidence or argument presented at the hearing, or of any member of any Tribunal, hearing agent, prosecutor, defendant or defense counsel, or other person performing official duties relating to said procedures, whether such act be committed on or off campus, before, during or after hearing.

While this by-law is applicable to all of the State Universities, the Board of Regents recognizes that there are appreciable differences in tradition, environment, mission, clientele, and institutional character. Accordingly the president of each university is authorized to establish such additional rules and regulations for student conduct, consistent with the by-laws of the Board of Regents, as he may determine to be appropriate for the needs of the university.

Power is hereby conferred upon the president of each state university to suspend or expel students for misconduct, and for such other causes as may be prescribed from time to time in these by-laws.

Without limiting its generality by specification, the term "misconduct" as herein used shall include violation on campus of federal, state or local law or by-laws of the Board of Regents of State Universities or university by-laws, rules or regulations, including the prohibitory provisions of this by-law; and also violations of such laws, by-laws, rules or regulations occurring off campus which are likely to have an adverse effect on the university or on the educational process carried on at the university or which stamp the offender as an unfit associate for the other students.

A student charged with conduct which may subject him to substantial disciplinary action should of course be afforded reasonable notice of the offense with which he is charged and the general nature of the evidence on which the charge is based, a reasonable opportunity to prepare and present any defense he may have, an adequate and fair hearing, and generally, procedural due process of law. He should be dealt with fairly in all respects; and the severity of the discipline when guilt is established should be reasonably commensurate with the gravity of the offense. If in any case the president shall determine that the best interests of the university or of the other students require it, the president may suspend the accused student temporarily, pending prompt determination as to his guilt.

This university feels strongly that it must protect the right of the teacher to teach and the students to learn. Students, who through procedural due process, are found to be in violation of items a, b, or d above will face suspension for one academic year.

Other offenses against good conduct which will be sufficient cause for disciplinary action (and may result in suspension) are: the possession or consumption of intoxicating or fermented malt beverages in residence halls or in approved off-campus housing, the illicit use or possession of narcotics or drugs, gambling, falsification of information, dishonesty and disorderly or undesirable conduct.

(For disciplinary action less than "substantial" the student is usually seen by a member of the Student Affairs Office. This level of discipline could involve such things as disciplinary probation, warning letters, removal from a residence hall, loss of privileges in any university facility.

(The University of Wisconsin does not require appeal avenues for this level of misconduct, but in the best interests of fair play, an appeal opportunity exists for those students receiving any level of disciplinary action. The Student Affairs Office has the appeal procedure in writing, and will advise any who inquire or who are disciplined as to these procedures.)

### **Guidelines for Student Disciplinary Procedure**

The following guidelines were adopted by the Board of Regents in Resolution # 3670 on November 13, 1970.

## **Student Life, Activities, Services**

Section 7.10 of the By-Laws of the Board of Regents of State Universities contains the following provision:

"A student charged with conduct which may subject him to substantial disciplinary action should of course be afforded reasonable notice of the offense with which he is charged and the general nature of the evidence on which the charge is based, a reasonable opportunity to prepare and present any defense he may have, an adequate and fair hearing, and generally, procedural due process of law. He should be dealt with fairly in all respects; and the severity of the discipline when guilt is established should be reasonably commensurate with the gravity of the offense. If in any case the president shall determine that the best interests of the university or of the other students require it, the president may suspend the accused student temporarily, pending prompt determination as to his guilt."



For the guidance of the Presidents in meeting their responsibilities in the area of student discipline, compliance with the following guidelines is required to the end that certain minimum standards of procedure shall prevail at all of the State Universities.

The Board of Regents reserves the right to suspend the application of provisions of these Guidelines and take direct control of disciplinary proceedings at the State Universities or at a Branch Campus or elsewhere in any case where the Board may deem such action appropriate; but that will normally be done only on the request of the President of the University or in situations when questions of system-wide or general public concern are presented or exceptional problems of hearing procedure arise out of the large number of students involved, the complexity of issues, or otherwise, or for any other reason the Guidelines procedure appears inadequate or inappropriate. The Board of Regents may delegate in whole or in part the exercise of this reserved power to the Executive Director of the State Universities System.

These guidelines shall apply to all cases in which a student is charged with conduct which may subject him to substantial disciplinary action including academic misconduct such as cheating or plagiarism. As thus used, the words "substantial disciplinary action" may include expulsion from the university, suspension from the university, denial of a degree to which the student would otherwise be entitled, and other penalties likely to involve comparable hardship to the student. Conversely these guidelines need not apply to action on account of failures or inadequacies in academic or scholastic achievement, such as failure to earn passing grades or meet the academic requirements for a degree or for continuation in the university, nor to non-attendance at classes.

## **1. Initiation of Charges.**

**1.1** The President of each campus shall designate a person as "Investigating Officer," who may, after investigation, initiate charges against any student for violation of University rules or regulations. The Investigating Officer will if warranted prepare and cause to be served upon the student a statement of charges. Nothing herein shall change the right of the administration, after investigation and after giving the student an opportunity to make any statement in his own behalf, to impose disciplinary punishment less severe than suspension.

## **1.2 Statement of Charges.**

A statement of charges shall contain:

- (a) A brief 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 copy of these rules.

## **1.3 Service.**

A copy of the statement of charges shall be served on the student charged in person or by mail to his address on file with the registrar. Where service is by mail, the date of mailing shall be the date of service. Each student shall keep the registrar notified in writing of his current address.

## **2.1 Appointment.**

Hearing Examiners shall be appointed by the Executive Director of the Wisconsin State Universities, when requested by the President of each campus. These positions may be filled by hearing examiners from the various state agencies. The University shall reimburse the agency for the salary and expenses of the examiner on a proportional basis but the examiner shall remain an employee of his parent agency. The appointment of the hearing examiner from other state agencies shall be in compliance with secs. 16.285 and 20.901, Wis. Stats.



## **2.2 Duties.**

The duties of the Hearing Examiners, upon assignment to particular cases shall be as follows:

- (a) Take custody of the case file and papers.
- (b) Schedule hearings in accordance with these rules on the statement of charges.
- (c) Issue subpoenas and administer oaths.
- (d) Conduct hearings, take testimony, and other evidence and take such other action as may be appropriate in accordance with these rules.
- (e) Transmit a transcript or his summary of the evidence, recommended findings of fact and decision, along with the file, record, exhibits, and other materials to the president.

## **3. Pre-Hearing Procedure.**

### **3.1 Request for Hearing.**

A student charged under sec. 1 has 10 days from the day of service to request a hearing in accordance with this section. This request shall be made in writing and directed to the president and shall also include an answer to the charges.

- 3.2** The answer 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 shall so state, such statement being a denial. All allegations

in the statement of charges, if no answer is filed, or any allegation in the charge not specifically denied or explained in an answer filed, unless the student states in the answer that he is without knowledge, are deemed to be admitted to be true and shall be so found by the Hearing Examiner unless good cause to the contrary is shown.

**3.3** If a student does not request a hearing within the 10-day period specified above, the President may accept the allegations in the statement of charges as true and expel, suspend, or impose other punishment on the student. Notice of such action shall be served upon the student and become effective upon service in accordance with sec. 1.3.

**3.4 Appointment of Hearing Examiner.**

When a request is made for a hearing the Executive Director of the State Universities shall appoint a hearing examiner in accordance with sec. 2.1. When appointed, the examiner is assigned to a particular case or cases and takes custody of the file. Notice of appointment of the examiner shall be sent to the student and to the Attorney General.

**3.5 Schedule of Hearings.**

The hearing examiner shall schedule the hearing as expeditiously as possible. The hearing shall be held on the date scheduled, except for good cause shown.

**3.6** Failure of a party to proceed in a duly scheduled hearing shall constitute a default. The examiner may make recommendation for either dismissing the charges, or upon a prima facie showing make a recommended finding that the student committed the violation(s) charged.

**4. Hearing Procedure.**

**4.1 Burden of Proof.**

The burden of proof shall be upon the administration to establish by substantial evidence the alleged conduct violative of University rules or regulations.

**4.2 Issues: Prior Criminal Conviction.**

Where the basis of the charge is conduct for which the student has been convicted in criminal proceedings the administration may introduce a certified copy of the judgment of conviction. The judgment of conviction shall constitute presumptive evidence of the commission of the acts charged in the criminal proceeding.

**4.3 Record of Hearings.**

A record of the testimony and a file of exhibits shall be made of all hearings, under sec. 3.1. Either party may, at his own expense, have the record transcribed. Nothing herein shall preclude either party from tape recording the proceedings.

**4.4 Public Hearings.**

Hearings before the hearing examiner shall be public unless the student whose case is being heard requests a closed hearing or the examiner determines in extraordinary circumstances that it is necessary to hold a closed hearing to preserve order or to protect the reputation of innocent persons. A record shall be made of the reasons for closing any hearing.

**4.5 Procedural Rights.**

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

**4.6 Contempt Powers.**

Hearing examiners are empowered to maintain order and decorum and shall have the power to eject disrupters and to impose discipline upon any student for misconduct occurring in his presence which impairs the proceedings.

**5. Decision and Appeal.**

**5.1 Decision on Transcript.**

When requested by the president, the examiner shall file with such person, a transcript of the proceedings together with his recommended findings of fact and decision. The president may decide the case solely on reading such record.

**5.2 Decision on Summary and Recommendations.**

Whenever it is impracticable for the president to hear or read all the evidence, the final decision shall not be made until a summary of the evidence prepared by the examiner, together with his recommendation as to the findings of fact and the decision in the proceeding has been prepared and furnished to each party.

**5.3 Exceptions.**

Either party has ten days after the date of service of the examiner's summary and recommendations under section 5.2 to file written exceptions thereto with the president. If no exceptions are filed to the summary and recommendations within the prescribed time the president may adopt the recommended findings and decision as his own, but shall do so in writing.

**5.4 Arguments, Briefs.**

If either party files exceptions under section 5.3, the president shall afford the parties an opportunity to file briefs and present oral argument.

**5.5 Decision.**

The president shall render written findings of fact and decision in each case.

**5.6 Decision Final.**

The decision of the president shall be final. The Board of Regents, however, reserves jurisdiction to review upon its own motion, any decision. Notice of such review shall be served within 30 days of the president's decision. In a case where the Board of Regents elects to review on its own motion, the decision of the president shall not be final.

**5.7 Effective Date.**

The final decision is effective upon service in accordance with sec. 1.3.

**5.8 Determination of Eligibility for Higher Educational Aids.**

In every case where the examiner recommends a finding that the student has committed acts which result in the recommendation of discipline he shall also recommend findings and decision on the following questions for the purpose of determining eligibility for aids under sec. 36.43, Wis. Stats., and sec. 504, Public Law 90-575.

- (a) Did the offense involve the use of (or assistance to others in the use of) force, disruption, or seizure of property under the control of the University.
- (b) Was the offense committed with intent to prevent students or employees at the University from engaging in or pursuing their duties.
- (c) Was the offense of a serious nature.
- (d) Did the offense contribute to a substantial disruption of the University.

For purposes of determining eligibility under sec. 205 of the Fiscal Year 1971 Appropriation Act for the Department of Health, Education and Welfare, the examiner shall also recommend findings and decision on the following questions.

- (e) Did the offense involve the use of (or assistance to others in the use of force or the threat of) force or the seizure of property under the control of an institution of higher education.
- (f) Was the offense committed with intent to require or prevent the availability of certain curriculum, or to prevent the faculty, administrative officials, or students in such institution from engaging in their duties or pursuing their studies at such institution.

A copy of these recommended findings shall be forwarded to the president along with the examiner's recommended findings of fact and decision.

**6. Status Pending Determination of Charges.**

**6.1 Temporary Suspension.**

A student may be temporarily suspended, pending a full hearing, for reasons relating to his safety or well-being or for reasons relating to the safety or well-being of members of the University community or University property. Prior to such temporary suspension the president shall:

- (a) Make an initial evaluation of the reliability of the information received and make such further investigation as the circumstances permit.
- (b) Determine whether the conduct reported is of such a nature as to require that the student be immediately suspended for his own safety or well-being or for the safety or well-being of members of the University community or University property.
- (c) Provide the student, if possible, with an opportunity to appear before the president to be informed of the nature of the offense, and to make such statement as he may wish to make before the decision is reached on a temporary suspension.

**6.2 Resignation Under Charges.**

Where a Statement of Charges has been served, the student, prior to hearing, shall have the option of submitting a written resignation. In the event of such resignation the president shall impose such penalty as he deems appropriate consistent with the Statement of Charges. Nothing herein shall limit the right of the administration and the student to agree to a penalty on a plea of "no contest." Any such agreement shall be reduced to writing as an order of the president and shall conclude the case.

**6.3 Pending Charges.**

During the period charges are pending, a student under charges unless suspended, shall continue to have the rights and privileges accorded other students. However, grades, records, transcripts, or diplomas shall be withheld pending determination of the charges. A student may lose credit for the semester in which the alleged misconduct occurred if he is found guilty of the conduct charged and the punishment imposed so specifies.



## **Articles of Operation of the Disciplinary Appeals Board**

### **PURPOSE**

Regulations governing student conduct at UW-Stevens Point have their origin in state and local statutes, Board of Regents policies, and administrative and faculty policies. University regulations are published in the university catalog, student handbook, and residence hall handbook. Infractions of published university regulations may result in disciplinary action being imposed upon a student or student organization by the office assigned authority and responsibility for such action. The purpose of the Disciplinary Appeals Board is to provide the student or student organization an opportunity to appeal the disciplinary decision of the office rendering the decision when the student or student organization considers the decision unfair or inappropriate and when the offense does not permit a hearing or appeal through the Board of Regents' guidelines.

### **ARTICLE I**

#### **Name**

Section 1: The name of this organization shall be the Disciplinary Appeals Board of UW-Stevens Point.

### **ARTICLE II**

#### **Composition of the Committee**

Section 1: The Disciplinary Appeals Board shall be composed of five students and five faculty.

Section 2: The Chairman shall be elected from and by the Disciplinary Appeals Board.

### **ARTICLE III**

#### **Appointment Procedure**

Section 1: Appointment of the five students to the Disciplinary Appeals Board shall be by the President of the Student Government for a one year year term. These appointments must be ratified by a  $\frac{2}{3}$  majority of the Student Government.

Section 2: Qualifications for the student members of the Disciplinary Appeals Board shall be established by the Student Government.

Section 3: Three faculty members of the Disciplinary Appeals Board shall be selected by the Executive Board of the faculty and ratified by the Faculty Senate.

Section 4: In the case of the three faculty members selected by the Faculty Senate, the first appointments shall be for one, two and three years. Thereafter, all faculty appointments shall be for three year terms.

## **Student Life, Activities, Services**

- Section 5:** Two members of the faculty serving on the Disciplinary Appeals Board shall be appointed by the President of the Student Government. These appointments shall be ratified by a  $\frac{2}{3}$  majority of the Student Government.
- Section 6:** Appointments shall be made during December for the following calendar year. (Special appointments to fill the Disciplinary Appeals Board for the remainder of the present calendar year shall be made upon ratification of these Articles of Operation.) The Student Government president shall designate the member of the Disciplinary Appeals Board to call the initial meeting.
- Section 7:** A member shall be automatically dismissed from the Disciplinary Appeals Board upon the accumulation of two unexcused absences in one school year.
- Section 8:** A member of this Board may be excused from a meeting by a majority vote of the Board. The Chairman may also excuse members subject to the approval of the Board.
- Section 9:** In the case of a vacancy on the Disciplinary Appeals Board, the vacancy shall be filled in the same manner as the original appointment. The Disciplinary Appeals Board shall be available to operate in the summer as needed. Therefore, it is necessary if members of the Board are not present during the summer session that temporary appointments be made, in the same manner as specified above for the permanent appointments to cover that period.

### **ARTICLE IV**

#### **Procedure for Establishing an Appeal**

- Section 1:** Any student or student organization who considers disciplinary action taken against him by an office of the University of Wisconsin-Stevens Point as unfair or inappropriate may appeal such action to this Board when appeal is not granted by the Board of Regents' Guidelines.
- Section 2:** All students or student organizations receiving disciplinary action by an office of the university shall be informed they have the right to request an appeal of the decision to the Disciplinary Appeals Board and shall be informed what procedure to follow in making the request.
- Section 3:** Any student or student organizations requesting an opportunity to appeal a disciplinary action shall be required to submit a letter to the chairman of the Disciplinary Appeals Board enumerating the circumstances involved in the incident and his reasons for appealing the decision rendered in this case. The letter shall be dated and signed by the student or student organization making the appeal.

Section 4: The student or student organization waives the right of an appeal unless he requests an appeal within ten school days (not to include scheduled vacations or final weeks), after he is notified of the disciplinary decision unless special consideration should be given (i.e. based on new evidence, etc.).

## ARTICLE V

### Appeal Committee Procedures

Section 1: The Disciplinary Appeals Board shall meet to hear cases within ten school days (not including scheduled vacations or final weeks) from the date of receipt of the notification by the Chairman.

Section 2: The Chairman shall notify all nine members of the Disciplinary Appeals Board of meetings scheduled. A minimum of seven members, including the Chairman, shall be present for a meeting to hear the appeal and render a decision in accordance with Article VI.

Section 3: Meetings to hear information and evidence shall be closed to all students, faculty and administration unless an open meeting is requested by the student. Should the need arise during the course of the meeting, the Chairman, by a majority vote of the Committee, may call for an adjournment and an open meeting at a later date.

Section 4: The student or student organization's appeal may be presented to the Disciplinary Appeals Board orally, with the original appeal letter, or with additional written statements.

Section 5: Notice of the appeal shall be given to the office responsible for the disciplinary action. The university shall be represented by an official from that office who shall present the case to the Disciplinary Appeals Board.

Section 6: A student or student organization may call experts for statements or have them in writing where interpretation is a factor in the case.

Section 7: For each meeting of the Disciplinary Appeals Board, the Chairman shall be responsible for providing copies of university regulations and policies governing student conduct.

Section 8: The Chairman shall begin the proceedings with a discussion of the regulation that has been violated.

Section 9: A member of the Disciplinary Appeals Board may be removed from a particular case by a majority vote of the Disciplinary Appeals Board if the student, student organization, or the official from the office responsible for the disciplinary action is able to raise some doubt as to a member's being unbiased or unprejudiced in this case.



- Section 10:** A member of the Disciplinary Appeals Board may remove himself if he recognizes possible prejudice or bias with respect to this case.
- Section 11:** A written record of each case, which includes the basic facts and reasons for the decision reached, shall be made by a member of the Disciplinary Appeals Board as designated by the Chairman and shall be kept in the office of the Assistant Chancellor of Student Affairs and made available only to subsequent appellate bodies. All Disciplinary Appeals Board members have the right to append an opinion with the record of the case as previously published.
- Section 12:** All Disciplinary Appeals Board sessions shall be tape recorded and will be kept for one calendar year in the office of the Assistant Chancellor of Student Affairs and shall be available only to subsequent appellate bodies.

## ARTICLE VI

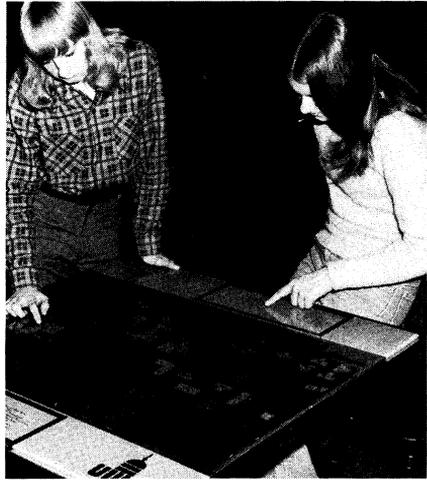
### Decisions

- Section 1:** The appeal shall be given full, careful and conscientious consideration to determine whether the action taken against the student or student organization is fair and reasonable.
- Section 2:** The Disciplinary Appeals Board decisions shall be in writing with the original filed in the Student Affairs office and copies given to the parties involved.
- Section 3:** A majority vote of the voting members present shall govern the decision of the Disciplinary Appeals Board. Members shall vote either yes or no. In case of a tie vote, the appeal fails. A record of individual Committee member votes shall be made.
- Section 4:** The Disciplinary Appeals Board by a majority vote shall decide one of the following:
1. Uphold the office's disciplinary action.
  2. Change the disciplinary action by reducing it.
  3. Rescind the disciplinary action.
- Section 5:** Final authority in these matters rests with this Committee, subject to appeal to the Chancellor and the Board of Regents.

### University Center

The University Center serves as a unifying force in the student's co-curricular life. It is a community center organized for students, faculty, alumni, and friends of the university. The Center provides cultural, social, and recreational programs which supplement classroom education.

The Center includes dining facilities, a snack bar, a games room, a television lounge, the University Book Store, offices for major student organizations, publications offices, and several meeting rooms available for use by student and faculty groups. Special services including lost and found, duplicating, and poster production are also located in the Center.



### The University Store

The University Store is located in a new facility on the lower level of the addition to the University Center. Occupying twice its original space, the store now combines all departments including the Text-Rental-Purchase Service.

The store 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.

For a rental fee of \$12.00 per semester 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.

### **Conference and Reservations**

The Conference and Reservations office is located on the second floor of the University Center, telephone extension 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 preparation for hosting special conferences. The coordination of food, housing, and other special needs and accommodations is a part of this program.

### **The Co-curricular Activities Program**

The university provides for student participation in the many varied activities of the co-curricular program. This program includes intellectual, cultural, recreational and social experiences. Through these activities, students are given an opportunity to apply classroom knowledge, to develop their talents, to broaden their interests, and to meet new people. In some instances the student may register for credit in these activities. In such a situation the activity, being curricular rather than co-curricular, is counted as a part of the regular study and class program, and may not be added if the number of credits will be in excess of the total permitted. When a student is registered for credit, his obligations are the same as in any other course, and at the end of the semester he will be graded on his participation.

### **Regulation of Participation in Activities**

Activities are important features of a college education, and students are encouraged to add to their personal, social, and professional experience and enjoyment by participating in them. However, experience has shown that students need to regulate their study and activities wisely if they are to maintain the required academic standing. University policy suggests that new students and students on probation should be especially careful in selecting the activities in which they will participate. It is recommended that during his first semester a student participate in no more than two co-curricular activities and that any student on probation participate in only one.

### **Recognition of Student Organizations**

Students at the university bring to campus a variety of interests previously acquired and develop many new interests as members of the academic community. They are free to organize and join associations to promote their common interests. University recognition of a student organization does not imply an endorsement of the organization's beliefs. 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 Organization 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 University Activities Calendar**

Each August the Student Activities Office puts out a yearly calendar listing all pre-scheduled events and activities which are to take place on the campus for the following year. The Student Activities Office also works closely with the University Center Information Desk, News Service, Housing Office, and the Reservations and Conference Coordinator in providing the latest information on all registered meetings or events which are to take place on the campus. Through its registration of campus events the Student Activities Office attempts to prevent duplication and conflicts in campus programming.

### **Registration of Activities of Student Organizations**

All events of student organizations must be registered with the Student Activities Office (second floor, University Center) at least 48 hours before the activity. (An exception is regular business meetings of an organization. These meetings need not be registered.) The primary purpose of registration of events is to enable one centralized office on campus to serve as a resource or information center on what is happening within the university community. Registration forms are available in the Student Activities Office and the Reservation Coordinator's Office.

### **Solicitation**

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 Business Affairs, Room 219 Main.

### **Student Governing Organizations**

Student participation in the development of institutional policies and regulations is encouraged at the University through the Student Government. The Student Government is divided into a Senate with 20 members (elected by housing regions) and an Assembly (with 1 representative from each student organization which desires a vote). A committee system develops policies and allocates the student activity fee for approval of the two houses of Student Government. Student Government is actively working to represent the needs of the students and to be their voice to the university administration, Board of Regents, United Council and the Legislature. They also act as a Grievance Board in all matters concerning student life.

### Student Programming Groups

The University Activities Board is an all-campus programming board composed of student committees. It offers a wide variety of programs—traditional, innovative, and para-curricular. Committee membership is open to all students who are interested. Committees are Homecoming, Winter Carnival, Special Events (Concerts and Special Programs), Coffeehouse, Popular Films, Cinema Arts Films, Fine Arts, Performing Arts, Travel, Trippers (outdoor recreation), Audio-Visual, Games, Publicity, Property and Public Relations.

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. These include the Academic Bowl Competition (similar to College Bowl), RHC Week, film festivals, Pride Week, special scholarships drives, etc. In addition to the representatives, there are elected officer positions for which any residence hall student is eligible.

### Social Fraternities and Sororities

There are 10 national social fraternal organizations on the campus. Their programs, aims, and objectives are consistent with the national organizations, the National Interfraternity or Panhellenic Conferences, and meet the criteria established by the university for recognition of any student group. Although primarily social organizations, most groups perform several service projects during the year. A student must demonstrate academic ability before joining these organizations, with membership by invitation. A "rush" period is held each semester to provide interested students with an opportunity to learn more about the Greek system at the university.

Social fraternities represented on campus include:

Delta Sigma Phi	Sigma Pi
Phi Sigma Epsilon	Sigma Tau Gamma
Sigma Phi Epsilon	Tau Kappa Epsilon

The following sororities are represented:

Alpha Phi	Delta Zeta
Alpha Sigma Alpha	Theta Phi Alpha

The activities of these groups are coordinated through the **Interfraternity Presidents' Council** and the **Panhellenic Council**.

### Honorary Organizations

Several student groups have been organized for the purpose of recognizing outstanding scholars at the university. Such organizations are commonly called honoraries. Most have special membership requirements pertaining to courses completed and the scholastic average maintained. Membership is by invitation, and often implies association with a national as well as a local organization. Throughout the year, these honoraries seek to encourage scholarship and to provide interesting and intellectual programs for the students.

The eight honoraries currently recognized on our campus are:

Alpha Mu Gamma (foreign language)	Phi Alpha Theta (history)
Association of Women Students	Phi Mu Alpha Sinfonia (men in music)
Honor Society (general)	Pi Kappa Delta Mu (forensics)
Delta Omicron (women in music)	Sigma Zeta (science)
Gamma Theta Upsilon (geography)	



### Departmental and Professional Organizations

Other recognized student organizations on campus were formed to work closely with a specific academic department or with a specific pre-professional group of students. The membership requirements in these organizations vary, but usually are based on a student's major or minor area of study. Most departmental and professional organizations share the common objectives of: 1) providing students with similar interests an opportunity to exchange information and ideas, 2) promoting general interest and inquiry in the respective major or minor areas, and 3) encouraging faculty and student interaction within small groups. There are 29 organizations on campus classified as departmental and/or professional groups. They include:

Alpha Delta Alpha (food and nutrition)	Speech and Hearing Association
Army ROTC Company	Student Affiliate Chapter of the American Chemical Society
Foreign Language Club	Student Chapter of the American Guild of Organists
Home Economics Club	Student Chapter of the Wildlife Society, Inc.
Home Economics In Business	Student Education Association
Music Educators National Conference	Technical Association of the Pulp and Paper Industry
Pershing Rifles	Tri Beta Biology Society
Phi Beta Lambda (business)	University Writers
Physical Education Major-Minor Club	UW-SP Chapter of the Society of American Foresters
Players	UW-SP Chapter of the Soil Conservation Society of America and the American Society of Agronomy
Political Science Association	Women In Education
Psychology Club	
Reserve Officers' Association	
Senior Primary Council (elementary education)	
Sigma Mu Tau (medical technology)	
Society of Physics Students (S.P.S.)	
Sociology-Anthropology Association	
Spanish Club	

**Special Interest Groups**

A large group of student organizations at the university can best be designated as special interest groups open to any students interested in the program of the club. Those marked with an asterisk have special membership requirements.) Each organization plans a variety of activities in keeping with the purposes for which it was formed. Those groups identified as special interest include:

Alpha Phi Omega (men's service fraternity)*	Students' Wives Club
American Indians Resisting Ostracism	Students International Meditation Society
Asian Study Club	The Pointer (student newspaper)
Black Student Coalition	University Film Society
Brigadiers	UW-SP Democratic Youth Caucus
Campus Bowling League	UW-SP International Folk Dance Club
Environmental Council	UW-SP Soccer Club
Five-Fifties (veteran's group)	UW-SP Trippers Ski Club
Gifford Pinchot Society	UW-SP Vets for Peace
International Club	Women's Intramurals
Poseidon's Aqua Prowlers	WWSP-FM (radio station)
Pointer Rifle and Pistol Club	Young Republicans
Reveliers (Women's Drill Team)	Zero Population Growth, Inc.
Siasefi (men's social group)*	

**American Indians Resisting Ostracism** (AIRO) became a formally recognized organization in the fall of 1971. It was formed for the purpose of encouraging a greater awareness and understanding of all native American people, and to help eliminate the numerous stereotypes and generalizations which exist in many minds concerning the first Americans. Membership is open to all without regard to race, religion or national origin.

The **Black Student Coalition** (BSC) at the University of Wisconsin-Stevens Point was formed during the 1970-71 school year for the purpose of being a representative voice for Black students in campus affairs.

BSC centers its activities around five basic aims: (1) to build solidarity in our search for identity; (2) to foster better race relations on campus; (3) to provide a vehicle through which our needs may be expressed to the college community and an effective channel of communication between the races; (4) to effectively combat alienation; and (5) to include Black history and culture in all facets of the core curriculum.

Administrative personnel have been very cooperative in helping BSC realize its aims, and have expressed concern in the lack of Black enrollment at Stevens Point as compared to other schools throughout the state. The Stevens Point campus has great potential for Black students so BSC, in conjunction with school administrators, has established a recruiting program to remedy this situation. The basic aims of this recruiting program are not only to increase Black enrollment on campus, but also to provide cultural enlightenment for the Stevens Point community and the central Wisconsin area.

## Religious Groups

Several denominational, interdenominational and non-denominational groups minister to the campus through the exploration and application of religious beliefs to man and society in the twentieth century. Membership and participation in any of these groups is open to any interested student. A number of denominations have joined together in the University Christian Ministry whose motto is: "We intend to do nothing separately that we can do together." Affiliation with this group is open to any individual or denomination that wishes to join. The religious groups on our campus are:

Chapter of the Church of Jesus Christ of Latter Day Saints	*Newman Community (Roman Catholic)
Christian Science Organization	*United Ministry in Higher Education
*Episcopal Church	American Baptist Churches
Inter-Varsity Christian Fellowship (non-denominational)	Disciples of Christ
*Lutheran Student Community	Moravian Church
American Lutheran Church	United Church of Christ
Lutheran Church in America	United Methodist Church
Missouri Synod Lutheran Church	United Presbyterian Church

\*Affiliated with the University Christian Ministry.

Students who are not able to make contact with one of the religious groups may contact the Student Activities Office for information.

## Leadership Training

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. Throughout the year follow-up sessions (evenings and weekends) are held with both the original Fall group and with any organizations that show an interest in the leadership area. 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.

## Community Involvement

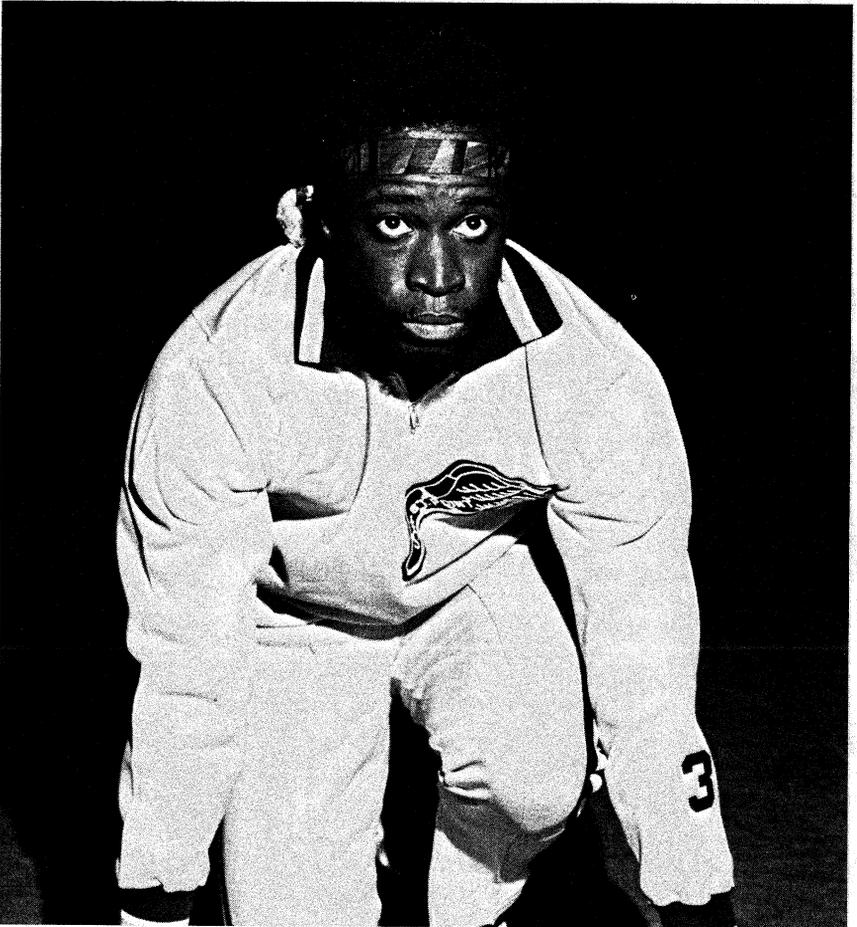
The Student Activities Office encourages and promotes student involvement in the Stevens Point and surrounding communities in several different ways. Through Student Community Projects, coordinated by this office, a student can seek a placement in the on-going work of non-profit community agencies such as the hospital, an institute for developmental disabilities, the Portage County Social Service Department, the YMCA, or others. Often these placements can be jointly arranged with an academic department so that the student can receive academic credit for his service experience. The Student Activities Office maintains an active file of opportunities for such service within the community and maintains a personal contact with many of the agencies. Placement credentials are provided for any student who successfully completes a semester's work in Student Community Projects.

## **Student Life, Activities, Services**

The Student Activities Office provides information and assistance to any individual or group which wishes to undertake a short-term voluntary project within the community. Through its background in the community and the knowledge of past student volunteer projects the Student Activities Office can offer effective assistance in choosing a volunteer project which is appropriate to real needs, and is most likely to be effective and appreciated.

### **Exchange Program**

Through the Student Activities Office UW-Stevens Point students participate in exchange programs with Grambling College of Louisiana and North Carolina Central University of Durham. Four Stevens Point students each semester will be enrolled and live at the southern institutions, while in return four students from those institutions will enroll and live at UW-Stevens Point. The exchange experience is designed to allow students to experience for themselves life in varied cultural and racial settings.



## Athletics

The university sponsors the following sports on an intercollegiate basis; football, cross-country, and golf in the fall; basketball, gymnastics, 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. A women's program, affiliated with the state association, offers field hockey, swimming, gymnastics, tennis, volleyball, basketball, badminton, and track on an intercollegiate basis.

Athletes who fulfill the requirements established by the coaches and approved by the Athletic Committee are awarded an "S" and a certificate. Men 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.

There is increased interest in the club sport program which currently offers opportunities for competition in soccer, bowling, 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 not participating in interscholastic 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 archery, cross-country, horseshoes, punt-pass-kick, swimming, touch football, paddleball, foul throw, basketball, badminton, bowling, handball, table tennis, volleyball, golf, relays, tennis, and track and field.

Some special interest groups are also organized through the intramural program. They include the American Red Cross Club, the Judo Club, the Weight Lifting Club, the Jog-a-long Program, and the Fencing Club.

Women's sports are planned by the **Women's Recreation Association**, an organization in which all university women are members. WRA supervises and sponsors a variety of recreational activities, including archery, badminton, basketball, golf, softball, swimming, tennis, field hockey, track and field, and volleyball.

During the year WRA attends a number of sportsdays held at other colleges in the state, conducts sportsdays in selected activities and plans special programs such as the swim carnival.

The intramural office, in cooperation with the WRA, also plans a number of co-rec programs during the year.

## Women's Athletics

Intercollegiate sports offered for the women at the University of Wisconsin-Stevens Point are: basketball, field hockey, gymnastics, swimming, tennis, track and field,

## **Student Life, Activities, Services**

and volleyball. Educational objectives are of primary importance with participation the key for those seeking a high level of competition. 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. Women's sports are open to all students on campus.

### **Museum of Natural History**

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, paleontology, 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.

### **Arts and Lectures Series**

The **Arts and Lectures Series** sponsors cultural events for the university and surrounding area. This series brings many outstanding attractions to the campus each year.

For the 1974-75 season the Arts and Lectures Series will present a total of nearly 20 events. These events will include major symphony orchestras and foreign group attractions, theatre, dance, and jazz. There will also be a number of lectures by well-known personalities (booked in conjunction with the University Activities Board).

University of Wisconsin-Stevens Point students pay a 50 cent charge for all concert events.

Tickets may be picked up in advance at the Arts and Lectures box office or at the door. A brochure advertising the entire series is available on request by either writing or calling the box office located in room B-210 of the College of Fine Arts Building, phone number 346-4666.

### **Art Exhibits**

A year-round art exhibition series is sponsored by the Department of Art under the management of the gallery director. Exhibits include student shows, traveling exhibitions, and feature artists of regional and national reputation. Exhibitions are

housed in the Edna Carlsten Gallery in the College of Fine Arts Building, and are open to students and the public without charge.

### **Musical Activities**

Opportunities to participate and opportunities to listen are both part of the musical program open to all students. Students may participate in concert and marching bands, orchestra, choir, opera workshop, oratorio, brass choir, percussion ensemble, clarinet choir, jazz lab band, woodwind quintet and other ensembles. Membership includes not only students specializing in music, but many who desire to continue previous musical experiences. Several concerts and tours are scheduled. Among recent operatic productions have been "The Magic Flute," "Dido and Aeneas," "Die Fledermaus," and two one-act contemporary operas, "The Medium," and the "Devil and Daniel Webster." Musicals have included "Kiss Me Kate," and "Man of LaMancha." Numerous solo recitals by faculty members and students are open to the public throughout the year.

### **WWSP Radio-Television-Film**

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. Besides weekly showings of artistic and classic films, foreign and domestic, the film society has sponsored student film production contests and film workshops.

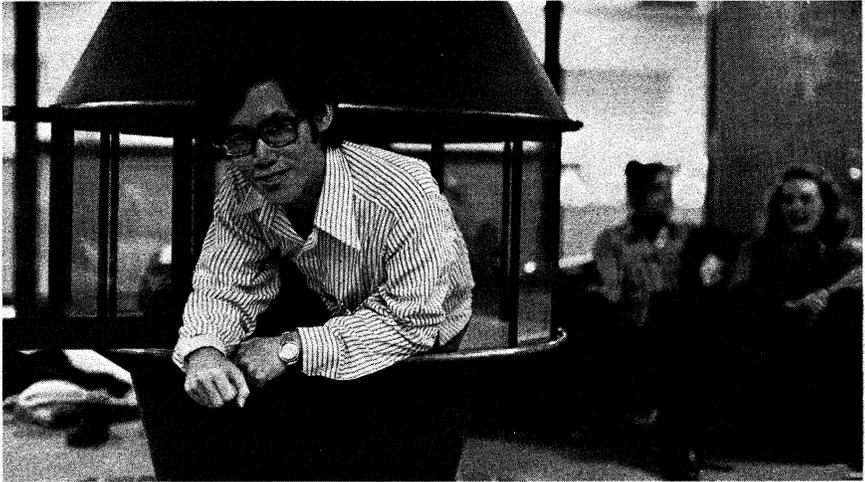
**Campus Television** is also a student sponsored organization which produces weekly programming over the local cable television station. Students have an opportunity to produce, direct, and star in almost any type of program they wish to air. Campus TV provides unique opportunity to gain television experience and provide a service to the campus and community.

A completely equipped television studio located in the Learning Resources Center provides opportunity for students and faculty to prepare productions for presentation over local television facilities. Remote television broadcasts are done periodically with operational experience available in all aspects. Facilities for campus closed circuit television and for creative film production are now being planned.

Projects and equipment are available on a broad basis jointly between the Department of Communication and Instructional Media Services. 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-Film.

### **Student Newspaper**

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.

### **Forensics, Debate, and Public Speaking**

The Department of Communication sponsors several activities for students interested in competitive, public, pre-professional, or casual speaking on the campus, in the community, or at other schools. These activities are open to all students of the university and are designed to augment classroom training and verbal skills in a co-curricular environment. The activities are divided into two distinct areas, as indicated below.

#### **Intercollegiate Events**

**Debate**—The university debate team annually attends 15-20 tournaments throughout the nation in competition with students from other colleges and universities. Teams from some 70 different schools are debated during the season which runs from September until mid-April. The team welcomes beginners with no experience along with students from high school debate programs to this activity designed to develop skills in argumentation, analysis, verbal refutation, and research. Academic credit is available.

**Forensics**—In addition to intercollegiate debate, this university also competes with other colleges and universities in a number of specific speaking contests. These contests include oratory, extemporaneous speaking, impromptu, discussion, after-dinner speaking and rhetorical criticism. Students from the university attend from three to five individual event speaking contests each year. Also, in each of the past few years, several students from this university have been delegates to the Harvard National Model United Nations Council.

**High School Communication Activities**—Each year the university presents several workshops for high school students and coaches. Workshops are presented on Debate, Spring Speech, and Radio-TV-Film. Students on this campus are encouraged to participate in the planning, organization, and presentation of these workshops. In addition, the university acts as host for speaking and debate and tournaments. Students may also become involved in these activities.

### **Leadership Training**

The Department of Communication offers students an opportunity to develop leadership and interaction dynamics skills through the course in Organizational Leadership (Communication 106/306) and other campus leadership training activities in which department personnel participate. Interested students are encouraged to join faculty in a discussion of a wide range of interaction dynamics problems such as parliamentary procedure, problem solving, interpersonal communication, group process, and organization operation. Students are also encouraged to work with the staff in developing, conducting, and participating in workshops or exercise sessions for their organizations and groups.

### **Management and Leadership Theory and Practicum**

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.

### **Theatre and Interpretation**

The university offers a rich program of dramatic and oral interpretation activities under the supervision of the Department of Theatre Arts and open to all students, whether or not they major or minor in drama.

The **University Theatre Winter Season** includes major stage productions for the public along with the regular schedule of studio theatre productions. A fall musical and spring opera are presented in conjunction with the Music Department, and a Dance Concert is also included as part of the major production activity. Opportunity for production experience is open both to students enrolled in classes studying specific production techniques and to qualified students and faculty with strong interest in theatre. A program of touring productions has been a feature of the University Theatre Winter Season in the past. Major productions have toured the region and the state, participated in the American College Theatre Festival and toured Greenland, Iceland, and the Northeast Command of the USO. In 1972-73, a ten-week USO sponsored tour of Europe included performances in Belgium, Holland, Germany, and Italy.

The **University Theatre Summer Session** offers a program of four major stage productions in a Summer Theatre Season. This unique enterprise features a Repertory Company of actors plus the talents of interested students in performance of the world's finest dramatic fare. Membership in the Repertory Company is open to qualified students.

## **Student Life, Activities, Services**

The **Studio Theatre** is an intimate, flexible playhouse located immediately west of Jenkins Theatre, on the Upper Level of the Fine Arts Center. With a program of original plays, opera, dance, full-length Senior Recital plays, and innovative experiments, the Studio Theatre serves as a showcase for student creativity.

All these production activities offer experience in directing, acting, stage design and the multiple aspects of technical theatre under the leadership of a professional staff, providing creative sponsorship for many types of talents and interests. Recent productions have ranged in scope and depth from the musical comedy "Man of La Mancha" to the Greek comedy "Lysistrata," to Shakespeare's "King John" to "The Birthday Party" by Harold Pinter, to "Winnie the Pooh" by A. O. Milne, "Der Freischutz" by von Weber, and "Juno and the Paycock" by O'Casey.

Since students enrolled in drama courses are expected to participate in department productions, optional credit for such participation is available to all students. Those intending to participate in production activity may enroll in Drama 126—Laboratory Work in Dramatics, for a total of two credits, in Drama 226 for a total of two credits, in Drama 326 for a total of two credits and in Drama 426 for a total of two credits. In addition, the 1-6 credit Summer Theatre course (Drama 129/429) offers variable credit for participation in the many phases of the University Theatre's Summer Season. Drama 129/429 is offered in both semesters.

### **News and Publications Service**

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.

Publications such as the University Catalog, Summer Session Timetable, monthly Calendar of Public Events, special bulletins, department brochures, flyers and programs are produced by this office.

### **Alumni Association**

The UW-Stevens Point Alumni Association is committed to a two-fold purpose: service to the alumni, and through them, service to the university. These services are effectively implemented in regular and special programs, and publications.

The Alumni Association co-sponsors an annual Continuing Education Day for Women on campus, develops alumni Homecoming activities, and sponsors the Commencement Brunch for graduating seniors.

The Alumni Association conducts the university Annual Fund Drive, which seeks support from alumni and the community for scholarships, loans, classroom equipment and additional funding for on-going university projects. Services provided by the Alumni office include program assistance for Alumni Association chapters, alumni record services and cooperation with campus organizations, including the UWSP Foundation.

# Student Expenses

**Academic Fees** (per semester) — subject to change **1973-74**

## **Undergraduate—Resident**

LEVEL I—Freshmen and Sophomores	
Full-Time (12 credits or more)	\$ 284.50
Part-Time (11 credits or less)—per credit	23.85
LEVEL II—Juniors and Seniors	
Full-Time (12 credits or more)	\$ 306.50
Part-Time (11 credits or less)—per credit	25.60

## **Undergraduate—Non-Resident**

LEVEL I—Freshmen and Sophomores	
Full-Time (12 credits or more)	\$ 861.50
Part-Time (11 credits or less)—per credit	71.85
LEVEL II—Juniors and Seniors	
Full-Time (12 credits or more)	\$ 927.50
Part-Time (11 credits or less)—per credit	77.35

## **Graduate—Resident**

LEVEL III—Full-Time (9 credits or more)	\$ 344.50
Part-Time (8 credits or less)—per credit	38.50

## **Graduate—Non-Resident**

LEVEL III—Full-Time (9 credits or more)	\$1,109.50
Part-Time (8 credits or less)—per credit	123.50

## Student Expenses

### Academic Fees — Summer Session (subject to change) 1974

#### Resident

##### LEVEL I—Freshmen and Sophomores

1 thru 5 credits	\$ 24.10 per credit
6 thru 9 credits	143.75
over 9 credits	197.75

##### LEVEL II—Juniors and Seniors

1 thru 5 credits	\$ 26.10 per credit
6 thru 9 credits	155.75
over 9 credits	215.75

##### LEVEL III—Graduate

1 thru 4 credits	\$ 37.95 per credit
5 thru 8 credits	189.75
over 8 credits	253.75

#### Non-resident

##### LEVEL I—Freshmen and Sophomores

1 thru 5 credits	\$ 72.10 per credit
6 thru 9 credits	431.75
over 9 credits	629.75

##### LEVEL II—Juniors and Seniors

1 thru 5 credits	\$ 77.10 per credit
6 thru 9 credits	461.75
over 9 credits	674.75

##### LEVEL III—Graduate

1 thru 4 credits	\$122.95 per credit
5 thru 8 credits	614.75
over 8 credits	848.75

**Special students** will be charged for all courses taken at the rate of the highest level course in which they are enrolled. Courses labeled 100 to 299 are Level I; 300 to 499 are Level II; and 500 thru 899 are Level III.

#### **Students admitted to the Graduate College must pay graduate fees.**

Certain courses will be charged a special course fee which will be included in the fee billings.

### Registration Fee

Every student who has registered is liable for the payment of a registration fee of \$50.00, which applies to the student's account. This charge will be withdrawn if the student notifies the registrar, before the first day of classes, that he is cancelling his registration.

Only students whose fees are to be paid **in full** by an outside agency (see the following paragraph) are exempt from the \$50.00 registration fee. All other students must pay the fee by August 6 (or at the time of registration if it is after August 6) in order to retain their registered status.

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 August 6 for the first semester, and by December 27 for the second semester, in order that proper arrangements can be made for the students to attend classes without payment of the fees by the student.

### 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. Interpretation of this statute is the responsibility of the Director of Admissions; any questions about it should be directed to him.

#### 37.11 Powers of board as to State Universities.

The said board shall have the government and control of all state universities, and may: . . .

(8) (a) Require any applicant for admission, who has not been exempted by this section, to pay or to secure to be paid such fees for tuition as the board deems proper and reasonable. The board may also charge any student laboratory fees, book rents, fees for special departments or any incidental fee covering all such special costs. Any adult student who has been a bona fide resident of the state for one year next preceding the beginning of any semester for which such student registers at the state universities, or any minor student whose parents have been bona fide residents of the state for one year next preceding the beginning of any semester for which such student registers at the state universities, 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 one year next preceding the beginning of any semester for which such student registers at the state universities or whose mother or father has been a bona fide resident for one year next preceding the beginning of any semester for which such student registers at the state universities, or any minor student who is an orphan and who has resided substantially in this state during his years of minority and at least one year next preceding the beginning of any semester for which such student registers at the state universities or whose legal guardian has been a bona fide resident for one year next preceding the beginning of any semester for which student registers at the state universities, or any minor student under guardianship in this state pursuant

## Student Expenses

to ch. 48 or 319 who has resided substantially in this state during his year of minority and at least one year next preceding the beginning of any semester for which such student registers at the state universities or whose legal guardian is a person who has been a bona fide resident of the state for one year next preceding the beginning of any semester for which such student registers at the state universities, shall while he continues a resident of the state be entitled to exemption from non-resident tuition, but not from incidental or other fees and tuition in the state universities.

(ab) Nonresident members of the armed forces who are stationed in the state and their wives and children shall be entitled to the exemptions provided in par. (a) during the period that such member of the armed forces is stationed in the state.

(ac) Any female student who attended the state universities as a minor student exempt from the fees for nonresident tuition, and, who would continue to be entitled to the exemptions provided in par. (a) except for having married a nonresident, shall continue to be entitled to such exemptions.

(ad) Any female who marries a bona fide resident shall be entitled to the exemptions provided in par. (a) effective the semester following her marriage and while continuing to reside in this state.

(am) Any minor, or totally dependent person, who resides outside the state but whose parent upon whom he is dependent is employed full time in this state shall be entitled to the exceptions provided in par. (a) provided that if the state of residence levies an income tax on individual income, such state must have provided for reciprocity in the levying of any taxes on income imposed by such state.

(b) Any student who has not been a resident of the state for one year next preceding the beginning of any semester for which such student registers at the state universities, except as above provided shall not be exempt from the payment of the nonresident tuition fees.

(8a) In determining bona fide residence, filing of state income tax returns in Wisconsin, eligibility for voting in this state, motor vehicle registration in Wisconsin, and employment in Wisconsin shall be considered. A student from another state who is in this state principally to obtain an education will not be considered to have established a residence in Wisconsin by virtue of attendance at educational institutions.

PLEASE NOTE: It is the responsibility of the student to register correctly, as a resident or non-resident, under this law. Those who have questions about their proper classification should write the Director of Admission at the university.

## Payment of Fees

Every student who registers is liable for a payment of \$50.00 due on or before August 6, 1974, (or at the time of registration if it is after August 6) in order to retain status as a registered student. The payment will apply to the student's account. It is refundable if the student notifies the Registrar in writing **before** 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 \$20.00 will be charged to the student's account when the withdrawal is processed.

A partial-payment plan of three installments is available for both semesters. Students selecting the partial payment plan must sign a credit agreement card before August 6 (or at the time of registration if it is after August 6).

First billing—Students may select one of the following plans for the fee payment which is due on August 6, 1974:

**Plan A:** Total fees\* for the semester. (Credit agreement not necessary)

**Plan B:** 40% of the total fees\* for the semester. (Signed credit agreement required)

**Plan C:** \$50.00 by August 6; balance of 40% of the total fees\* for the semester. (Signed credit agreement required)

**Plan D:** \$50.00 by August 6; balance of the total fees\* for the semester. (Signed credit agreement required)

\*Plus any balance which may have accrued previously.

Second billing—at least 50% of the balance is due, plus the service charge.

Third billing—100% of the balance is due, plus the service charge.

Students who are more than **30 days delinquent** in the payment of any accounts 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 will they be allowed to register for a subsequent term.

### **Fee Adjustments**

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

In either semester—

- During the first week of classes—100% less \$20.00 withdrawal fee.
- During the second week of classes—80% less \$20.00 withdrawal fee.
- During the third and fourth week of classes—60% less \$20.00 withdrawal fee.
- During the fifth week and thereafter—none.

In the summer session—

- During the first week of classes—100% less \$10.00 withdrawal fee.
- During the second week of classes—70% less \$10.00 withdrawal fee.
- During the third week of classes—30% less \$10.00 withdrawal fee.
- During the fourth week and thereafter—none.

A student whose withdrawal from a class results in a study load of less than 12 semester hours will receive a full adjustment of the difference in fees only during the first two weeks of classes. No adjustment will be made during the third week of classes and thereafter.

**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.

## Student Expenses

**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 the termination of the residence hall assignment.

**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:

**Room**—\$268.00 per semester per student for double occupancy; \$536.00 for the academic year. This includes bed linens and their laundering. Students provide their own pillows, blankets, and towels.

**Board**—There are two plans available: (1) \$255.00 per semester (\$510.00 for the academic year), plus 4% sales tax. This provides 20 meals per week—three meals a day Monday through Saturday with a brunch and dinner on Sunday. (2) \$237.50 per semester (\$475.00 for the academic year), plus 4% sales tax. This provides 15 meals per week—three meals a day Monday through Friday only.

All students who live in the residence halls must eat in the university's dining centers. Students who live off campus may purchase their board at the rate available to residents of the halls.

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**

In a number of courses, special charges are made to take care of laboratory breakage, field trips. etc.

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 Graduation Fee is payable in the semester or summer session in which the degree is granted: Associate Degree—\$2.00; Bachelor's Degree—\$8.50; Master's Degree—\$12.50.

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

### **Financial Aids**

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) available from the high school he attends. This form along with the College Scholarship Service Parents' Confidential Statement must be mailed as directed. Freshmen should also apply for the Basic Educational Opportunity Grant through the high school guidance office.

A transfer student should obtain the necessary application blank, and the Parents' Confidential Statement form from the Office of Financial Aids.

A continuing student in the university may secure his application materials from the Office of 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 Financial Aids Office.

In all cases, the financial aid application form and the Parents' Confidential Statement (the Student Financial Statement where deemed advisable) 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.

## Student Expenses

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 Financial Aids Office is based on student need only.

**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.

**State Honor Scholarship:** Available only to freshmen, awarded on the basis of high school graduation rank selected by the high school.

**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 \$1400 for an academic year. Grants are not automatically renewable.

**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 \$1500 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.

**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.

**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 Financial Aids Office.

**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 Financial Aids Office.

**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.

**Veterans Benefits**

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

Semester Hours Carried		Training Time	*Payment According to No. of Dependents			
Undergrad	Grad		0	1	2	Additional Dependents
12+	9+	Full-time	220	261	298	Add \$18 each
9-11	7-8	¾ time	165	196	224	Add 14 each
6- 8	5-6	½ time	110	131	149	Add 9 each
1- 5	1-4	Less than ½ time	(Approximate payment figured by taking cost of fees and dividing by months of instruction.)			

\*per month

Full GI Bill 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.

**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 Financial Aids Office.

**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, and for graduate students enrolled for less than eight credits. Application for the grant should be made through the County Veterans Service Officer.

**Army ROTC Scholarships:** ROTC Scholarships of four, three, two and one year duration 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.

## Student Expenses

### Special Services

The staff of the Student Financial Aids Office 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

## **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:

## **Admission**

- 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 sub-standard education, family income level, or ethnic background.
- VII. Requirements 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 blank 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 student's 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.

### **Readmission 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 page 73.

### **Entrance As an Adult Special Student**

Students who are service veterans or are 21 years of age or older may be admitted by giving satisfactory evidence of scholastic ability on the university level.

Persons intending to enroll in this category should follow applicable procedures for enrolling outlined above, and must also write the Director of Admissions outlining their educational background.

### **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 13 credits during the semester in order to be eligible for this recognition.

**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.

**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 3.49 to 3.74; and **Honors** for those achieving a grade point ratio of 3.20 to 3.49.

## **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.

## Academic Work

### 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—See Sociology and Anthropology		
Art .....	X	X
Art Education .....	X	X
Asian Studies .....		X
Biology .....	X	X
Business Administration .....	X	
Business Education .....	X	
Chemistry .....	X	X
Coaching .....		X
Communication .....	X	X
Communication and Drama Education .....	X	
Communicative Disorders .....	X	
Comparative Literature .....		X
Computer Science .....		X
Conservation—See Resource Management		
Dance .....		X
Dietetics .....	X	
Drama .....	X	X
Drama and Communication Education .....	X	
Early Childhood Education .....	X	
Economics .....	X	X
Education of the Deaf .....	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	
Latin American Studies .....	X	X
Learning Resources .....		X
Library Science .....		X
Mathematics .....	X	X

	Major	Minor
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	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 and Anthropology .....	X	X
Soil Science .....	X	X
Spanish .....	X	X
Special Learning Disabilities .....		X
Water Resources .....	X	
Wildlife .....	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.

## Academic Work

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 late 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** indicates satisfactory performance in a course that continues beyond the end of the semester. The grade for the course will be assigned when the entire course is completed.

**S** is also 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 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 who is doing failing work withdraws officially from the university after the end of the ninth week of classes. A grade of WF is 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. In computing the grade point ratio, WF is treated as an F. The designations S, W, 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, 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

## Academic Work

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 freshmen or 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.

### 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. The instructor will indicate on the grade list what work must be completed in order for the student to receive credit and will also indicate the approximate grade at the time the work became incomplete.

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 course may be audited under the following conditions:

- A. For students who are also registered for courses carrying regular academic credit:
  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. (Special reduced fees are available for persons registering **only** for non-credit, audited work.)
  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.

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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.

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. For students who are registered **ONLY** for "audited" classes:

- 1, 2, and 3 are the same as in paragraph A, above.
4. The student may not change to a credit basis during the term of enrollment.
5. 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.
6. A student who has audited a course may take the course at a later date for credit.
7. Regent, University, and Student Government regulations applying to students apply equally to audit enrollees.
8. Persons 65 years of age or older are exempt from payment of regular fees.
9. Persons under 65 who are Wisconsin residents will pay fees at a rate one-half that charged a Wisconsin resident taking the course for credit. (Non-residents shall pay, in addition, the appropriate non-resident tuition.)
10. Any special costs for course instruction, other than normal fee charges, will be assessed.
11. Persons enrolling under this policy will not be assessed any portion of the university's segregated fees, nor will they be eligible for the use of services supported by those fees.
12. Refunds will be permitted at the rate of 100 percent during the first two weeks of classes, with no refunds after the second week of classes.

Persons who wish to audit courses under this policy should apply at the Office of Extended Services, where registration will be arranged.

## 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 sub-committee 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 im-

## Academic Work

partial 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 Affairs.

### 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.

For transfer students who are not on probation when admitted, credits in any course in which a D grade was earned will be used for meeting prerequisite, course, or credit requirements for a degree, but not necessarily for a major. Such courses will be subject to university regulations regarding the same or similar courses taken on this campus.

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 before the beginning of the term for which he is registering and which are creditable toward a degree, according to the following schedule:

<b>Number of credits</b>	<b>Classification</b>	<b>Number of credits</b>	<b>Classification</b>
0- 17	1st sem freshman	60- 73	1st sem junior
18- 29	2nd sem freshman	74- 89	2nd sem junior
30- 43	1st sem sophomore	90-103	1st sem senior
44- 59	2nd sem sophomore	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:

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

## Academic Work

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 minimum 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 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.

- C. Any student who is suspended for academic reasons and not enrolled for one or more semesters immediately following the suspension action will be granted an option 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 pre-requisites, 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.

**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.

### 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.

## **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, but drops will be permitted only if the reasons for dropping are clearly beyond the control of the student.

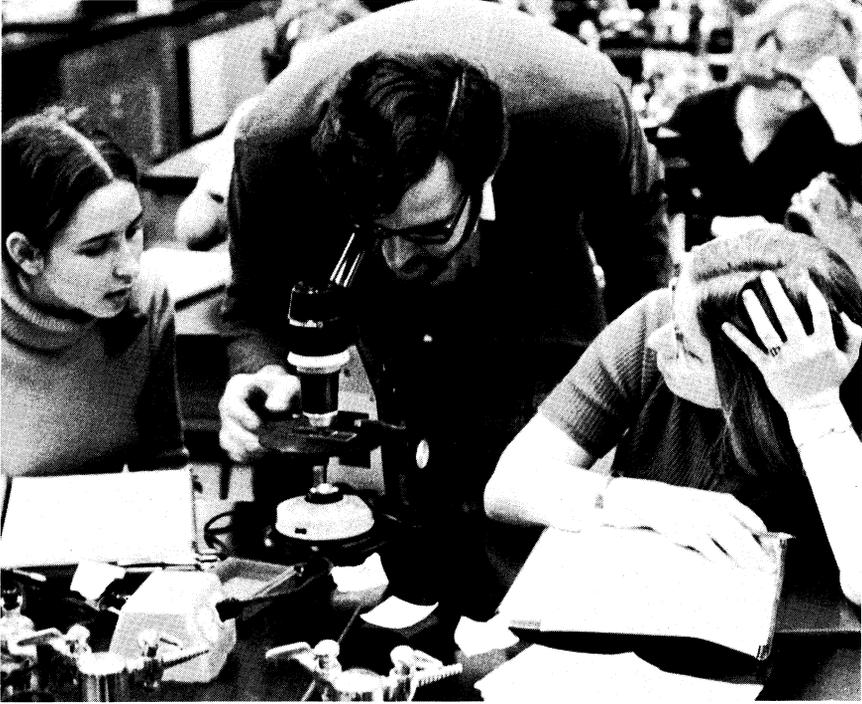
A student who officially drops a course after the second week of classes in a semester will receive a W in the course. Repeated occurrence of W will be cause for review of the student's record by the committee of Academic Deans, and possible dismissal of the student from the university.

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 Student Affairs office 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. A student 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. The dean of the college in which the student is enrolled may assign a W if the student's withdrawal from the university is judged to be 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.

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 signed by the individual whose record is involved; except that the university cooperates with high schools in follow-up studies of their graduates.

### 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. The instructor shall provide his chairman a statement indicating the use made of the final examination period. 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 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 any 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 Associate Dean of Students.

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 Associate Dean 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 Affairs. 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**

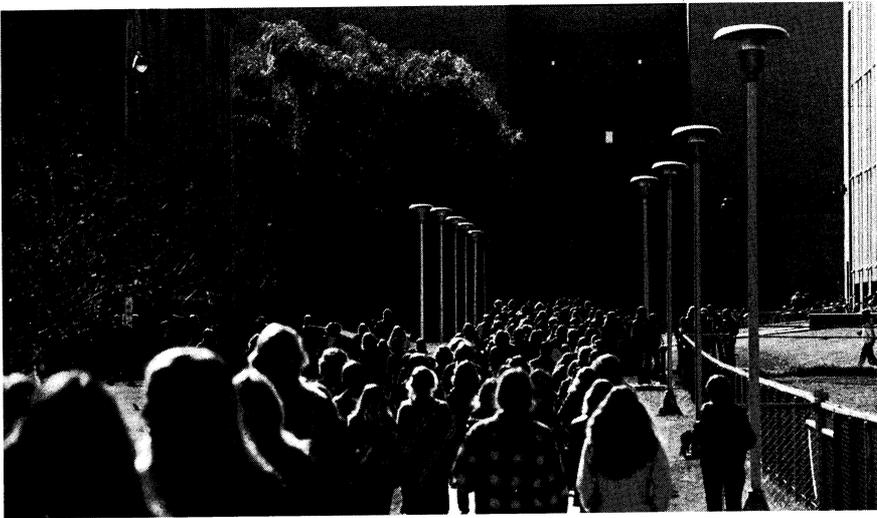
A number of courses are being offered between semesters and during the period following the end of the school year and before summer school starts. Each period is usually about three weeks, and a maximum of one credit per week can be completed in this time. The program is administered through the Office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

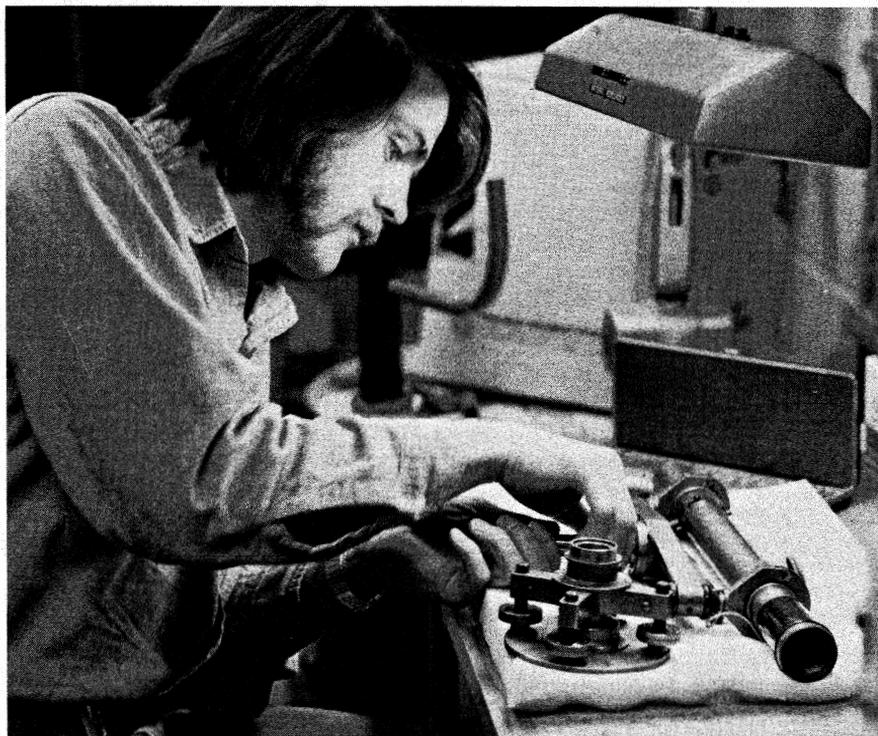
### **Second Baccalaureate Degree**

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**

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 which provide residence credit. 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 17 weeks, and each meeting lasts two and one-half hours. Fees are \$22.00 per undergraduate credit and \$33.25 per graduate credit (subject to change). On-campus evening and Saturday classes are listed in the regular time table. Fees for on-campus classes are \$20.25 or \$22.00 (depending on classification) per undergraduate credits (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, but will be transferred to other colleges on request. Before enrolling, a student should obtain assurance that credit earned can be applied to the curriculum he is following at the college to which he wishes the credit transferred.

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 teachers shall be granted no more than four credits total for extension, correspondence, evening and Saturday courses in any one semester.
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**

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 this 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 timetable may be secured by writing to the Director of Summer Sessions.

### **Graduate Study**

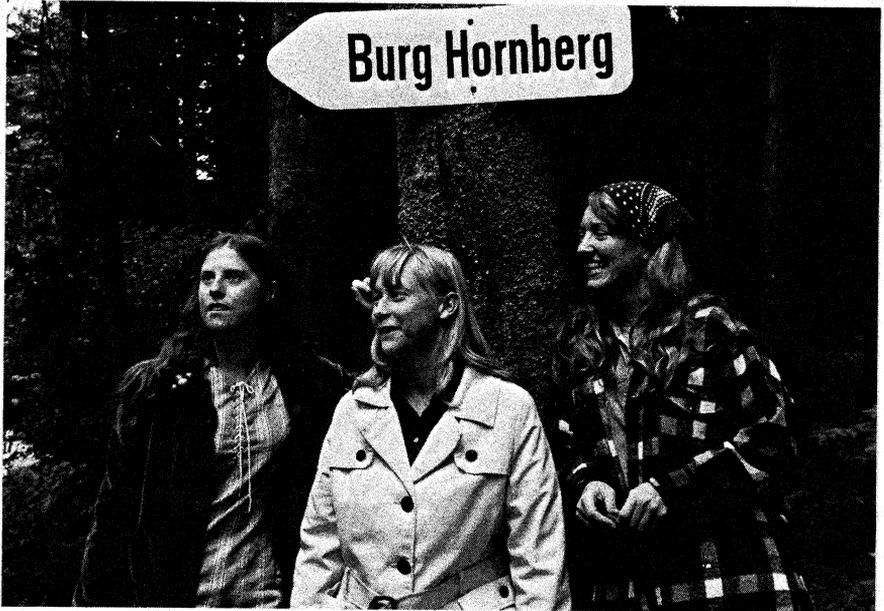
Master of Science, Master of Science in Teaching, and Master of Arts in Teaching programs are available in specific areas. All courses are listed in the university catalog.

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.

### **International Programs**

Three major overseas study programs, the **Semester in Britain**, the **Semester in Germany**, and the **Semester in the Far East**, enable students to earn 12 to 17 credits while abroad.



The program in London operates each semester and is residential-instructional in nature. It is open mainly to juniors and seniors. Students may apply as early as during their freshman year. Selection of students for the program is made well in advance in order to provide thorough orientation for the experience. Two faculty members accompany the group to London. The remainder of the staff is drawn from colleges and universities in the London area. A three to four week Continental Study Tour may be part of the semester's work if the student group so chooses.

The semester in Germany operates on the same general plan, but for the first semester only in each year. It is open to sophomores, juniors, and seniors, and is based in Munich.

The semester in the Far East has as its principal base the University of Malaya at Kuala Lumpur. For comparative study, the program also visits Bangkok, Hong Kong, Taipei, and Kyoto.

Additional semester programs are in the planning stages.

Summer programs in England, Germany, Greece, and Scandinavia are features of 1974. For succeeding summers, and interim periods, other programs are developing. Currently, one interim program is operational—a spring Soviet and East Central European Seminar.

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.

## **PRIDE — Programs for Recognizing Individual Determination through Education**

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.

### **Cooperative Education Program**

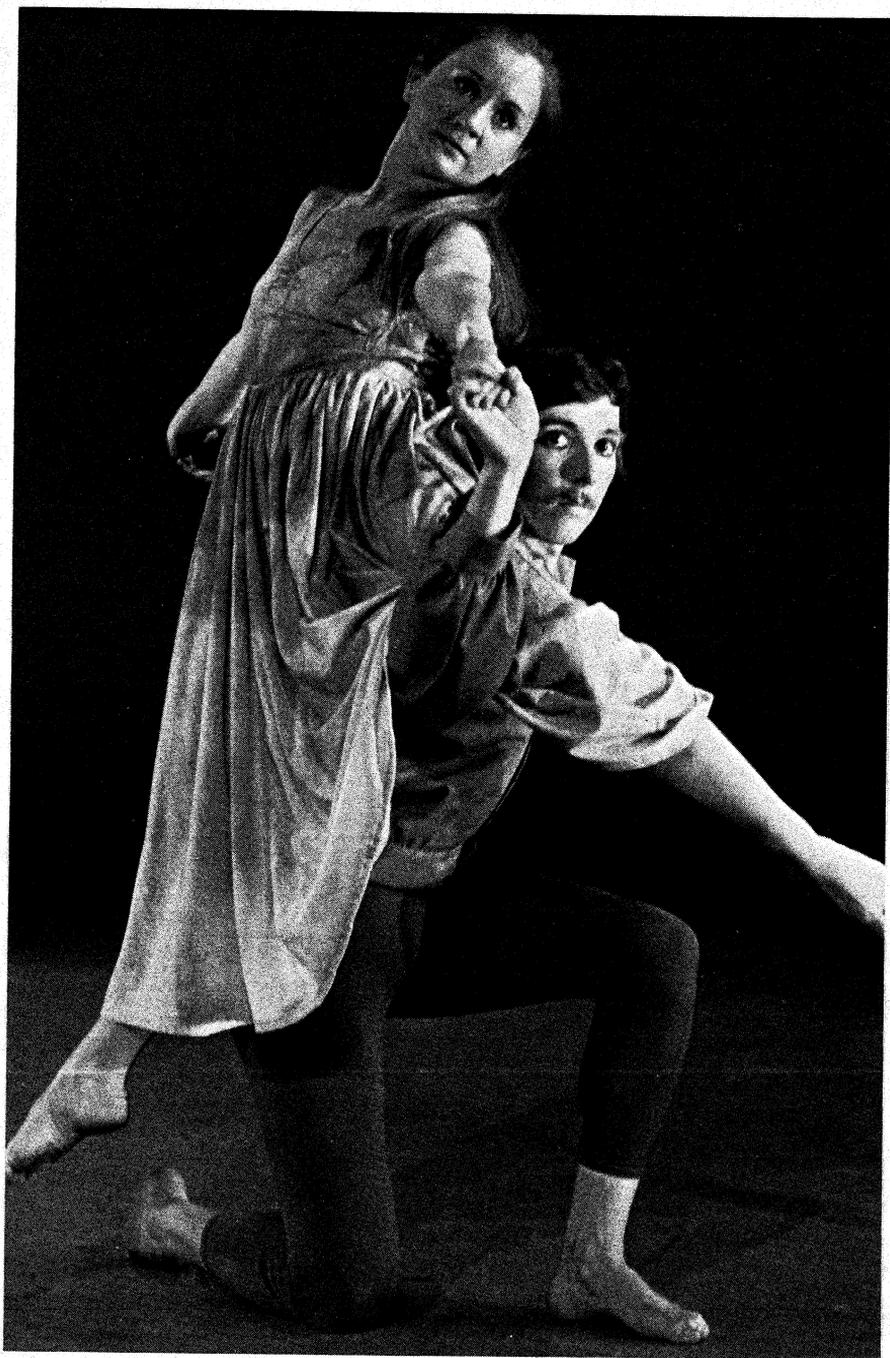
The **Cooperative Education Program** is a unique five year program designed to prepare students more fully for a career in the field of their major studies. It is available to both men and women.

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 Cooperative Education, Room 106, Main Building.



# College of Fine Arts

William J. Hanford, 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; or 103 and 104; or 105 and 106.
- 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; cultural 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 who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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 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; or 103 and 104; or 105 and 106.
- 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 Introduction to Literature, or 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. Cultural 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:

1. Astronomy 105, 106, 311.

2. Biology 101, 130, 160.

3. Chemistry 101, 103, 105, 106, 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, 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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 (total: 124 credits).

**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; or 103 and 104; or 105 and 106.

**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. 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 170, 205, 206, 211, 212, 213, 214, 280, 281, 282, 283, 284, 285, 286, 287, 288, 310, 312, 314, 315, 316, 317, 318, 319, 321, 322, 323, 324, 325, 326, 327, 328, 330, 333, 334, 336, 361, 362, 364, 367, 370, 371, 372, 375, 377, 378, 380, 383, 384, 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, 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. Cultural 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:

1. Astronomy 105, 106, 311.
2. Biology 101, 130, 160.
3. Chemistry 101, 103, 105, 106, 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, 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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:

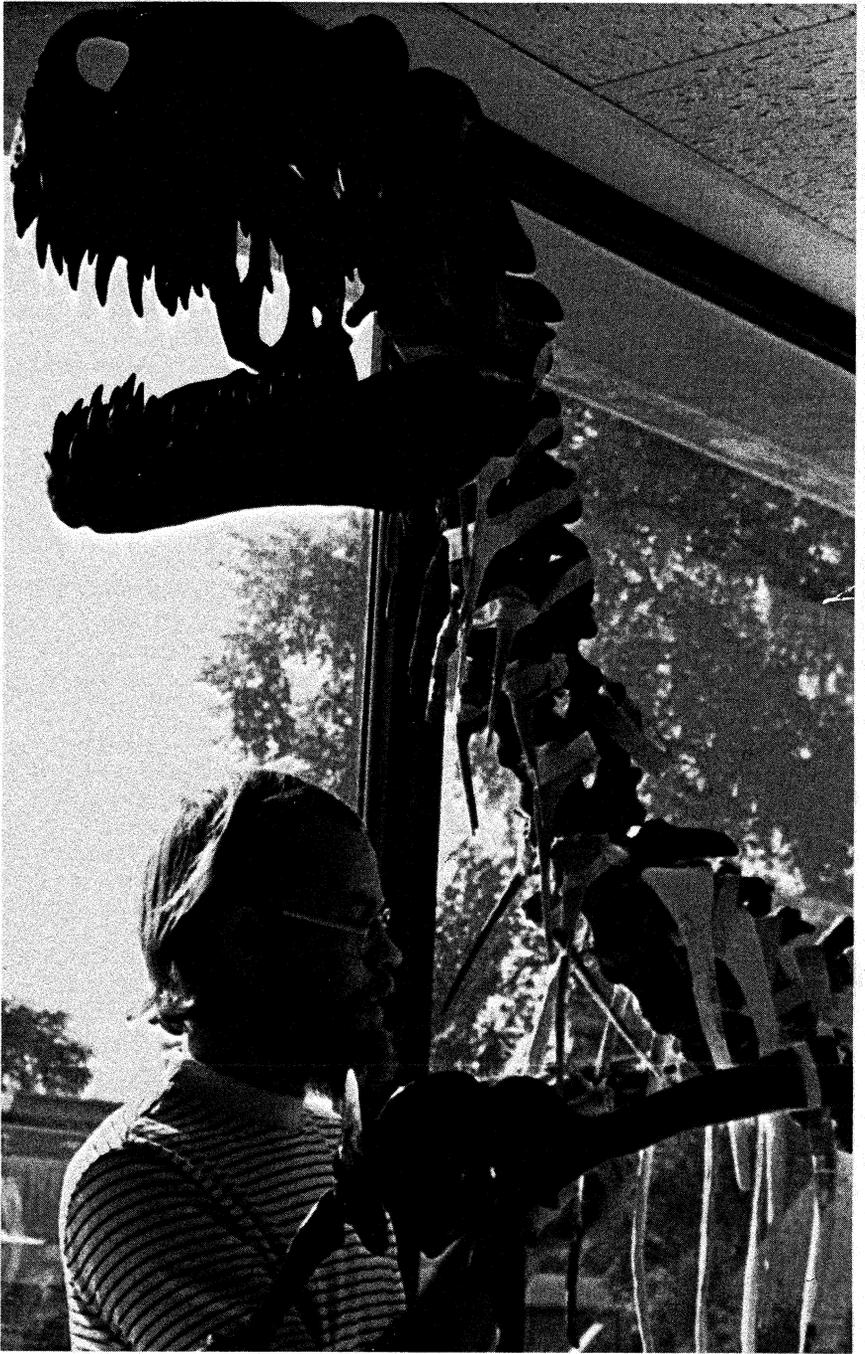
**Option I.** In the College of Professional Studies, they must complete:

- 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 (two credits in the major field; 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, Assistant Dean

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.

## College of Letters and Science

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; or 103 and 104; or 105 and 106.

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; cultural 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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**

1. **English**—six credits: English 100 or 101, and 102; or 103 and 104; or 105 and 106.

**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 completed 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. Cultural 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:

1. Astronomy 105, 106, 311.
2. Biology 101, 130, 160.
3. Chemistry 101, 103, 105, 106, 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, 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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 or minor 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 (two credits in the major field; 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.

### 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 pre-medical 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**

Pre-legal 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 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

Raymond Anderson, Frederick Baumgartner, Henry Booke, James Bowles, Gabriel Cherem, Daniel Coble, Robert Engelhard, Milo Harpstead, John Heaton, Ronald Hensler, Frederick Hilpert, Gerald Jacobi, Irving Korth, Chen Hui Lee, Robert Miller, Lyle Nauman, Theodore Roeder, Hans Schabel, Byron Shaw, N. Earl Spangenberg, Raymond Specht, William Sylvester, John Toepfer, Bernard Wievel.

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

## **Forestry**

A degree in forestry can be earned through the completion of one of two possible collateral emphases. An emphasis in forest management is designed to meet the traditional needs for competent forest sciences. An emphasis in forest administration is designed to train a forester in areas of public relations, communication, and business-economics.

## **Resource Management**

A broad area of study with the opportunity for some specialization in specific resource areas. A concentration in soils or forestry courses enables a student to meet federal forester, park management, soil conservation, and/or soil scientist requirements. Selection of courses also enables a student to qualify for positions in outdoor recreation, environmental law enforcement, regional planning, or other professions requiring a broad background in resource management. Environmental education is also an option within this major.

## **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 Professional Education sequence. They should refer to the pertinent material under 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 he intends to major. The adviser will assist him in selecting courses, improving his abilities, making vocational plans, and other aspects of university life. During the student's junior and senior years, his program must be approved by the designated representative.

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.

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

The dean's signature is not required on senior study list cards unless the load or the courses deviate from the norm.

## Curriculum for Bachelor of Science Degree

**I. English**—six credits: English 100 or 101, and 102; or 103 and 104; or 105 and 106.

**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. 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. 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.

## College of Natural Resources

2. Cultural 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 student majoring in the College of Natural Resources fulfills this requirement by taking **required** collateral courses. Refer to each major for specific courses required.)

**A. Eight to 10 credits** from the following courses:

1. Astronomy 105, 106, 311.
2. Biology 101, 130, 160.
3. Chemistry 101, 103, 105, 106, 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, 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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:

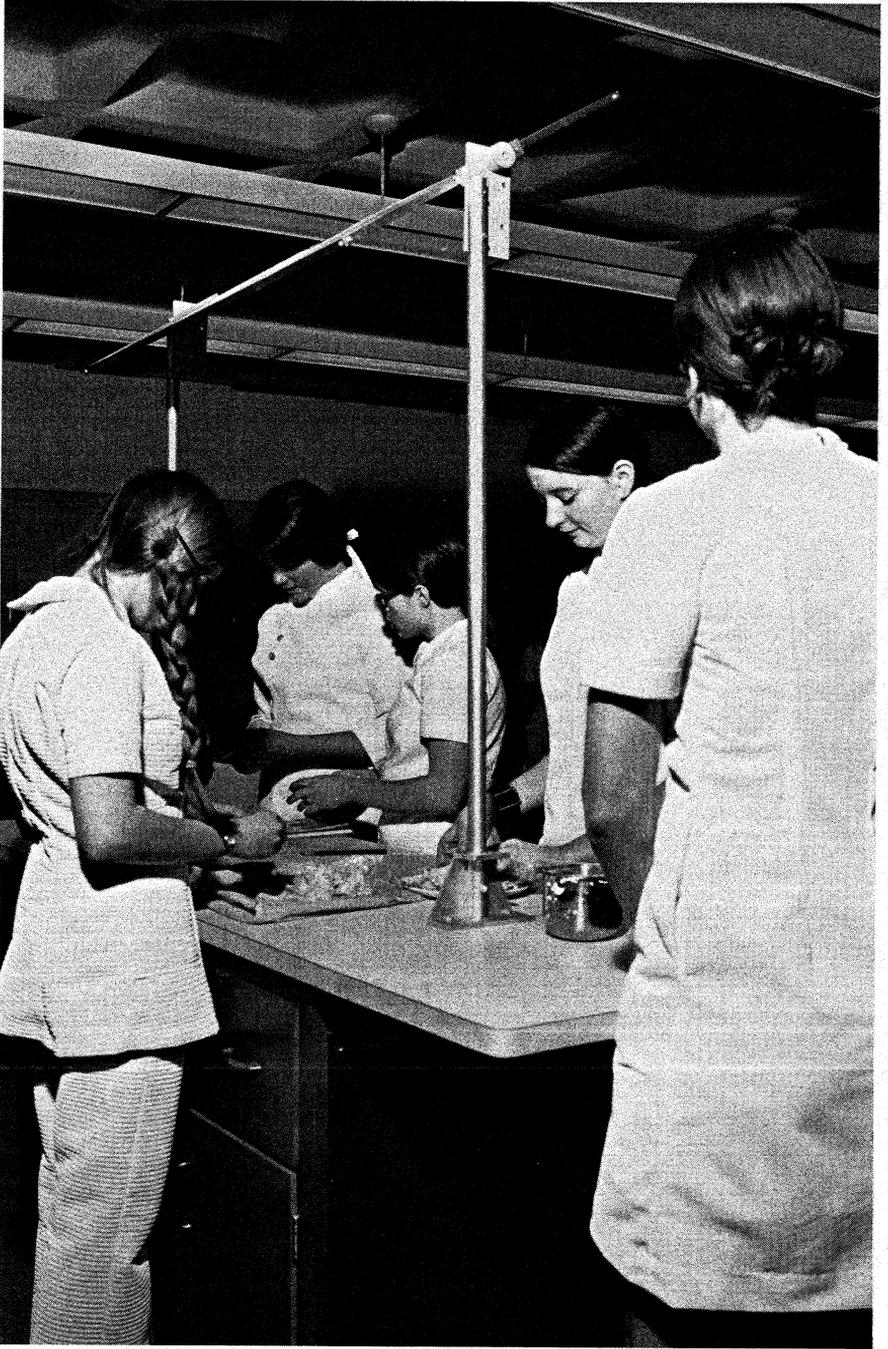
**Option I.** In the College of Professional Studies, they must complete:

- 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 for those seeking teacher certification at the secondary school level, including 20 credits in the following courses: Education 330-340 (two credits in the major field; 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 Professional Studies

Arthur L. Fritschel, Dean; Gerald F. Johnson, Assistant Dean, School of Communicative Disorders; Thomas E. McCaig, Acting Assistant Dean, School of Education; Robert O. Bowen, Assistant Dean, School of Health, Physical Education, Recreation, and Athletics; Agnes A. Jones, Assistant Dean, School of Home Economics.

The College of Professional Studies 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 Medical Technology, Military Science (Army ROTC), and the Department of Paper Science 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) a major in Physical Education; and (2) minors in (a) Coaching and (b) Health 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; and (3) Food and Nutrition, with options in (a) Dietetics, (b) General Food and Nutrition, (c) Experimental Food and Nutrition, and (d) Food Service Management.

## Graduate Degrees

**Master of Science in Teaching** degrees are offered in elementary education and elementary education with emphasis in reading.

## College of Professional Studies

**Master of Science** degrees are offered in Communicative Disorders (with emphasis areas in speech pathology, audiology, language disabilities, education of the deaf, and speech and hearing science) and in Home Economics Education.

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 pre-professional 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. Two acceptable recommendations from faculty members in the School of Communicative Disorders and one from a faculty member outside this School. The student is responsible for obtaining these forms and asking the faculty to recommend him.
  - e. 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-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 is open only to those students who have been accepted into the professional program.

Student teaching is open only to those students who have been accepted into both the professional program of the School of Communicative Disorders and the School of Education.

### **Professional Education Program**

Students must file formal application for admission to any education curriculum.

Admission to the Professional Education Program or to the School of Education is a prerequisite for the following courses: Education 301, 302, 310, 324, 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 School of Education at which time he will be assigned an adviser in the School of Education for professional program planning.
2. Each applicant after securing his application will see his adviser in the School of Education. The signature of the adviser shall appear on the application form before admission will be granted.
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 Assistant Dean of the School of Education.

B. Students interested in Elementary Education shall apply for admission to the professional program in the School of Education during their freshman year at which time they shall be assigned an adviser in the School of Education.

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 Assistant Dean of the School of Education.
2. Acceptable performance as determined by the faculty of the School of Communicative Disorders on the freshman speech and hearing screening. If a problem existed and remediation has been recommended and is in progress, a student may be provisionally admitted.
3. A GPR of at least 2.25 based on credits earned at this university.

D. The School of Education shall secure a report for advising purposes for each student from the Office of Student Affairs.

- E. Students who are denied admission to the professional education program for other than academic reasons 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. A student who has been provisionally admitted shall consult with the Assistant Dean of the School of Education and the chairman of the department in which the student will be doing student teaching.

**Transfer Students:**

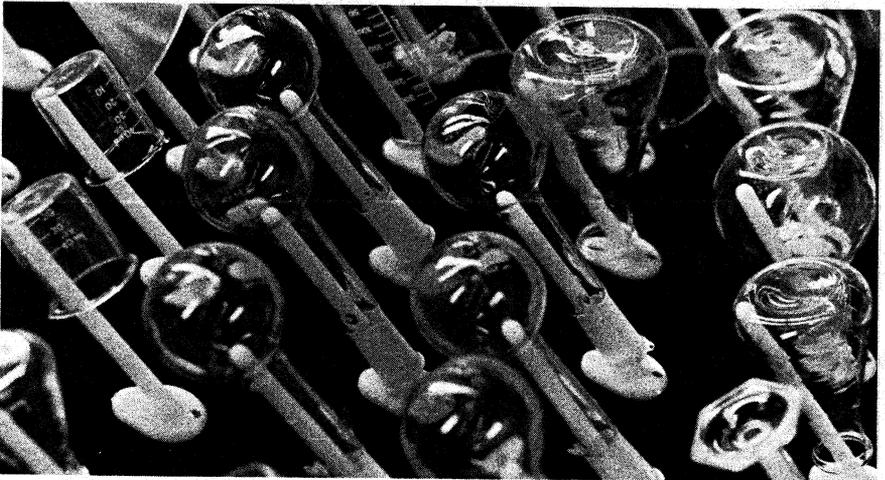
Transfer students and those who have completed a baccalaureate degree from an accredited institution (in meeting the conditions of paragraph C, above) will be conditionally admitted to the Professional Education Program for their first semester, if they satisfy the following requirements:

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; or 103 and 104; or 105 and 106.

**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. Cultural 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:

1. Astronomy 105, 106, 311.
2. Biology 101, 130, 160.
3. Chemistry 101, 103, 105, 106, 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, 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, under-

\*Required for Home Economics majors.

\*\*Recommended for Home Economics majors.

standing, 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.

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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.)

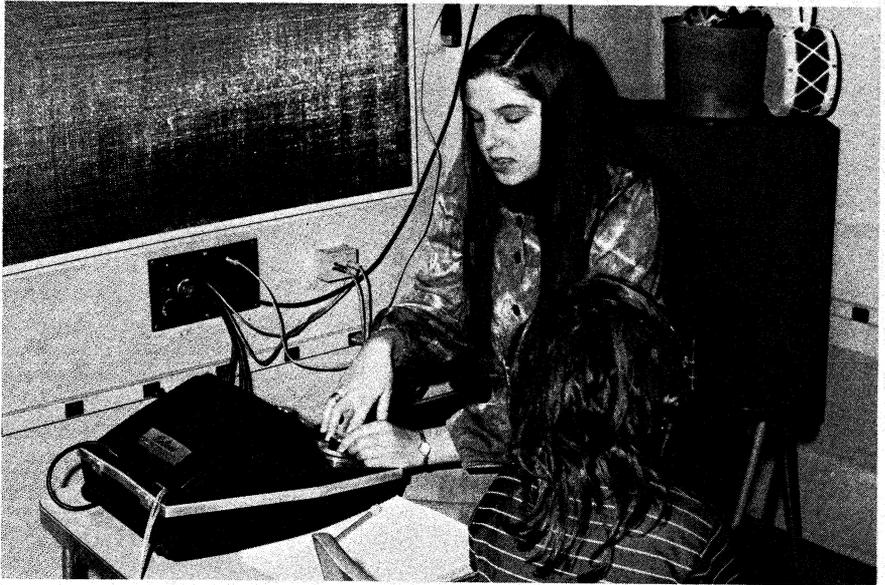
**IX. The required professional education sequence** for those seeking teacher certification at the secondary school level includes 20 credits in the following courses: Education 330-340 (two credits in the major field; two credits in the minor field, if required); Education 380, 381, 398. (Psychology 200 is a prerequisite for Education 381.) Students not having a minor will elect at least two credits of other education courses.

**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 Assistant Dean of the School of Education.

**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.
- 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.

## 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 a 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 women's 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
American Civilization .....	X	
Art K-12 .....	X	X
Biology .....	X	X
Business Education .....	X	
Chemistry .....	X	X
Coaching .....		X
Communication .....	X	X
Communication and Drama .....	X	
Communicative Disorders .....	X(1)	
Dance .....		X
Drama .....	X	X
Early Childhood Education .....	X(2)	
Economics .....	X	X
English .....	X	X
French .....	X	X
General Science (Broadfield) .....	X	
Geography .....	X	X
German .....	X	X
Health Education .....		X
History .....	X	X
Home Economics Education .....	X	
Learning Resources K-12 .....		(3)
Library Science K-12 .....		X
Mathematics .....	X	X
Music K-12 .....	(4)	
Natural Resources Management .....	X	
Philosophy .....	X	X
Physical Education K-12 .....	X	X

Area	Major	Minor
Physics .....	X	X
Political Science .....	X	X
Psychology .....	X	X
Russian .....		X
Social Science (Broadfield) .....	X	
Sociology-Anthropology .....	X	X
Spanish .....	X	X
Special Learning Disabilities .....		X

(1) After July 1, 1975, a master's degree will be required for certification.

(2) May be secured through the Elementary Education Department or the School of Home Economics.

(3) Minor in Learning Resources leads to certification as school librarian and as audio-visual director or coordinator.

(4) Major in Music leads to certification in Instrumental K-12, Vocal K-12, or Instrumental and Vocal K-12.

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; or 103 and 104; or 105 and 106.

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

**III. Foreign Language** — eight credits; or **Mathematics** — four credits.

The completion of Mathematics 229 and 239 fulfill the general degree requirements in mathematics in the Elementary Education Curriculum. (See additional mathematics requirement under VIII.)

**IV. American History** — six credits: History 211 and 212.

**V. A. Humanities** — nine credits:

1. English 205 and 206, or 211 and 212, or 213 and 214.
2. Music 100.

**B. Social Science** — 14 or 15 credits:

1. Cultural 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:

In the (Kindergarten-) Primary options:

Phy Ed 101	2 cr.
Phy Ed 231	3 cr.
	<hr/>
	5 cr.*

In the intermediate option:

Phy Ed 101	2 cr.
Phy Ed 232	3 cr.
	<hr/>
	5 cr.*

**OR**

In any option:

Phy Ed 231	3 cr.
Phy Ed 232	3 cr.
	<hr/>
	6 cr.*

\*Four credits apply toward the Phy Ed 101 requirement; the additional one or two credits 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.)

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

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after registration.

**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 302, 322, 324, 381, 398; 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 310, 322, 324, 381, 383, 398; Learning Resources 331; Music 381; Physical Education 232.

**D. Kindergarten-Grade 8** (Grades K-8): Add Education 301 and Student Teaching in Kindergarten.

**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 36 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: Education 302 or 310, 324, 381, 383; and Learning Resources 331. 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 professional 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. (In the Early Childhood Education major, English 275 may be used in partial fulfillment of the Humanities requirement.)

### **II. Major Requirements**

Education 242, 301, 381, 398; Psychology 200; Home Economics 101 **or** Art 101; Home Economics 261 **or** Psychology 260; Home Economics 351 **or** 353; 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, 480; Education 351, 353; Physical Education 231.

Completion of I, II, 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, physical education, 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 (21 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 one year of 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 in Special Learning Disabilities is a certification program (Certificate 811) that is in addition to completion of a general professional major in Elementary Education. Applicants to the Special Learning Disabilities program are admitted if they have proved competency in their general professional preparation. Equally important, however, are requirements for admission that evaluate the student's needs, interests, and capacity to cope with a career in teaching learning disabled children. An Advisory Committee in Learning Disabilities, whose members are composed of instructors in the SLD courses and certified SLD practitioners, is in charge of screening all candidates for admission, and counsels those who should not be admitted.

**I. Criteria for Admittance of Applicants**

1. Elementary Certification or near completion of elementary certification requirements.
2. A Grade Point Ratio of 2.50.
3. "B" average in professional elementary education courses and exceptional education courses completed.
4. Approximately 70% average performance of behaviors observed, as indicated on the Performance Rating Scales submitted.
5. Admittance recommended by two of the three interviewers.
6. Successful performance of the competencies required for Education 353/553.

Applicants recommended or not recommended for admittance into the Special Learning Disabilities Program will be so notified in writing, with a copy of the letter to be filed in the Office of Assistant to the Dean, Student Services, COPS. When a student is not recommended for admittance by the SLD Advisory Committee it means that, in the best judgment of instructors and professionals guiding the SLD Program, the student should not proceed in the program. The student may decide to continue to take SLD courses after such a non-recommendation but at his own risk of failing to meet the competencies required in the program and not being recommended for SLD certification. See also **SPECIAL LEARNING DISABILITIES** under "Courses of Instruction.")



### **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.

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 32 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.

**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. For further description of this program, see Student Teaching Plan E below.

### Student Teaching

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 staff, 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**

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.
5. For Early Childhood Education majors: Completion of Education 349.
6. Recommendation from the Chairman of the Department of Elementary Education.
7. Recommendation on the health form required by the State of Wisconsin for all certified teachers, from a physician of the student's choice, based on an examination within the last three years. Also, a medical statement indicating they are 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 the student teaching will be done.

Elementary education student teachers will have completed Elementary Education 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. In the Elementary Education major, students enroll for 13 credits of Education 398. The assignment of student teaching usually includes work at two grade levels, e.g., nine weeks in grade four, and nine weeks in grade five. Students in the Kindergarten-Primary program must teach at the kindergarten level for part of the assignment. The typical student teaching program is for a complete semester on a full-day basis. Elementary education students are invited to apply for the intern program as 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.

### **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.

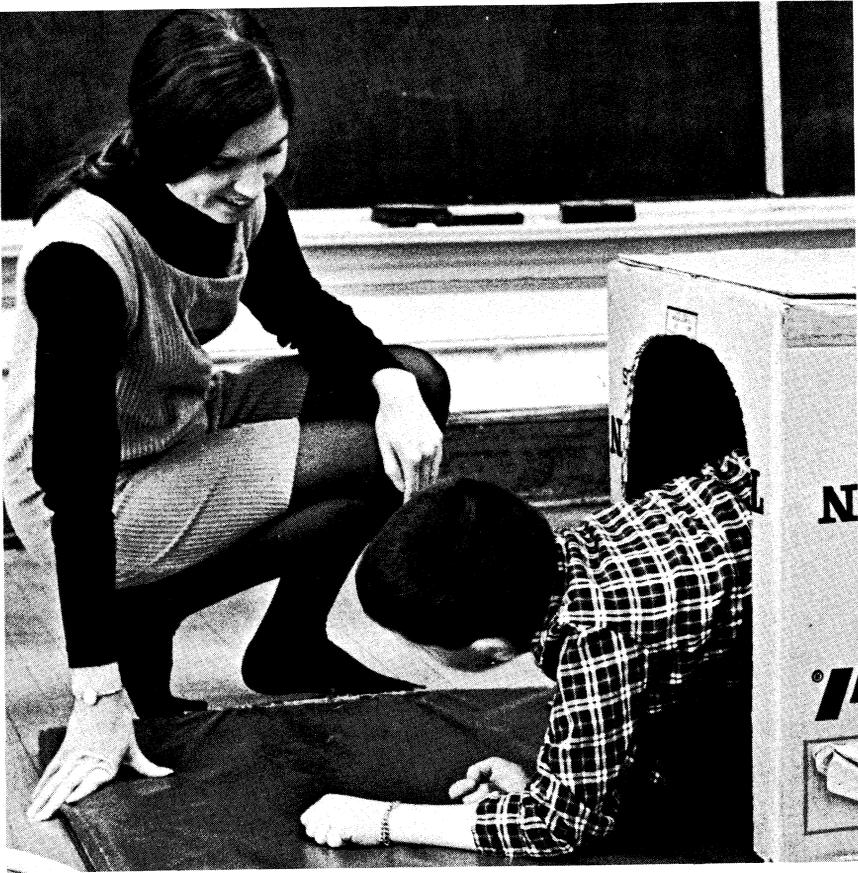
3. A cumulative grade point ratio of 2.25 or better for student teaching and of 2.50 for internship.
4. A grade point ratio of 2.25 in the major and minor fields, and of 2.50 in the major and minor fields of internship.
5. Recommendation from the chairman of the student's major and minor departments.
6. Completion of the techniques courses in the area(s) to be taught.
7. Recommendation on the health form required by the State of Wisconsin for all certified teachers, from a physician of the student's choice, based on an examination within the last three years. Also, a medical statement indicating they are 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 on campus 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.** (Centers for the Study of Teaching.)

Plan B differs from Plan A in that:

1. The student must have completed a different sequence of course work in professional education prior to the start of this pattern.
2. During either semester of the senior year the student teacher will ordinarily enroll for 16 hours of work in professional education.
  - A. Student Teaching (Education 398) and the other required courses (Education 390 and 381) are taken in a designated geographic area which serves as a "teaching center" for student teachers, cooperating schools, and university personnel.
  - B. This "teaching center" makes it possible to blend theory and practice throughout the entire semester and affords expanded opportunity for observational and teaching experiences.

- C. Plans are being developed to bring about an even more closely articulated program of experimentation and in-service opportunity for both the student teachers and the professional personnel of the school districts participating in the center program.
- D. Students who elect this plan are advised to live in the teaching center area during the entire semester.

**Plan C. (Internship)**

- 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 in 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 \$5.00.
  - 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 D. (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 five credits.
6. The junior high level will count toward secondary certification.

**Plan E.** (Special plan for Special Learning Disabilities.)

The Center Program in Special Learning Disabilities (CP-SLD) is a semester experience of student teaching in an elementary or secondary school SLD setting which includes instruction in SLD models, methods, materials, and management procedures. It is a program where the public and/or private schools in a community and the School of Education at the University of Wisconsin-Stevens Point cooperate in completing the professional education of an SLD teacher.

Students who have completed all requirements in the SLD Program at UW-SP except Education 364 and Education 398 spend one semester in an elementary or secondary school under the joint supervision of a master SLD teacher and a UW-SP professor in SLD. From two to four students are placed with an SLD teacher. Three to five elementary or secondary school settings are utilized for placement within one community. Formal classes in Education 364 are held at the beginning of the semester, and integrated with student teaching thereafter. A seminar (Education 365) is held each week with the students meeting at a central location in the community. Students work with SLD children and the master SLD teacher throughout the semester. They live in or near the community where they are assigned.

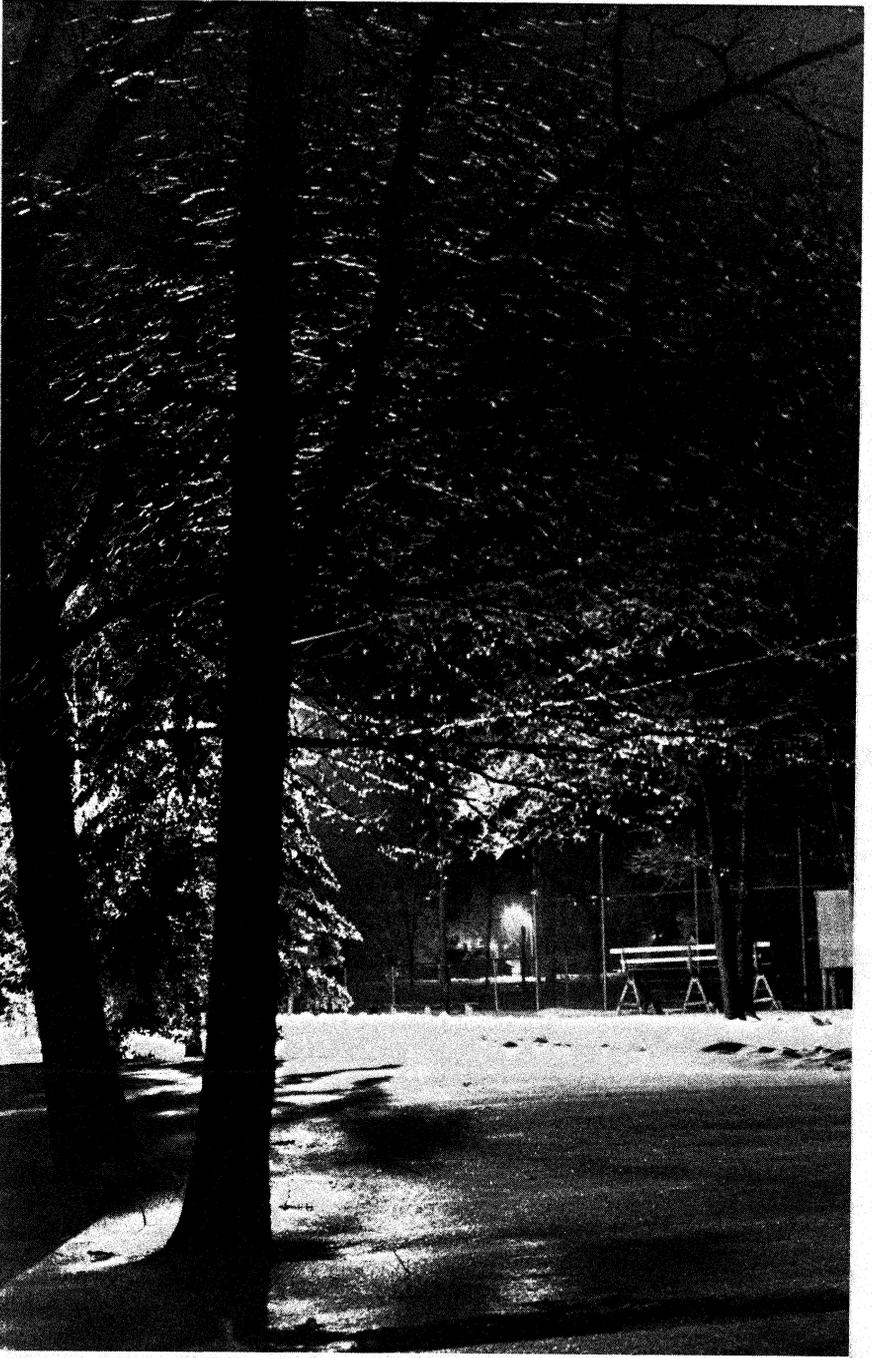
**The Student Education Association**

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.

**Teacher Corps Program**

The Wisconsin Indian Teacher Corps Program at the University of Wisconsin-Stevens Point is a two-year federally funded project (1973-75) involving twenty-one interns in elementary education. The purpose of the program is to: (a) develop a community-based program in elementary schools, (b) initiate multi-unit organization and Individually-Guided-Education in the elementary schools in the program and (c) develop a competency-based teacher education program at the university.

The project, one of 87 Teacher Corps programs throughout the country, involves the local communities and school systems of Ashland, Bayfield, Bowler, Hayward and Webster. Interns participate in student teaching, community activities and academic course work in their respective communities. 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; or 103 and 104; and 105 and 106.
- II. **Communication**—two credits: Communication 101, or an equivalent performance course in oral communication.
- III. One of the following:
  - A. **Foreign Language**—eight credits.

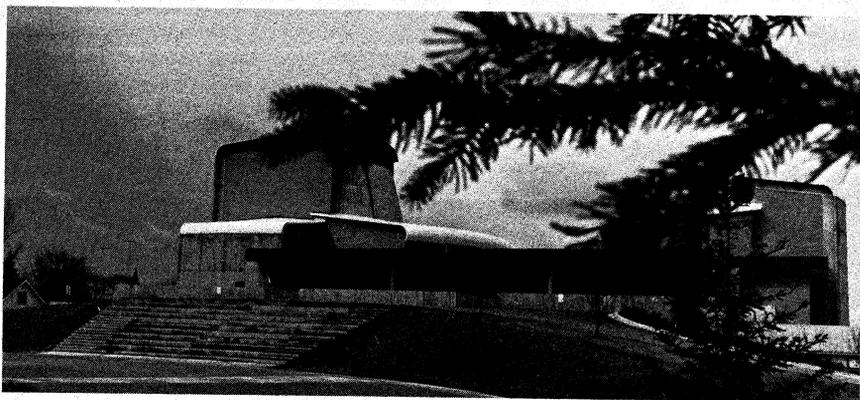
The equivalent of one year of college work in one language must be completed before credit will count toward this requirement.

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. Cultural 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.)

Students who believe they have medical or other grounds for exception must present their claims to the Physical Education department after 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.

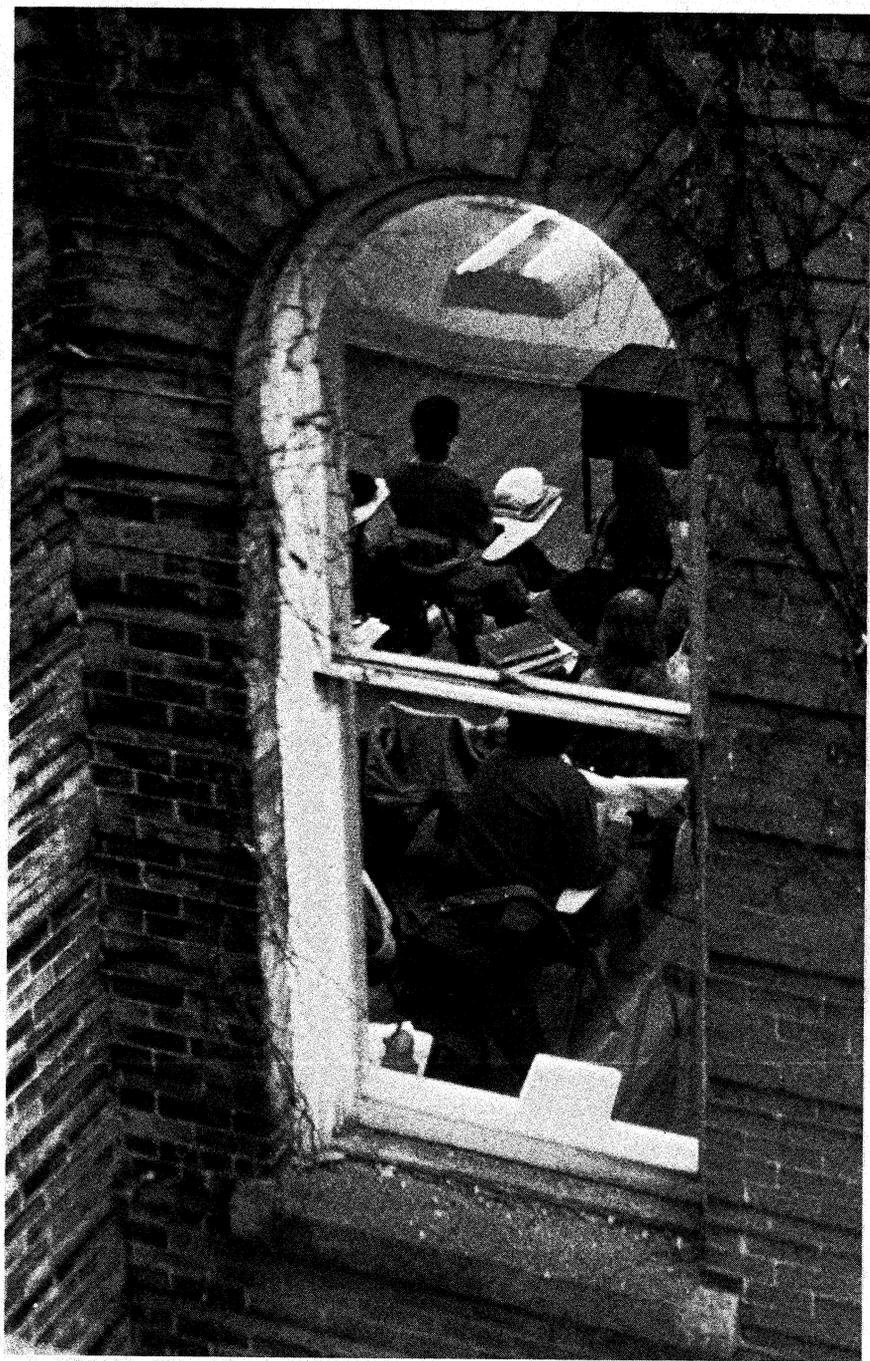
A cumulative grade point ratio of 2.00 is required for granting of the Associate Degree.

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, Coordinator of Graduate Programs

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.

In 1962, the Wisconsin State College System, at the request of the Coordinating Council for Higher Education, initiated plans to grant the master's degree for classroom teachers on each of the campuses. The first master's degrees were conferred at Wisconsin State University–Stevens Point in the summer of 1964.

UW–SP implemented a full-time academic year program in the fall of 1966. Graduate courses and a number of graduate-undergraduate combination courses afford students opportunity to complete their program in one academic year and one summer session.

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 Coordinator of Graduate Programs or his representative, the Chairman of the Graduate Faculty, and 12 other members elected from the Graduate Faculty. These include six members from the College of Letters and Science, three from the College of Professional Studies, two from the College of Fine Arts, and one from the College of Natural Resources. 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 Coordinator of Graduate Programs.

**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

## The Graduate College

appointment. Under current Regents' rules, assistants cannot assume classroom teaching responsibilities, but are required to give approximately 20 hours of service per week to their departments and to register for nine credits of graduate work. Out-of-state tuitions are waived and a salary is paid. An application for an assistantship may be obtained by contacting the department chairman's office.

### Admission

Students who plan to enroll in **any** graduate course, even if they plan to take only one course, must be admitted to the Graduate College. Application for admission to the Graduate College must be filed on standard forms available in the Graduate College office. Transcripts of under-graduate and all graduate work must be mailed directly to the Coordinator of Graduate Programs by the institution formerly attended, and must bear the official seal of the institution.

Baccalaureate graduates of the University of Wisconsin—Stevens Point need not furnish transcripts of their records here. Transcripts of post-graduate and graduate work taken elsewhere are required even though it 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 to be undertaken.
4. For admission **in good standing**, a cumulative grade point ratio of 2.75 in undergraduate courses, or a 2.90 grade point ratio in the last half of the undergraduate program. (A=4 points.)
5. For admission **on probation**, a cumulative grade point ratio of 2.25-2.74 in undergraduate courses.
6. For the MST degree, certification for teaching in Wisconsin or another state.
7. Such other requirements as may be prescribed by the Graduate Council. These requirements may include standardized testing.

A student who does not meet all of the standards listed above may be admitted on a provisional basis by the Coordinator of Graduate Programs.

Students who do not expect to pursue a degree, but who are otherwise qualified, may be admitted with the approval of the Coordinator of Graduate Programs.

Assignment of an adviser is made by the department chairman as soon as practicable after the student has been admitted.

### Transfer of Credit

Students who have made satisfactory records in graduate courses at 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 Coordinator of Graduate Programs.

## Registration

In order to register for a graduate course, the student must have a Permit to Register, granted by the Coordinator of Graduate Programs.

**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.

## 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.

Students admitted on probation must earn a B average during their first six to 12 credits to remain in the program. Upon earning the B average, the probationary status will be removed. No credit shall be granted for a grade lower than C, but the grade shall be counted in figuring the student's average.

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).

A graduate student may not take more than six credits beyond the minimum requirement for the purpose of raising his grade point ratio.

### **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. He must have demonstrated fitness for candidacy on such written or oral examinations as may be prescribed by the Graduate Council.
5. Applications for Admission to Candidacy must be filed in the Graduate Office after the completion of nine credits, and must include a planned program for the completion of the work. Applications must be approved by the student's adviser before being approved by the Coordinator of Graduate Programs.

### **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).

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 Coordinator of Graduate Programs 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**. A student must complete arrangements for the examination with his academic adviser at least 30 days before the date of the examination.

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.
5. Social Studies—at least nine credits in one of the following disciplines, and the remainder in at least two of the others: Economics, cultural Geography, History, Natural Resources, Political Science, Psychology, and Sociology and Anthropology. Courses deemed germane for the Social Studies in other academic areas may be substituted with the adviser's approval. At least half of the credits in the area of specialization must be in 700-level courses.

**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 762 (eight credits) and Education 763, 764 (six credits).

Additional credits may be required to correct deficiencies and/or to meet certification requirements.

Wisconsin teacher certification regulations require that teachers of the **social studies** have courses in both cooperatives (Economics 200 or 323) and conservation (Natural Resources 370), or their equivalents at the graduate level. 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):

## The Graduate College

- 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.
- C. (Additional option for Social Studies, only): **A seminar**, carrying three credits, in the area of specialization, including a research paper written in connection with the seminar.

### The Master of Music Education (MMEd) 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. **Major Applied Music**—four credits.

B. **Music Theory**—six credits.

A placement examination is required. Students found not qualified 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 720, and one other graduate course in music literature/history. Qualified students may select any graduate courses in music literature/history, except Music 720.

D. **Music Education**—six credits.

Music 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

- I. **The general requirements** for the master's degrees must be met, as specified above.
- II. **The minimum of 30 academic credits** in graduate courses is distributed as follows:
  - A. **Required Core Courses**—five credits: Communicative Disorders 710, 711.
  - B. **Area of Specialization**—18 credits in academic courses at the 700 level in the emphasis areas of Audiology or of Speech and Language Pathology; or 15 credits in the emphasis area of Education of the Deaf:
    1. Audiology: Communicative Disorders 750, 751, 752, 753, 754, 755, 765.
    2. Speech and Language Pathology: Communicative Disorders 725, 729, 730, 732, 733, 734, 735, 736, 737, 740, 745, 767.
    3. Education of the Deaf: Communicative Disorders 749, 766, 768, 769, 770, 771, 772.
  - C. **Electives** in the above areas supporting the specialization of which not more than seven credits can be earned in workshops. Communicative Disorders 712, 796, and 799 (Thesis) may also be elected.
- III. Completion of at least 150 clock hours of graduate level practicum: Communicative Disorders 795, one credit in each semester or summer session. These credits are required in addition to the 30 credits listed in paragraph II, 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, 577, 583, 646, 648, 649, 650, 655, 657, 748, 749, 753.
4. **Consumer Education and Management:** Home Economics 771, 779.
5. **Housing and Interiors:** Home Economics 511, 581, 612, 613, 616, 712, 719.
6. **Other:** Home Economics 690.

### The Master of Science (MS) Degree — Natural Resources

The Master of Science degree—Natural Resources encompasses the disciplines of forestry, water resources, wildlife, 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 major; a student with a major in social sciences or humanities should expect to have more deficiencies than one who has a major in the sciences or mathematics.

A student must have an adviser selected from the staff of the College of Natural Resources before he or she is admitted into the graduate program. An adviser may be obtained by applying to the College of Natural Resources Graduate Committee.

- I. **The general requirements** for the master's degree must be met, as specified above.
- II. **Graduate courses offered** by the College of Natural Resources include the following:
  - A. **Forestry** 521, 522, 524, 525, 532, 625, 626, 627, 628, 632, 693, 720, 730.
  - B. **Natural Resources** 570, 571, 572, 573, 673, 674, 675, 790, 791, 792, 793, 795, 796, 797, 799.
  - C. **Soils** 561, 562, 564, 565, 661, 665, 693, 760, 762.
  - D. **Water** 582, 589, 680, 681, 780, 781, 786, 787, 788, 789.
  - E. **Wildlife** 641, 642, 644, 645, 646, 651, 652, 653, 655, 693, 740, 742, 752.
- III. **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):

This option is recommended for most graduate students:

- a. Thesis—two to six credits.
- b. Seminar—two credits.

**D. Non-thesis option (Plan B):**

This option is available in certain situations and only with the approval of the student's graduate committee and his adviser:

- a. Independent Study—three credits (library research, management plan, etc.)
- b. Seminar—two credits.

## 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; Social Studies (six to nine credits in one of the following disciplines, and the remainder in at least two of the others: Economics, cultural Geography, History, Natural Resources, Political Science, and Sociology).

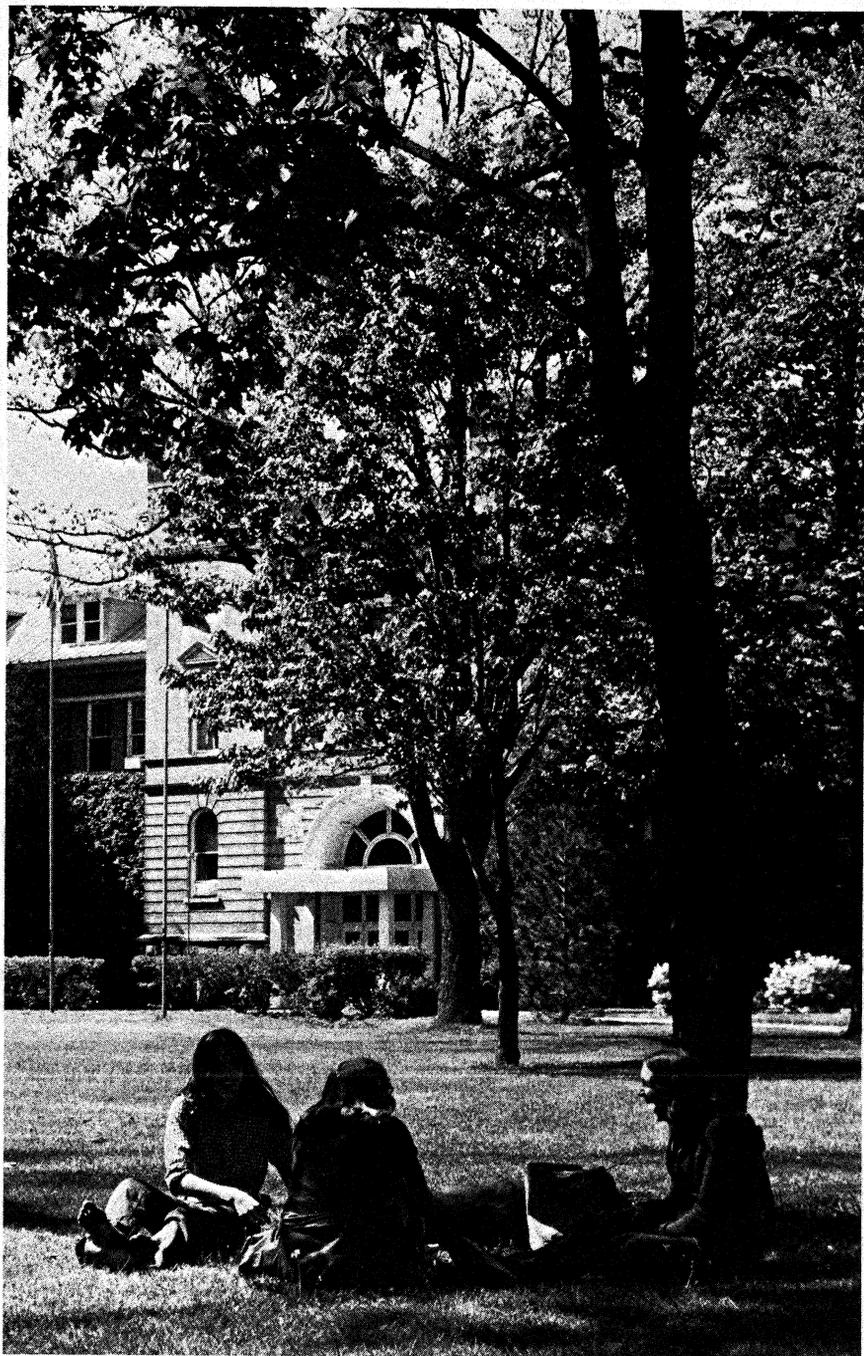
Department of Public Instruction certification for **Reading Teacher** and **Reading Specialist** may be accomplished by completion of four courses (Reading Teacher) or six courses (Reading Specialist) in Reading. Certification for grades K-12 is available within a variety of degree or non-degree program 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

## 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 at 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 Coordinator of Graduate Programs.

### **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.

## **AMERICAN CIVILIZATION**

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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.

**American Civilization 101. American Personality and the Creative Arts.** Three credits. 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.

**American Civilization 102. Social Science in American Culture.** Three credits. 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.

**American Civilization 300/500. American Life.** Three credits. The integrating course in American Civilization for juniors and seniors, emphasizing an inter-

disciplinary study of American life in terms of concentration on a specific theme, person, or period, such as individualism, Frank Lloyd Wright, or the 1920's. 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.

**American Civilization 399. Special Work.** One to six credits. 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.

**American Civilization 701. Contemporary American Culture.** Three credits. An interdisciplinary approach to American life, thought, and creative expression since World War II; materials integrated from history, literature, and music.

## **ANTHROPOLOGY**

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Courses in Anthropology are taught by members of the department of Sociology

and Anthropology, which also administers the major and minor in Sociology and Anthropology.

For the description of the major and minor and for course listings in Anthropology, see the section headed **Sociology and Anthropology**, later in the catalog.

## **ART**

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Henry Runke, chairman; Robert Boyce, Lawrence Brown, Daniel Fabiano, Colleen Garvey, Gary Hagen, Wayne Halverson, William Hanford, Norman Keats, Dennis Meyer, Herbert Sandmann, Richard Schneider, David Smith, Timothy Volk.

**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, Education 322, 331, 380, 381, and 10 credits of 398; and 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, and 103.
2. Two of these: Art 221, 231, or 234.
3. Two of these: Art 241, 251, 261, or 271.
4. Art 282 or 283 or 381.

In certain cases, substitutions may be permitted by the chairman of the department.

A fee is charged for some studio courses to cover the cost of materials furnished to the student by the department.

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.

**Art 101. Design: 2-dimensional.** Three credits. Fundamental design principles in the art process on the 2-dimensional plane, 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 Economics 101. Fee: \$1.00.

**Art 102. Design: 3-dimensional.** Three credits. Fundamental design principles

in the art process in 3-dimensions, in structure and arrangement utilizing a variety of materials. Fee: \$1.00.

**Art 103. Drawing.** Three credits. Basic drawing utilizing a variety of subject matter, media, and approaches with emphasis on visual perception and awareness. Prerequisite: Art 101 or 102. Fee: \$3.00.

**Art 104. Drawing.** Three credits. Advanced problems in drawing emphasizing conceptual development. Prerequisite: Art 103. Fee: \$3.00.

**Art 106. Layout and Lettering.** Two or three credits. Fundamentals of lettering in various alphabets; problems in poster, sign, and advertising layout in a variety of media.

**Art 203. Drawing.** Three credits. Course of study to be determined between student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 104 or consent of instructor. Fee: \$3.00.

**Art 206. Layout and Lettering.** Two or three credits. Course of study to be determined between student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 106 or consent of instructor.

**Art 221. Printmaking.** Three credits. Printmaking in black and white, and color, employing basic graphics media and techniques. Prerequisite: Art 103. Fee: \$9.00.

**Art 231. Painting: Watercolor.** Three credits. Painting in transparent and opaque water color. Prerequisite: Art 103. Fee: \$3.00.

**Art 234. (Formerly 232) Oil Painting.** Three credits. Painting techniques in figure, still life, and landscape. Prerequisite: Art 103. Fee: \$3.00.

**Art 236. (Formerly 233) Life Drawing.** Three credits. Drawing the human figure with attention to anatomy, utilizing a variety of media. Prerequisite: Art 103. Fee: \$9.00.

**Art 241. Crafts.** Three credits. Application of design principles in various craft activities. Prerequisite: Art 103. Fee: \$9.00.

**Art 251. Sculpture.** Three credits. Introduction to materials and techniques of sculpture. Prerequisite: Art 103. Fee: \$9.00.

**Art 261. Ceramics.** Three credits. Introduction to the materials and techniques of ceramics; methods of construction of ceramic ware, glazing, firing, and kiln management. Prerequisite: Art 103. Fee: \$9.00.

**Art 271. Art Metal.** Three credits. Basic materials and techniques of art metal. Prerequisite: Art 103. Fee: \$9.00.

**Art 282. History of Ancient and Medieval Art.** Three credits. Historical survey of architecture, sculpture, and painting, including Egypt, Greece, Rome, and Medieval Europe. Prerequisite: Sophomore standing.

**Art 283. History of Renaissance and Modern Art.** Three credits. Historical survey of architecture, sculpture, and painting in the western world from the 15th century to the present. Prerequisite: Sophomore standing.

**Art 321. Printmaking.** Three credits. Advanced problems in the graphics media. Prerequisite: Art 221. Fee: \$9.00.

**Art 322. Printmaking.** Three credits. Course of study to be determined between student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 321 or consent of instructor. Fee: \$9.00.

**Art 331. Painting: Watercolor.** Three credits. Advanced problems in watercolor media. Prerequisite: Art 231. Fee: \$3.00.

**Art 332. Painting: Watercolor.** Three credits. Course of study to be determined between student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 331 or consent of instructor. Fee: \$3.00.

The former **Art 332—Oil Painting**—is now **Art 334**.

The former **Art 333—Life Drawing**—is now **Art 336**.

**Art 334.** (Formerly 332) **Oil Painting.** Three credits. Advanced problems in the oil medium and other contemporary media. Prerequisite: Art 232. Fee: \$3.00.

**Art 335. Oil Painting.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 334 or consent of instructor. Fee: \$3.00.

**Art 336.** (Formerly 333) **Life Drawing.** Three credits. Continuation of study of the human figure with emphasis towards experimental work. Prerequisite: Art 236. Fee: \$9.00.

**Art 337. Life Drawing.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 336 or consent of instructor. Fee: \$9.00.

**Art 341. Crafts.** Three credits. Advanced problems of applied design in various craft activities. Prerequisite: Art 241. Fee: \$9.00.

**Art 342. Crafts.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 341 or consent of instructor. Fee: \$9.00.

The former **Art 342—Crafts of American Indians**—is now **Art 347**.

**Art 343. Woven Textiles.** Three credits. Design principles in two and three dimension woven textiles; use of armature, frame and harness looms; natural and synthetic fibers. Prerequisite: Art 101, 102, 103; or Home Economics 101 and 233, or concurrent registration. Fee: \$9.00.

**Art 344. Woven Textiles.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 343 or consent of instructor. Fee: \$9.00.

The former **Art 344—Printed Textiles**—is now **Art 345**.

**Art 345.** (Formerly 344) **Printed Textiles.** Three credits. Design principles in hand printed two and three dimensional textiles; direct area dyeing, resist dyeing, silk screen and block printing. Prerequisite: Art 101, 102, 103; or Home Economics 101 and 233, or concurrent registration. Fee: \$9.00.

**Art 346. Printed Textiles.** Three credits. Course of study to be determined be-

tween the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 345 or consent of instructor. Fee: \$9.00.

**Art 347. (Formerly 342) Crafts of the American Indians.** Two or three credits. A laboratory investigation into the material culture of the Indians of North America with particular emphasis on the traditional crafts of the Woodland Cultures. Laboratory experience in such crafts as weaving, lapidary, basketry, quill embroidery, ceramics, and other media as are available directly from natural resources. Some field trips may be required.

**Art 348. Crafts of the American Indians.** Two or three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 347 or consent of instructor.

**Art 351. Sculpture.** Three credits. Advanced problems in sculpture including a greater variety of materials and advanced techniques. Prerequisite: Art 251. Fee: \$9.00.

**Art 352. Sculpture.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 351 or consent of instructor. Fee: \$9.00.

**Art 361. Ceramics.** Three credits. Advanced problems and techniques in ceramic art. Prerequisite: Art 261. Fee: \$9.00.

**Art 362. Ceramics.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 361 or consent of instructor. Fee: \$9.00.

**Art 371. Art Metal.** Three credits. Advanced problems in art metal. Prerequisite: Art 271. Fee: \$9.00.

**Art 372. Art Metal.** Three credits. Course of study to be determined between the student and instructor on the basis of previous course work in the medium. This class meets concurrently with beginning sections. Prerequisite: Art 371 or consent of instructor. Fee: \$9.00.

**Art 381. History of the Visual Arts.** Three credits. Major periods, styles, artists, and problems of architecture, sculpture, and painting. Not open to Art majors to fulfill Art department art history requirements or to students who have had Art 282 or 283.

**Art 382. History of Latin American Art.** Three credits. Survey of the visual arts of Latin America from prehistoric to contemporary times. Prerequisite: Art 282 or 283 or 381.

**Art 383. History of 19th and 20th Century European Painting.** Three credits. Historical survey of the development of modern European painting. Prerequisite: Art 282 or 283 or 381.

**Art 384. History of Painting in the United States.** Three credits. Historical survey from the colonial period to the present. Prerequisite: Art 282 or 283 or 381.

**Art 385. History of Sculpture in the United States.** Three credits. Historical survey of native sculpture, sculptors, and movements in sculpture of the United States from the colonial period to the present. Prerequisite: Art 282 or 283 or 381.

**Art 386. History of Modern Architecture.** Three credits. Historical survey of the development of modern and American architecture of the 19th and 20th centuries. Prerequisite: Art 282 or 283 or 381.

**Art 387. History of Classical Art.** Three credits. Historical survey of the visual arts of Greece and Rome with special emphasis on architecture and sculpture. Prerequisite: Art 282 or 283 or 381.

**Art 388. African Arts.** Three credits. Sub-Saharan African art; survey of the visual tribal arts of sub-Saharan black Africa with emphasis on architecture and sculpture.

**Art 399. Special Work.** Each one to three credits. Upper class students ma-

joring or minoring in Art, may by agreement with the chairman of the Art Department 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** (Fee: \$1.00 per student); **399B—Drawing**; **399C—Printmaking** (Fee: \$3.00 per credit); **399D—Painting**; **399F—Crafts** (Fee: \$3.00 per credit); **399G—Sculpture** (\$3.00 per credit); **399H—Ceramics** (Fee: \$3.00 per credit); **399J—Art Metal** (Fee: \$3.00 per credit); **399K—Art History**; **399Z**—(Subtitle will be supplied).

**Art 490. Seminar.** Two credits. Open only to Art majors; research into problems and developments in the field of Art.

**Art 701. Historical and Philosophical Concept of Art.** Three credits. Philosophical and aesthetic aspects of Art in both its historical and contemporary phases; the arts in the life of the individual; the function of the arts in society. For students with little or no background in Art.

## ART EDUCATION

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**Art Education 340. Curriculum in Art.** Two credits. Seminar in planning and developing an individual or group art

curriculum for grades K-12. Prerequisite: Education 398 or consent of instructor.

## ASIAN STUDIES

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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); **Geography** 327 (Asia); **History** 215 (East Asia to 1800); 216 (East Asia Since 1800); **Philosophy** 105 (India and China); **Political Science** 106 (Developing Areas, when offered with primary emphasis on Asia).

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** 250 (Oriental); **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); **Music** 428 (Pacific, Near East, Asia); **Philosophy** 335 (Hinduism, Buddhism), 336 (Contemporary Indian Thought); **Political Science** 370 (South Asia), 371 (China), 372 (Southeast Asia), 488 (U.S. Policy in Asia), 491 (Militant Non-Violence), 494 (Communism in Asia); **Religious Studies** 100 (Eastern Religions); **Sociology** 375 (Social Structure and Change in Northeast Asia).

3. Asian language study is recommended.

**Asian Studies 101. Introduction to Asian Studies.** Three credits. A study of traditional and contemporary Asia, emphasizing its units and diversity, from an interdisciplinary approach; geographical, historical, philosophical, religious, governmental, social, anthropological, linguistic, literary, artistic, and cultural aspects of Asian life.

**Asian Studies 399. Special Work.** One to three credits. Upper class students enrolled for 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 a special project.

## **ASTRONOMY**

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Courses in Astronomy are administered by members of the department of Physics.

**Astronomy 100. Unveiling the Universe.** Three credits. An encounter with man's ideas concerning the physical universe, from earth to intergalactic space. Two hours lecture, two hours laboratory per week. This course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirements.

**Astronomy 105. The Solar System.** Four credits. Early concepts, recent developments, and modern theories of its origin; emphasis on modern methods of obtaining information. Three hours lec-

ture, three hours laboratory per week. Prerequisite: Two units of high school mathematics, including algebra and plane geometry.

**Astronomy 106. Stars, Nebulae, and Galaxies.** Four credits. 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 hours lecture and three hours laboratory per week. Prerequisite: Astronomy 105, or consent of instructor.

**Astronomy 311. Introduction to Astronomy.** Three credits. 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 Astronomy 105 or 106.

**Astronomy 370/570. Astronomy for Teachers.** Four credits. An introduction, with emphasis on the Earth, Moon, Sun, and the total solar system, stars, star systems, and recent discoveries; emphasis on teaching. Prerequisite: Experi-

ence in, or preparation for, teaching science.

**Astronomy 371/571. Laboratory in Planetarium Studies.** Two credits. 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 hours laboratory per week, night observations. Prerequisite: Experience in, or preparation for, teaching science.

## **BIBLIOGRAPHY**

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See **Instructional Resources**.

## **BIOLOGY**

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Virgil Thiesfeld, chairman; John Barnes, George Becker, Frederick Copes, Robert Freckmann, Gordon Geeseman, Kent Hall, Joseph Harris, Don Hay, Vincent Heig, R. David Hillier, Garry Knopf, Charles Long, Edwin Pentecost, Edgar Pierson, Douglas Post, Robert Quick, Robert Simpson, Harry Smith, Stephen Taft, Marvin Temp, Steven VanHorn, Charley White, Robert Whitmire, Robert Wilde.

**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 and an additional animal course of at least three credits, including regularly scheduled laboratory work.
  - d. 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 Wildlife 441 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 courses taken within the Biology major (this includes collateral courses). 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 including Biology 130; 160; 281 or 314 or 351 or 381. At least four credits should be in courses numbered 300 or above in the area (plant or animal) opposite to that selected for the physiology course.

Students who have taken Biology 101 may complete a minor by taking Biology 281 or 314 or 351 or 381; 205 or 210; and other courses specifically approved by the chairman of the department to total at least 22 credits.

To be approved for graduation with a minor in Biology, the student must have a minimum grade point ratio of 2.00 in courses taken within the Biology minor.

**Biology 100. Biological Principles and Man.** Three credits. A survey of biology with special emphasis on man's present and future relationship to his environment. Two hours lecture, three hours laboratory 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.

**Biology 101. General Biology.** Five credits. Biological principles; survey of a wide variety of plant and animal life. Three hours lecture, four hours laboratory per week. Credit for this course cannot be counted for graduation or the major if Biology 130 and 160 (or equivalent) are counted.

**Biology 109. Nature Study.** Two credits. General relationships of plant and animal life (to mankind) with special attention to nature study teaching and its correlation in the elementary grades.

**Biology 130. Introduction to Plant Biology.** Five credits. General biological principles with emphasis on growth, reproduction, structure and functions of plants; morphological studies of typical plants. Three hours lecture, four hours laboratory per week.

**Biology 160. Introduction to Animal Biology.** Five credits. Anatomy, physiology, adaptation, and classification of

animals; morphology and anatomy of various types of animals. Three hours lecture, three hours laboratory per week. Additional two-hour test sections four times during the semester.

**Biology 204. Introduction to Ecology.** Three credits. Introduction to basic ecological principles. Not open to students majoring or minoring in Biology or Natural Resources. Credit may not be earned in both Biology 204 and 205.

**Biology 205. General Ecology.** Three credits. Interrelationships of plants and animals; ecosystem concepts; organization and distribution of biotic communities; application of ecological principles to human affairs. Prerequisite: Biology 101; or 130 and 160. Credit may not be earned in both Biology 204 and 205.

**Biology 206. Ecological Methods.** One credit. Application of ecological methods in field and laboratory analyses of ecosystems. Three hours laboratory per week. Prerequisite: concurrent enrollment in Biology 205; or Biology 205 and consent of instructor.

**Biology 210. Principles of Genetics.** Three credits. General principles of heredity and variation of plants and animals, with emphasis on human inheritance. Prerequisite: Sophomore standing.



**Biology 244. Trees and Shrubs.** Three credits. 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 hour lecture, four hours laboratory per week. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 101 or 130.

**Biology 275. Introductory Bird Study.** Two credits. Identification, life histories, and external morphology of the common birds of Wisconsin. One hour lecture, two hours laboratory per week. Not open to students majoring or minoring in Biology or Natural Resources.

The former **Biology 277** is now **377/577**.

**Biology 281. Animal Physiology.** Four credits. A general course dealing with body functions. Three hours lecture, three hours laboratory per week. Prerequisite: Biology 160; or Biology 101 and Chemistry 101.

**Biology 309/509. Field Biology.** Three credits. Field trips; collection, preparation, and identification of local plants and animals. One hour lecture, four hours laboratory per week. Nominal pro-

rata charge for field trip expenses. Not to be counted as credit if Biology 342 and/or Biology 379 are also taken. Prerequisite: Biology 101, or 130 and 160.

**Biology 310/510. Experimental Genetics.** Two credits. Introduction to experimental techniques used in cellular, organismic, and population genetics. Four hours laboratory per week. Prerequisite: Biology 210 or concurrent registration.

**Biology 311/511. Organic Evolution.** Three credits. Origin and evolution of the Bios. Prerequisite: Biology 101; or 130 and 160.

**Biology 314/514. Cell Biology.** Four credits. 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 hours lecture, four hours laboratory per week. Prerequisite: Biology 130, 160; and Chemistry 106 or 116.

**Biology 320/520. Biological Technique.** Four credits. Preparation of plant and animal tissues, organs, and entire organisms for microscopic and macroscopic study. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 101, or 130 and 160.

**Biology 322/522. Museum Methods.**

Three credits. 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 museum or nature center professions. Six hours laboratory per week. Prerequisite: Consent of the instructor.

**Biology 326/526. Electron Microscope Techniques.**

Three credits. 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 hour lecture, six hours laboratory per week. Prerequisite: Chemistry 106 or 116; and Biology 314, or 320, or 373, or consent of instructor.

**Biology 330/530. Plant Morphology.**

Four credits. Form and structure of plants and plant parts, both vegetative and reproductive. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 130.

**Biology 331/531. Plant Anatomy.**

Four credits. Study of the internal structures of vascular plants, with special emphasis on development, function, and evolutionary history. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 101 or 130.

**Biology 333/533. General Bacteriology.**

Four credits. Introduction to morphology, physiology, classification, and cultivation of bacteria, yeasts, and molds, with consideration of applied phases of bacteriology. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 101, or 130, or 160. Preparation in chemistry is highly desirable.

**Biology 335/535. Mycology.** Four credits. The taxonomy, morphology, physiology, and ecology of fungi; the role of fungi in disease, industry, decomposition, food production, and biological research. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 130 or consent of instructor.

**Biology 337/537. Plant Pathology.**

Three credits. Causes, symptoms, spread, and control of plant diseases. Two hours lecture, two hours laboratory per week. Prerequisite: Biology 130.

**Biology 338/538.** (Formerly part of 346/546)

**Algology.** Two credits. Taxonomy, morphology, and ecology of algae with emphasis on local species. One hour lecture, two hours laboratory per week. Prerequisite: Biology 101 or 130.

**Biology 342/542. Vascular Plant Taxonomy.**

Three or four credits. A survey of the major groups with emphasis on identification, classification, and phylogeny of flowering plants. Two hours lecture, and two or four hours laboratory per week. Prerequisite: Biology 101 or 130.

**Biology 345/545. Agrostology.**

Two credits. The structure, identification, classification, and evolution of grasses and grass-like plants. One hour lecture, two hours laboratory per week. Prerequisite: Biology 101 or 130.

**Biology 347/547.** (Formerly part of 346/546)

**Aquatic Vascular Plants.** Two credits. Taxonomy and ecology of aquatic vascular plants with emphasis on local species of freshwater angiosperms. One hour lecture, two hours laboratory per week. Prerequisite: Biology 101 or 130.

**Biology 351/551. Plant Physiology.**

Four credits. Plant growth and development,

water relations, nutrition, and metabolism. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 130; and Chemistry 106 or 116.

**Biology 355/555. Plant Ecology.** Three credits. Analysis of physical and biotic environment of plants; plant adaptations; composition, distribution and dynamics of plant communities; ecological methods; field trips. Two hours lecture, three hours laboratory per week. Prerequisite: Biology 205 or consent of the instructor; a course in plant taxonomy is recommended but not required.

**Biology 360/560. Invertebrate Zoology.** Four credits. Structure, function, classification, and life history of each of the major groups of invertebrate animals (exclusive of the insects and parasitic invertebrates). Two hours lecture, four hours laboratory per week. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 101 or 160.

**Biology 362/562. Animal Parasitology.** Four credits. Structure, classification, and life histories of animal parasites. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 101 or 160.

**Biology 364/564. Protozoology.** Four credits. Biology of free-living and parasitic protozoa; systematics, morphology, morphogenesis, physiology, genetics, and ecology. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 160. A year of chemistry is highly desirable.

**Biology 367/567. General Entomology.** Four credits. Structure, classification, and natural history of insects, with practice in collecting, mounting, and identification. Two hours lecture, four hours laboratory per week. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 101 or 160.

**Biology 370/570. Comparative Vertebrate Anatomy.** Four credits. Structure and evolutionary relationships of vertebrates. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 160.

**Biology 371/571. Embryology.** Four credits. Early embryology of vertebrates and the development of organ systems. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 160.

**Biology 372/572. Biology of the Vertebrates.** Four credits. Classification, phylogeny, special adaptations, and natural history of the vertebrates. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 101 or 160.

**Biology 373/573. Histology.** Four credits. The microanatomy and related function of vertebrate (primarily mammalian) organs, tissues, and cells. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 160; Chemistry 105 and 106, or 115 and 116. Biology 281 is strongly recommended but not required.

**Biology 374/574. Ichthyology.** Four credits. Classification and natural history of fishes, with emphasis on food, game, and forage fishes found in Wisconsin. Two hours lecture, four hours laboratory per week. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 101 or 160.

**Biology 375/575. Life Histories of Fishes.** Three credits. Reproduction, behavior, growth, habitat, food, parasites, associates, and senescence of fishes. Two hours lecture, two hours laboratory per week. Prerequisite: Biology 101 or 160 or consent of instructor.

**Biology 376/576. Herpetology.** Three credits. The biology of reptiles and am-

phibians, including research methods and identification of species found in North America. Two hours lecture, three hours laboratory per week. Prerequisite: Biology 101 or 160.

**Biology 377/577.** (Formerly 277) **Ornithology.** Three credits. The study of 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 hours lecture, three hours laboratory per week. Prerequisite: Biology 101 or 160.

**Biology 378/578. Mammalogy.** Three credits. Taxonomy, zoogeography, life history, and ecology of mammals with field work. Two hours lecture, two hours laboratory per week. Nominal pro-rata charge for field trip expenses.

**Biology 379/579. Field Zoology.** Three credits. Field trips; collection, preparation, and identification of local animals. One hour lecture, four hours laboratory per week. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 101 or 160.

**Biology 381/581. Comparative Animal Physiology.** Four credits. A comparative study of physiological adaptations of aquatic and terrestrial animals. Three hours lecture, three hours laboratory per week. Prerequisite: Biology 160; and Chemistry 106 or 116.

**Biology 383/583. Human Reproduction.** Three credits. Developmental, physiological, and anatomical components of human reproduction. Prerequisite: Biology 100 or 101 or 160 or consent of instructor.

**Biology 385/585. Animal Ecology.** Three credits. Distribution and abundance of animals; habitat relationships; properties, dynamics, and natural regulations of animal populations; intraspecific and interspecific reactions. Two hours lecture, three hours laboratory per week. Prerequisite: Biology 205 or consent of instructor; a course in statistics is recommended but not required.

**Biology 388/588. Animal Behavior.** Three credits. 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 hours lecture, three hours laboratory per week; individual term project. Nominal pro-rata charge for field trip expenses. Prerequisite: Biology 160.

**Biology 399/599. Independent Studies.** One or two credits. 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. Prerequisite: Consent of the appropriate faculty member and of the chairman of the department.

**Biology 405/605. Selected Topics in Ecology.** Three credits. Major concepts and problems in an area of ecology. Three hours lecture; or two hours lecture and three hours laboratory per week. Prerequisite: Biology 205.

**Biology 425/625. Problems in Quantitative Biology.** Two credits. Selected problems in quantitative biology and independent projects involving analysis of

data obtained in the student's field of interest. One hour lecture, three hours laboratory per week. Prerequisite: Biology 130 and 160; Mathematics 110 recommended.

**Biology 490/690. Seminar.** One credit. Studies and discussions of biological problems.

**Biology 705. Advanced Ecology.** Three credits. Studies in population and community ecology and measurements of the effect of environment on organisms. Two hours lecture, three hours laboratory per week. Prerequisite: Biology 205 or equivalent.

**Biology 710. Advanced Genetics.** Four credits. Genetic analysis of selected organisms; transmission, function, and mutation of genes; radiation and genes; quantitative inheritance and population genetics. Two hours lecture, four hours laboratory per week. Prerequisite: Biology 210 or equivalent.

**Biology 711. Physiological Mechanisms.** Four credits. Respiration, photosynthesis, nitrogen metabolism and pertinent metabolic pathways as related to current knowledge of cell structure and growth. Three hours lecture, two hours laboratory per week. Prerequisite: Biology 551 or consent of instructor.

**Biology 726. Problem Analysis.** Two credits. 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. Prerequisite: Consent of instructor.

**Biology 728. Integrated Biological Concepts.** Three credits. 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 a biological science and who are not specializing in a biological science.

**Biology 790. Graduate Seminar.** One credit. Studies and discussions of biological problems.

**Biology 796. Independent Study.** One to three credits. 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. Prerequisite: Consent of instructor.

**Biology 799. Thesis.** Two to six credits.

## **BUSINESS AND BUSINESS ADMINISTRATION** \_\_\_\_\_

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 Mathematics 108.

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.

**Business 210. Financial Accounting.**

Three credits. 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 hours per week. Prerequisite: Sophomore standing.

**Business 211. Managerial Accounting.**

Three credits. 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 hours per week. Prerequisite: Business 210.

**Business 261. Principles of Insurance.**

Three credits. For the non-specialist, an introduction to 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. Prerequisite: Economic 200 or consent of instructor.

**Business 310. Intermediate Accounting.**

Three credits. Development and application of accounting principles; procedures relating to cash, receivables, inventories, investments, and tangible fixed assets. Prerequisite: Business 211.

**Business 311. Cost Accounting.**

Three credits. 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 hours per week. Prerequisite: Business 211.

**Business 313. Income Tax Accounting.**

Three credits. 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. Prerequisite: Business 211.

**Business 315. Advanced Accounting I.**

Three credits. Accounting principles and procedures relating to intangible fixed assets, liabilities, stockholder's equity, and financial statement analysis. Prerequisite: Business 310.

**Business 316. Advanced Accounting II.** Three credits. Advanced financial accounting applied to specialized fields, including partnerships, installment and consignment sales, home office and branch accounting, mergers and consolidations. Prerequisite: Business 315.

**Business 317. Management Information Systems.** Three credits. 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. Prerequisite: Business 310; and Business 320 or equivalent course.

**Business 318. Auditing.** Three credits. General principles of auditing, including the preparation of working papers and various kinds of reports incorporating electronic data processing controls. Prerequisite: Business 310; and Business 320 or equivalent.

**Business 319. Accounting Theory.** Three credits. Analysis of contemporary issues in accounting, and examination of basic

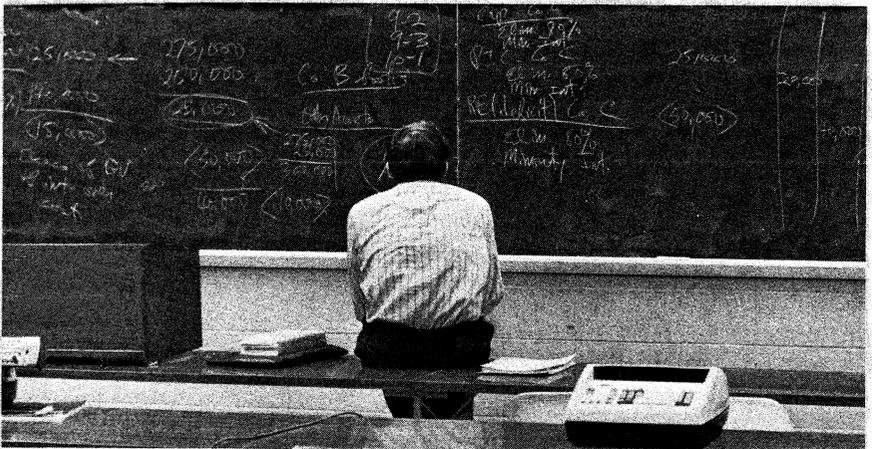
principles underlying accounting. Prerequisite: Business 316.

**Business 320. Data Processing.** Three credits. Computer systems and their application to business problems; machine indoctrination, coding, computer logic, programming, and specialized techniques allied with integrated data processing. Prerequisite: Business 210 or consent of instructor.

**Business 330. Marketing.** Three credits. Analysis of institutions, functions, and problems in marketing; planning and procedures related to the distribution of goods: costs, price determination, and trends. Prerequisite: Economics 201.

**Business 340. Business Law I.** Three credits. History of legal development, contracts, agency, sale of goods, insurance.

**Business 341. Business Law II.** Three credits. Commercial paper, real estate and personal property, partnerships, corporations, bankruptcy. Prerequisite: Business 340 or consent of instructor.



**Business 350. Investments.** Three credits. 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. Prerequisite: Economics 341.

**Business 370. Personnel Relations.** Three credits. Principles, policies, and practices applicable to personnel problems in dealing with staffing, training, wages, labor relations, communications. Prerequisite: Economics 200.

**Business 380. Principles of Management.** Three credits. Theory of management, managerial functions, departmentalization, staffing, direction, planning, and control. Prerequisite: Economics 200.

**Business 499. Special Work.** Upper-class students majoring in Business Administration may, by agreement with the department chairman, arrange for special out-of-class work, for which credit may be allowed on the basis on one credit for each week, or its equivalent, devoted exclusively to a special project.

## **BUSINESS EDUCATION**

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Ann Carlson, Robert Hille, Rita Scheuerell.

**A. The comprehensive major in Business Education** consists of:

1. Business Education 101, 102, 103, 104, 304, 305, 306, and 307.
2. Collateral courses including: Business 210, 211, 310, 320, 340, and 380; Economics 200, 201, and 330; Mathematics 108.

**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 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, 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.

**Business Education 101. Beginning Typewriting.** Two credits. The mechanism of the typewriter, its technique of operation and the development of basic skill.

**Business Education 102. Advanced Typewriting.** Two credits. Development of typewriting proficiency. Prerequisite: Business Education 101, or exemption on proficiency.

**Business Education 103. Beginning Shorthand.** Four credits. Introduction to shorthand; reading and dictation practice.

**Business Education 104. Advanced Shorthand.** Four credits. Development of shorthand abilities. Prerequisite: Business Education 103, or exemption on proficiency.

**Business Education 303. Production Typewriting.** Three credits. Advanced typewriting problems and practices; machine transcription. Prerequisite: Business 101 and 102, or equivalent.

**Business Education 304. Office Procedure and Machines.** Three credits. Principles of office organization, filing systems, business machines. Prerequisite:

Business Education 102 and 104, or equivalent.

**Business Education 305. Secretarial Techniques.** Three credits. Shorthand, typewriting, and English in the transcription of letters; duties, responsibilities, and personal qualities of the secretary; human relations in the business office. Prerequisite: Business Education 102 and 104, or equivalent.

**Business Education 306. Secretarial Practices.** Three credits. On-the-job work experience and training in industrial situations. Prerequisite: Business Education 102 and 304, or equivalent.

**Business Education 307. Business Communication.** Three credits. Methods and procedures in business letter writing; introduction to report writing.

**Business Education 499. Special Work.** Upper class students majoring in Business Education may, by agreement with the chairman of the Business Education 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.

## CHEMICAL ENGINEERING

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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

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Robert Weaver, chairman; Oliver Andrews, Dakshinamurthy Chitharanjan, Carl Farnsworth, C. Marvin Lang, Gerald Nienke, Douglas Radtke, Jack Reed, Robert Rouda, Calvin Schmid, Raymond Sommers, Robert Steinpreis, Roland Thurmaier, Roland Trytten.

**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 Chemistry 329, 338, 365, 375, 425, 445, 446, 455, 458, including Chemistry 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 Chemistry 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 of the Chemistry department.)

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 Chemistry 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.

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 of chemistry selected from courses numbered 300 or over, but excluding 499.

A minimum grade point ratio of 2.00 in Chemistry courses is required for departmental approval of the minor.

**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, Chemistry 105 and 106 may be substituted for Chemistry 115 and 116.

2. By special permission of the chairman of the department, Chemistry 330 may, in some cases, be substituted for Chemistry 335-336-338. However, the minimum of 10 credits of chemistry courses numbered 300 or over, exclusive of 499, must still be met.
3. Students may not receive credit for both Chemistry 101 (or 103) and Chemistry 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 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:
  - a. An F in Chemistry 115 can be replaced by a subsequent grade in Chemistry 103 or 105.
  - b. An F in Chemistry 105 can be replaced by a subsequent grade in Chemistry 101 or 103.
6. A student shall not receive credit toward graduation for a course after having successfully completed a more advanced course in a similar area. The following restrictions hold:

**If a student has completed**

- a. Chemistry 103
- b. Chemistry 105
- c. Chemistry 115
- d. Chemistry 225
- e. Chemistry 335
- f. Chemistry 361
- g. Chemistry 365
- h. Chemistry 445
- i. Chemistry 446

**he is NOT eligible for**

- Chemistry 101  
Chemistry 101, 103  
Chemistry 101, 103, 105, 106  
Chemistry 220  
Chemistry 330  
Chemistry 260, 365  
Chemistry 260, 361  
Chemistry 240  
Chemistry 240

**Chemistry 100. Appreciation of Chemistry.** Three credits. Introduction to selected principles of chemistry, emphasizing the relation between chemistry and modern society. Two hours lecture, two hours laboratory per week. This course will apply to part B of the Natural Science requirement for the Bachelor of Music or the Bachelor of Science degree.

**Chemistry 101. Basic Chemistry.** Five credits. Introduction to the basic chemical concepts of atomic structure, bonding, stoichiometry, and descriptive chemistry as applied to both inorganic and organic compounds. Three hours lecture, one hour discussion, three hours laboratory per week. Not open to students who qualify for Chemistry 103, except with permission of the chairman of the department. (See Notes 3, 5, and 6.)

**Chemistry 103. Basic Chemistry.** Three credits. Introduction to the basic chemical concepts of atomic structure, bonding, stoichiometry, and descriptive chemistry as applied to both inorganic and organic compounds. Two hours of lecture, three hours of laboratory per week. Prerequisite: One year of high school chemistry; one year of high school algebra or equivalent, or Mathematics 103. (See Notes 3, 5, and 6.)

**Chemistry 105. Fundamental Chemistry.** Five credits. An introductory lecture and laboratory course 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 hours lecture, one hour discussion, and three hours laboratory per week. Prerequisite: Two acceptable units of high school mathematics, or Mathematics 104. (See Notes 1, 3, 5, and 6.)

**Chemistry 106. Fundamental Chemistry.** Five credits. A continuation of Chemistry 105. Prerequisite: Chemistry 105. (See Notes 1 and 6.)

**Chemistry 114. General Chemistry Laboratory.** One credit. For students enrolled in Chemistry 115 who desire introductory laboratory work; particularly for those with little or no laboratory experience. Three hours laboratory per week. Prerequisite: Concurrent enrollment in Chemistry 115.

**Chemistry 115. General and Quantitative Chemistry.** Four credits. Laws and principles of chemistry; atomic structure, formulas, and equations; stoichiometry and chemical equilibria. Three hours lecture, one hour discussion per

week. Prerequisite: One year of high school chemistry; three years of high school mathematics or Mathematics 105. High school courses must have a grade of C or better to be accepted as prerequisites. (See Notes 1, 5, and 6.)

**Chemistry 116. General and Quantitative Chemistry.** Four credits. A continuation of Chemistry 115. Two hours lecture, one hour discussion, three hours laboratory per week. Prerequisite: Chemistry 115. (See Note 1.)

**Chemistry 220. Survey of Organic Chemistry.** Four credits. A systematic survey of the compounds of carbon for students needing only one semester of organic chemistry. Three hours lecture, three hours laboratory per week. Prerequisite: Chemistry 106 or 116. (See Note 6.)

**Chemistry 225. Organic Chemistry.** Three credits. An integrated study of the compounds of carbon. Prerequisite: Chemistry 116; or Chemistry 106 and consent of the chairman of the department. (See Notes 1 and 6.)

**Chemistry 226. Organic Chemistry.** Three credits. A continuation of Chemistry 225. Prerequisite: Chemistry 225.

**Chemistry 228. Organic Chemistry Laboratory I.** Two credits. Basic methods and techniques used in the preparation and analysis of organic compounds. Six hours laboratory per week. Prerequisite: Chemistry 226 or concurrent registration.

**Chemistry 240. Techniques of Analytical Chemistry.** Four credits. Introduction to the methods used in chemical analysis, including instrumental and separation techniques. Two hours lecture, six hours laboratory per week. Prerequisite: Chemistry 106 or 116. (See Note 6.)

**Chemistry 248. Quantitative Analysis Laboratory.** Two credits. Precision laboratory measurement in chemical analysis. Six hours laboratory per week. Prerequisite: Chemistry 116; or Chemistry 106 and consent of the chairman of the department.

**Chemistry 260. Elementary Biochemistry.** Four credits. Introduction to the structure and cellular reactions of the primary constituents of living cells; for students with limited preparation in organic chemistry. Three hours lecture, three hours laboratory per week. Prerequisite: Chemistry 106 or 116, or consent of instructor. (See Note 6.)

**Chemistry 329. Organic Chemistry Laboratory II.** Two credits. Extension of Chemistry 228 with more advanced preparative methods and instrumental techniques; introductory qualitative and quantitative analysis of organic compounds. Six hours laboratory per week. Prerequisite: Chemistry 226 and 228.

**Chemistry 330. Brief Course in Physical Chemistry.** Four credits. Introduction to physical chemistry with emphasis on the "classical" areas such as kinetics, thermodynamics, and colloidal phenomena. Three hours lecture, three hours laboratory per week. For students wanting only one semester of physical chemistry; not to be counted toward the major in chemistry. Prerequisite: Chemistry 220 or 228, and 240 or 248; Mathematics 212 or 224, or concurrent registration in either; Physics 104 or 211, or concurrent registration in either. (See Notes 2 and 6.)

**Chemistry 335/535. Physical Chemistry Lectures.** Three credits. Atomic and molecular structure, thermodynamics, kinetics. Prerequisite: Chemistry 226, and 395 or concurrent registration in 395; Mathematics 212; Physics 212; or

consent of instructor. (See Notes 2 and 6.)

**Chemistry 336/536. Physical Chemistry Lectures.** Three credits. Continuation of Chemistry 335. Prerequisite: Chemistry 335, or consent of instructor.

**Chemistry 338/538. Physical Chemistry Laboratory.** Two credits. Laboratory work illustrating the principles of physical chemistry. Six hours laboratory per week. Prerequisite: Chemistry 248, 335, and 336 or concurrent registration in 336.

**Chemistry 361. Physiological Chemistry.** Five credits. Basic principles of biochemistry as they apply to human biology with laboratory emphasis on the application of biochemical techniques to clinical chemistry. Three hours lecture, six hours laboratory per week. Not to be counted toward the major or minor in chemistry. Prerequisite: Chemistry 240 or 248; 226 and 228, or 220. (See Note 6.)

**Chemistry 365/565. Biochemistry.** Five credits. The chemistry of the components of living cells, and the nature and mechanism of cellular reactions. Three hours lecture, six hours laboratory per week. Prerequisite: Chemistry 226, 228, and 248. (See Note 6.)

**Chemistry 372. Wood Chemistry.** Three credits. The chemistry of carbohydrates, cellulose, lignin, and wood extractives, and the effect of wood structure on their rates of reaction. Two hours lecture, three hours laboratory per week. Not to be counted toward the major or minor in chemistry. Prerequisite: Chemistry 220 or 228; 240 or 248; Forestry 428.

**Chemistry 375. Polymer Science.** Three credits. The chemistry and physics of

polymers, including synthesis, characterization, and mechanical properties. Two hours lecture, three hours laboratory per week. Prerequisite: Chemistry 226, and 336 or concurrent registration.

**Chemistry 391. Seminar for Chemistry Majors in Teacher Education.** One credit. Current topics in chemical education, chemical education literature, demonstrations, typical high school laboratory programs, and textbook evaluations. Prerequisite: Chemistry 226 and 228, or consent of instructor.

**Chemistry 395. Seminar I.** One credit. 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. Prerequisite: Chemistry 226.

**Chemistry 399. Special Work.** Juniors and seniors majoring or minoring in Chemistry may, with the consent of the chairman of the Chemistry Department, 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.

**Chemistry 425. Advanced Organic Chemistry.** Three credits. Theoretical and physical organic chemistry including reaction mechanisms, quantum mechanical applications, and advanced stereochemistry. Prerequisite: Chemistry 336.

**Chemistry 445. Advanced Analytical Chemistry.** Three credits. Theory and application of complex chemical equilibria and selected methods of analytical separations. One hour lecture, six hours laboratory per week. Prerequisite: Chemistry 248; and 336 or concurrent registration. (See Note 6.)

**Chemistry 446. Instrumental Analysis.** Four credits. Instrumental methods of analysis including optical, electrical, and radiochemical methods. Two hours lecture, six hours laboratory per week. Prerequisite: Chemistry 248; and 336 or concurrent registration. (See Note 6.)

**Chemistry 455. Advanced Inorganic Chemistry.** Three credits. Nuclear chemistry, atomic and molecular structure, coordination compounds, inorganic reaction mechanisms, nonaqueous solvents, descriptive inorganic chemistry. Prerequisite: Chemistry 336 or concurrent registration.

**Chemistry 458. Inorganic Chemistry Laboratory.** One or two credits. Advanced preparative techniques; characterization of inorganic compounds, inorganic reaction kinetics; application of radio-isotopes to chemical problems. Three or six hours laboratory per week. Prerequisite: Chemistry 248; and 455 or concurrent registration. If the course has been taken for one credit, it may be repeated for one credit.

**Chemistry 492. Seminar for Chemistry Majors in Teacher Education.** One credit. Continuation of Chemistry 391. Prerequisite: Chemistry 391 or consent of instructor.

**Chemistry 496. Seminar II.** One credit. Student participation in studies and discussions of current developments in chemistry. Prerequisite: Chemistry 336, 395; or consent of instructor.

The former **Chemistry 499** has been replaced by **Chemistry 399**.



## **CHILD DEVELOPMENT**

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See **Early Childhood Education**.

## **CHINESE**

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Courses in Chinese are administered by the department of Foreign Languages and Comparative Literature.

**Chinese 101. First Year Chinese.** Four credits. Elementary modern Mandarin, for students with no previous training in the language.

**Chinese 102. First Year Chinese.** Four credits. Continuation of Chinese 101. Prerequisite: Chinese 101 or equivalent.

**Chinese 211. Second Year Chinese.** Four credits. Intermediate modern Man-

darin; intensive grammar review, practice in reading, speaking, and writing Chinese. Prerequisite: Chinese 102, or equivalent.

**Chinese 212. Second Year Chinese.** Four credits. Continuation of Chinese 211. Prerequisite: Chinese 211, or equivalent.

## **COACHING**

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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

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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.

**Colloquium 301, 302, 303, 304. Colloquium on Important Books.** Each two credits. Group reading and discussion of some of the writings of eight different authors from the Greek era to the present. Prerequisite: Consent of the instructor.

## COMMUNICATION

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Myrvin Christopherson, chairman; Calvin Allen, Roger Bullis, Joseph Chilberg, Albert Croft, William Davidson, Fred Dowling, Lee Dreyfus, John Ellery, Robert Fischbach, F. Gerald Fritz, Toby Goldberg, A. Irene Gray, Daniel Houlihan, Pauline Isaacson, Fred Kauffeld, William Kelley, Elizabeth Kyes, James Moe, William Phillips, Richard Rogers, William Witt.

- 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. An Interdepartmental major in Communication and Drama for teacher certification** consists of 39 credits, 14 of which must be in courses numbered 300 or above. The following are required:
1. Communication 101, or equivalent; Communication 317 or 318; Drama Education 382; Communication or Drama electives (three or more credits) selected to satisfy the Humanities requirement.

2. Fifteen credits of Communication courses as approved by the chairman of the department of Communication. Communication 105, 107, 219, and six credits of electives are recommended.

3. Drama 130, 171, 240, 375; three credits of Drama electives.

4. Students enrolled in the Interdepartmental major in Communication and Drama must have the approval of advisers in each department for courses in the respective departments. (This major satisfies certification requirements in the academic area designated **Speech** by the Wisconsin Department of Public Instruction.)

**D. 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.

**E. A minor in Communication for teacher certification** consists of 24 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.)

**Communication 101. Fundamentals of Oral Communication.** Two or three credits. Introduction to and application of those principles which lead to an understanding of and facility with practical discourse.

**Communication 105. Man and Communication.** Three credits. A historical survey of communication theories and practices with special emphasis on developments in the twentieth century.

**Communication 106. Organizational Leadership.** Two credits. 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 Communication 306.

**Communication 107. Nature of Practical Argument.** Three credits. An intro-

duction to the logical structure of ordinary argumentative acts, its application in communicative practice and theory.

**Communication 121. Evolution of American Media.** Three credits. A historical survey of the growth, regulation, and ramifications of communication media in this country.

**Communication 126. Communication Activities: Debate-Forensics.** One credit. Directed experience in debate and forensics, by special arrangement with the instructor. (May be repeated.)

**Communication 127. Communication Activities: Media.** One credit. Directed experience in film, radio, TV, newspaper, and yearbook production, by special arrangement with the instructor. (May be repeated.)

**Communication 210. Introduction to Mass Communication.** Three credits. Investigation of and experience with com-

munication processes within the context of mass media and mass audience. Prerequisite: Sophomore standing.

**Communication 211. Introduction to Interpersonal Communication.** Three credits. Investigation of and experience with communication conducted within small groups. Prerequisite: Sophomore standing.

**Communication 217. Introduction to Organizational Communication.** Three credits. Investigation of and experience with communication within institutionalized channels. Prerequisite: Sophomore standing.

**Communication 219. Art of Criticism.** Three credits. An introduction to the nature and practice of criticism as applied to communicative acts, with special emphasis on the description and evaluation of messages. Prerequisite: Sophomore standing.

**Communication 301/501. News and Public Affairs.** Three credits. The informational forms of mass communication and factors which constrain these forms and their functions.

**Communication 302/502. Popular Arts.** Three credits. The entertainment and promotional forms of mass communication and the factors constraining these forms and their functions.

**Communication 306. Organizational Leadership.** Two credits. Same as Communication 106. Primarily intended for campus leaders in their junior and senior years. Approximate requirements will be implemented to distinguish between the 100 and 300 levels. Students may not receive credit for both 106 and 306.

**Communication 311/511. Communication as Dialogue.** Three credits. Analysis of communication based directly and primarily on genuine regard for the other, as is found in close personal relationships. Prerequisite: Communication 211.

**Communication 312/512. Communication in Social Interaction.** Three credits. Analysis of conventionally shaped personal communication. Prerequisite: Communication 211.

**Communication 317/517. Directing High School Forensics and Debate.** Two credits. Prerequisite: Communication 126 or 326.

**Communication 318/518. Directing High School Mass Communication Activities.** Two credits. Problems and methods of supervising high school radio, TV, film, newspaper, and yearbook activities. Prerequisite: Communication 127 or 327.

**Communication 326. Communication Activities: Debate-Forensics.** One credit. Directed experience in debate and forensics, by special arrangement with the instructor. May be repeated.

**Communication 327. Communication Activities: Media.** One credit. Directed experience in film, radio, TV, newspaper, and yearbook production, by special arrangement with the instructor. May be repeated.

**Communication 330/530. Promotional Communication Laboratory.** Three credits. 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 laboratory is offered. May be repeated. Prerequisite: Consent of instructor.

**Communication 331/531. Print Laboratory.** Three credits. Training in the forms of print communication with variable focus in writing, layout, and design. Focus will be specialized each time the laboratory is scheduled; may be repeated. Prerequisite: Consent of the instructor.

**Communication 332/532. Television Laboratory.** Three credits. Training in the forms of television communication with variable focus on writing, editing, producing, directing. Focus will be specified each time the laboratory is scheduled; may be repeated. Prerequisite: Consent of the instructor.

**Communication 333/533. Radio Laboratory.** Three credits. Training in the forms of radio communication with variable focus on writing, reporting, producing, directing. Focus will be specified each time the laboratory is scheduled; may be repeated. Prerequisite: Consent of instructor.

**Communication 334/534. Film Laboratory.** Three credits. Training in the forms of film communication with variable focus on writing, editing, producing, directing. Focus will be specified each time the laboratory is scheduled; may be repeated. Prerequisite: Consent of the instructor.

**Communication 335. Speech-Making Laboratory.** Three credits. Training in speech-making with emphasis on preparation, delivery, and evaluation. May be repeated. Prerequisite: Communication 101, or consent of instructor.

**Communication 336/536. Small-Group Laboratory.** Three credits. Training in small group communication processes with variable focus on such topics as leadership, problem solving, interviewing, and conflict resolution. Focus will

be specified each time the laboratory is offered. May be repeated. Prerequisite: Consent of instructor.

**Communication 340/540. Organizational Communication Systems.** Three credits. Communication in established hierarchies; analysis of institutionalized codes, networks, and media; and the communication they commonly produce in business, industrial, and governmental organizations. Prerequisite: Communication 217.

**Communication 341/541. Organizational Communication and Social Change.** Three credits. Organizational communication involved with the promotion of social change; communication in such contexts as political movements, community action programs, dissent, and cross-cultural exchange. Prerequisite: Communication 217.

**Communication 350/550. Media Law.** Three credits. Regulations, laws, conventions governing the mass communication media, with attention to principles common across media and unique to film, broadcast, or print industries.

**Communication 352/552. Media History.** Three credits. In-depth investigation of the development of particular mass communication media. Variable focus on print, broadcasting, or film; emphasis will be specified each time the course is offered. May be repeated.

**Communication 365/565. Writing for the Media.** Three credits. Intensive preparation in writing and specific media contexts: news features, scientific reports, documentaries, and others. Prerequisite: Consent of the instructor.

**Communication 390/590. Seminar.** Three credits. Study and discussion of a new development, special problem, or area

of interest in the field of communication. A subtitle will indicate the emphasis each time the course is offered. Prerequisite: Consent of instructor.

**Communication 392/592. Personal Communication Seminar.** Three credits. Possible topics: therapeutic communication, para-language, human relations, and crisis communication. Topics will be specified each time the seminar is offered. May be repeated. Prerequisite: Communication 211, and Communication 311 or 312; or consent of instructor.

**Communication 393/593. Organizational Communication Seminar.** Three credits. Possible topics: lobbying practices, evaluation and training, conflict resolution, inter-organizational relations, and organizational campaigns. Topic will be specified each time the seminar is offered. May be repeated. Prerequisite: Communication 217, and Communication 340 or 341, or consent of instructor.

**Communication 395/595. Public Communication Seminar.** Three credits. Possible topics: international communication, mass media, mass culture, public opinion, and public address. Topic will be specified each time the seminar is offered. May be repeated. Prerequisite: Communication 210, and Communication 301 or 302; or consent of instructor.

**Communication 400/600. Communication and Natural Resources.** Three credits. Research report writing for professional journals, technical writing for the general audience, and outdoor writing on such activities as hunting, fishing, and camping, with attention to media techniques and case studies. Prerequisite: Consent of the instructor.

**Communication 490. Senior Seminar.** Three credits. Each student is required to select and research a topic in his

area of interest, to submit his conclusions in writing and defend them orally before an invited panel. Prerequisite: Completion of the required core courses in the major, and recommendation of the adviser.

**Communication 499. Special Work.** Upper class students majoring or minoring in Communication may, by agreement with the chairman of the Communication Department, arrange for special out-of-class work, for which credit may be allowed on the basis of one for each week, or its equivalent, devoted exclusively to a special project.

**Communication 700. Fundamentals of Research.** Three credits. Analysis of a broad spectrum of research; examination of subject choice, methods for summarizing studies, kinds of data, quality of sources, research, and methods of discerning cultural and methodological bias within that research spectrum; problems in writing: language and form.

**Communication 701. Foundations of Communication.** Three credits. Inquiry into efforts to integrate theories concerning the various types, media, and situations of communication into a consistent comprehensive framework.

**Communication 760. Perspectives in Communication Education.** Three credits. Current trends in communication education; alternative approaches to an integrative view of communication; development of individual courses and a coherent curriculum; relationship to general education objectives.

**Communication 770. Perspectives in Communication Management.** Three credits. Identification, planning, implementation, and adjustment of the communication practices and strategies necessary to satisfy organizational goals and meet the needs of related publics.

**Communication 780. Seminar in Professional Practices.** Two to six credits. Career development through participation within professional contexts; field study to analyze, evaluate, and report on actual communication programs in appropriate career areas, background readings, and research applications.

**Communication 785. Administrative Communication: Educational Systems.** Three credits. Analysis of the communication demands on school administrators in addressing multiple publics (students, teachers, administrators, non-professional staff, and non-school community); emphasis on the formulation of appro-

priate communication policies and their integration into an effective total system.

**Communication 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Regularly scheduled conferences with a staff supervisor.

**Communication 799. Thesis.**

**NOTE:** Graduate courses in **DRAMA** are also available as electives in the program for the Master of Arts in Teaching and the Master of Science degree in **COMMUNICATION.**



## COMMUNICATIVE DISORDERS

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Gerald Johnson, Assistant Dean and Head of the School of Communicative Disorders; Donald Aylesworth, Karen Carlson, Gerald Chappell, Jack Curtis, Gary Glascoe, Thomas Jensen, Perry Leslie, William Meyer, Dennis Nash, Gary Nix, Judith Pratt, Mary Sommers, Linda Stombaugh, LaRene Tufts, Frederic Tyszka.

A student majoring in **Communicative Disorders** and/or **Education of the Deaf** must be advised by a faculty member in the School of Communicative Disorders. The student has three options: (1) education certification by the School of Education in Communicative Disorders, (2) a major in the College of Professional Studies in

Communicative Disorders, or (3) education certification in Education of the Deaf. No minor is available.

**A. The program in Communicative Disorders for teacher certification** consists of courses from the undergraduate program in Communicative Disorders and collateral courses from Psychology and Education, and the Master of Science Degree—Communicative Disorders. The following are required at the undergraduate level:

Communicative Disorders 108, 260, 264, 266, 295, 345, 351, 352, 365, 366, 395, 407, and 480.

Psychology 200, 260, and 370 or 450.

Education 329, 351, 381, and 398.

**B. A major in Communicative Disorders** at the undergraduate level (College of Professional Studies) consists of the following:

Communicative Disorders 108, 260, 264, 266, 295, 345, 351, 352, 365, 366, 395, 407, and 480.

This major does not meet the State of Wisconsin teacher certification requirements in Wisconsin public schools.

A student who elects option A or B, above, will **NOT** be recommended for employment until after he receives a Master's degree in Communicative Disorders.

**C. A major in Education of the Deaf** is described under the heading "Education of the Deaf" later in this section of the catalog. (There currently is a moratorium on student enrollment in this major.)

Students will be required to maintain an academic record that is consistent with school standards, and they must achieve proficiency as speech and hearing clinicians. Students who do not meet these standards will not be considered as majors by the school.

A description of the Pre-Professional and Professional programs in Communicative Disorders is included in the earlier section of this catalog entitled "College of Professional Studies."

**D. The Master of Science Degree—Communicative Disorders** is described in the section of the catalog on THE GRADUATE COLLEGE.

## **Remedial Speech and Hearing Service**

Clinical therapy is available for students who have a speech, language, and/or hearing problem. Students in need of this remedial service may contact or be referred to the Center for Communicative Disorders for consultation, diagnosis, and/or therapy.

**Courses in Communicative Disorders** were formerly designated as courses in Speech Pathology and Audiology.

**Communicative Disorders 108.** (Formerly 208) **Disorders of Communication.** Three credits. Definitions, symptomatology, and classification; principles and procedures underlying the management of communicative disorders.

**Communicative Disorders 259. Foundations of Education of the Hearing Impaired.** Three credits. History and philosophy of the education of the hearing impaired; psychological characteristics and social adaptation of deaf and hard-of-hearing populations. Prerequisite: Sophomore standing.

**Communicative Disorders 260. Phonetics and Phonemics.** Three credits. Descriptive and scientific analysis of speech production and perception; study and practice of the International Phonetic Alphabet. Prerequisite: Communicative Disorders 108, or consent of instructor.

**Communicative Disorders 264. Anatomy and Physiology of Language, Speech, and Auditory Systems.** Three credits. Anatomical and physiological study of central and peripheral systems serving speech production, speech perception, and language behavior. Two hours lecture, two hours laboratory per week. Prerequisite: Communicative Disorders 108, or consent of instructor.

**Communicative Disorders 266. Normal Development of Human Communicative Behavior.** Three credits. Normal development of speech perception and production, including linguistic parameters and psycholinguistics. Prerequisite: Communicative Disorders 108 for majors in Communicative Disorders; others by consent of instructor.

**Communicative Disorders 295. Introduction to Practicum.** One credit. Introduction to the clinical process including

observation, interaction analysis, and clinical writing. One hour lecture, one hour laboratory per week. May be repeated for one credit. Prerequisite: Communicative Disorders 208, or consent of instructor.

**Communicative Disorders 345/545. Disorders of Articulation.** Three credits. Study of the correlates or causes, methods of assessment, and principles of therapy for disorders of articulation. Prerequisite: Communicative Disorders 260, 264, 266, and 295.

**Communicative Disorders 350/550. Summer Camp for the Deaf and Hearing Impaired.** Four to six credits. Topical information and practicum experience; topics for discussion will include counseling, guidance, play techniques, natural language development, and adaptive speech and hearing procedures. Prerequisite: Physical Education 241, or consent of instructor.

**Communicative Disorders 351/551. Basic Procedures of Audiology and Audiometry.** Three credits. Nature of hearing, measurement and evaluation of auditory acuity; supervised testing. Prerequisite: Communicative Disorders 260, 264, 266, and 295.

**Communicative Disorders 352/552. Rehabilitation of Auditory Disorders.** Three credits. History, methods, and materials pertaining to speech reading and auditory training. Prerequisite: Communicative Disorders 351.

**Communicative Disorders 355/555. Language for the Deaf and Hearing Impaired.** Three credits. Principles and methods of developing language skills; vocabulary development, English composition, development of receptive and expressive oral and written language;

emphasis on developing facility with the Fitzgerald Key.

**Communicative Disorders 356/556. Language for the Deaf and Hearing Impaired.** Three credits. A continuation of Communicative Disorders 355: modern linguistics and psycholinguistics; implications of these areas for education of hearing impaired infants, children, and young adults; pedagogical emphasis on transformational grammar, Peck's Patterned Language, and Natural Language as instructional methods.

**Communicative Disorders 357/557. Speech for the Deaf and Hearing Impaired.** Three credits. Multisensory approach for the teaching of speech; articulation, voice, sentence rhythm; ear training utilizing residual hearing, kinesis, visual skills, and speech intelligibility.

**Communicative Disorders 358/558. Methods of Teaching the Deaf and Hearing Impaired.** Three credits. 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.

**Communicative Disorders 365/565. Introduction to Language Learning Disabilities.** Three credits. Definition, symptomatology, and classification of disordered spoken and written language, including methods of assessment. Prerequisite: Communicative Disorders 266.

**Communicative Disorders 366/566. Programs and Methods for Language Learning Disabilities.** Three credits. Basic procedures for the treatment of disordered language development, emphasis on comparative methodology and indi-

vidual and group management practices. Prerequisite: Communicative Disorders 266.

**Communicative Disorders 369/569. Curricula for the Deaf and Hearing Impaired.** Three credits. 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.

**Communicative Disorders 380/580. Communicative Disorders in School Children.** Three credits. Examination of the various communicative disabilities and pertinent literature. Designed for teachers and school administrators. Not open to majors in Communicative Disorders or those with credit in Communicative Disorders 108 and 208.

**Communicative Disorders 395. Advanced Practicum.** One credit. Advanced clinical experience in assessment and treatment with speech-, language-, or hearing-impaired persons in the Center for Communicative Disorders. At least 45 hours of clinical practice will be required for each credit; must be repeated to total three credits. Prerequisite: Consent of the Center's Director.

**Communicative Disorders 407/607. Principles of Speech and Hearing Science.** Three credits. Principles of acoustics, physics, and electronics applied to speech perception and production, including techniques and equipment for the assessment of communication from laboratory models. Prerequisite: Consent of the instructor.

**Communicative Disorders 480/680. Disorders of Voice and Fluency.** Three credits. Methods of assessment and treatment of disorders of voice and fluency. Prerequisite: Consent of instructor.

**Communicative Disorders 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.

**Communicative Disorders 710. Seminar in Communicative Disorders.** Three credits. Specific inquiry into the clinical processes; heritage and literature of the profession. Prerequisite: Consent of instructor.

**Communicative Disorders 711. Speech and Hearing Science.** Two credits. 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 hours laboratory per week will be expected. Prerequisite: Communicative Disorders 407/607, or consent of instructor.

**Communicative Disorders 712. Advanced Speech and Hearing Science.** Three credits. 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 hours laboratory per week will be expected. Prerequisite: Communicative Disorders 711, or consent of instructor.

**Communicative Disorders 725. Advanced Study in Stuttering.** Two credits. Research, theories, and therapies regarding stuttering behavior in children and adults. Prerequisite: Consent of instructor.

**Communicative Disorders 729. The Neurophysical Bases of Normal and Pathological Speech and Language.** Two credits. Normal and pathological speech and language in relation to the function of the central nervous system and related neuromuscular systems. Prerequisite: Consent of instructor.

**Communicative Disorders 730. Treatment of Neuromuscular Disorders of Speech.** Two credits. 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. Prerequisite: Consent of instructor.

**Communicative Disorders 732. Language Theories.** Three credits. The nature of language learning and acquisition from several theoretical viewpoints related to dynamic psycholinguistic aspects of language behavior. Prerequisite: Consent of instructor.

**Communicative Disorders 733. Language Therapy I.** Three credits. Respective therapeutic goals, materials, and methods for fostering the development of communicative skills of children with developmental aphasia, psychosis, and related disorders of language. Prerequisite: Consent of instructor.

**Communicative Disorders 734. Language Therapy II.** Three credits. 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. Prerequisite: Consent of instructor.

**Communicative Disorders 735. Advanced Studies in Voice Pathology.** Two credits. Pathologies and dysfunctions producing organic and functional voice disorders; consideration of both medical and voice rehabilitation. Prerequisite: Consent of instructor.

**Communicative Disorders 736. Advanced Study of Language Learning Disabilities.** Three credits. 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. Prerequisite: Consent of instructor.

**Communicative Disorders 737. Cleft Palate.** Two credits. Cleft palate and related orofacial conditions; speech characteristics; principles, methods, and procedures of evaluation and management. Prerequisite: Consent of instructor.

**Communicative Disorders 740. Aphasia and Related Language Disorders.** Three credits. The nature of adult language disorders; principles of assessment and management. Prerequisite: Consent of instructor.

**Communicative Disorders 745. Advanced Methods in Articulatory Pathology.** Three credits. An analysis of the diagnosis and treatment of articulatory pathology; emphasis on measurements in articulatory assessment and therapeutic planning. Prerequisite: Consent of instructor.

**Communicative Disorders 749. Total Communication.** Theory, rationale, and the research pertaining to total communication; performance skills in the total communication approach. Prerequisite: Consent of instructor.

**Communicative Disorders 750. Aural Rehabilitation.** Three credits. Theories, principles, and research related to speech reading and auditory training for the hearing impaired. Prerequisite: Consent of instructor.

**Communicative Disorders 751. Clinical Audiology I.** Three credits. Differential diagnosis of auditory disorders including pure tone air conduction, bone conduction, masking, speech audiometry, and pediatric audiometry. Prerequisite: Consent of instructor.

**Communicative Disorders 752. Theories of Hearing.** Four credits. Anatomical, psychoacoustic, and bioacoustic aspects of hearing; the nature of auditory perceptual behavior and the effects of auditory stimulation; student investigations are required. Prerequisite: Consent of instructor.

**Communicative Disorders 753. Clinical Audiology II.** Three credits. Continuation of Communicative Disorders 751, with emphasis on site of lesion diagnostic tests including PGSR, EEG, Impedance Audiometry, functional tests and related assessment techniques. Prerequisite: Consent of instructor.

**Communicative Disorders 754. Hearing Aids I.** Two credits. Amplification from the standpoint of electroacoustic systems. Prerequisite: Consent of instructor.

**Communicative Disorders 755. Pathologies of the Auditory Mechanism.** Two credits. Pathologies of the ear and their effect on auditory function; the reflection of pathologies in audiometric data; medical therapeutics. Prerequisite: Consent of instructor.

**Communicative Disorders 765. Hearing Aids II.** Two credits. Hearing aid selection procedures, modification techniques, maintenance, and distribution. Prerequisite: Consent of instructor.

**Communicative Disorders 766. Problems of the Deaf and Hearing Impaired.** Two credits. Contemporary problems and an analysis of the research pertaining to the deaf and hearing impaired. Prerequisite: Consent of instructor.

**Communicative Disorders 767. Differential Diagnosis of the Communicatively Impaired.** Three credits. Methods and techniques in differentiation of deafness, mental retardation, emotional disorders, and perceptual difficulties. Prerequisite: Consent of instructor.

**Communicative Disorders 768. Counseling and Guidance of the Deaf and Hearing Impaired.** Two credits. The management of the deaf and hearing impaired in relationship to their educational, vocational, social, and emotional adjustments within the home, school and community. Prerequisite: Consent of instructor.

**Communicative Disorders 769. Operant Analysis and Techniques in Teaching the Deaf.** Three credits. 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. Prerequisite: Consent of instructor.

**Communicative Disorders 770. Advanced Methods of the Oral-Aural Approach in Teaching the Deaf.** Three credits. 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 develop-

ment and correction of oral skills of the deaf and hearing impaired. Prerequisite: Consent of instructor.

**Communicative Disorders 771. Methods of Teaching the Multi-handicapped Deaf.** Three credits. Secondary handicapping conditions of mental retardation and blindness in relation to the deaf; development of specific competencies in teaching multi-handicapped deaf children. Prerequisite: Consent of instructor.

**Communicative Disorders 772. Administration of Programs for the Deaf.** Two credits. Problems associated with administering both day and residential programs for the deaf. Prerequisite: Consent of instructor.

**Communicative Disorders 795. Graduate Practicum.** One credit. 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. Prerequisite: Consent of instructor.



**Communicative Disorders 796. Independent Study.** One to three credits. Planned study to enrich the student's preparation in Communicative Disorders. Prerequisite: Consent of instructor.

**Communicative Disorders 797. Workshop.** Three to six credits. 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 Au-

diometry, Geriatric Audiometry, Acoustic Problems in Community, Industry, and the Military, Hearing Aids); (Mental Retardation, Pre-School Language); (Stuttering in Children, Stuttering in Adults, Cleft Palate, Laryngectomy, Research in Communicative Disorders, Medical Lectures in Communicative Disorders, Public School Speech and Hearing Services). Prerequisite: Consent of instructor.

**Communicative Disorders 799. Thesis.** Two to six credits.

## COMPARATIVE LITERATURE

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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 from English 310, 312, 319, 361, 362, 372, 380.

**Comparative Literature 101. Masterpieces of the Western World.** Three credits. A comparative study of themes and literary traditions in the literature of the Western World from Homer to Montaigne.

**Comparative Literature 102. Masterpieces of the Western World.** Three credits. A comparative study of themes and literary traditions in the literature of the Western World from Milton to Mann.

**Comparative Literature 231. Survey of Dramatic Literature.** Three credits. Tragedy: A comparative study of the styles, theories, and traditions of tragedy in the literature of the world; emphasis on the classic heritage. Prerequisite: Consent of instructor.

**Comparative Literature 232. Survey of Dramatic Literature.** Three credits. Comedy: A comparative study of the styles, theories, and traditions of comedy in

the literature of the world; emphasis on the classic heritage. Prerequisite: Consent of instructor.

**Comparative Literature 240. Literature of the Bible.** Three credits. A comparative analysis of the Bible as literature. Prerequisite: Sophomore standing.

**Comparative Literature 250. Asian Literature.** Three credits. A comparative analysis of selected readings in narrative, dramatic, philosophic, and lyric literature of China, India, and Japan. Prerequisite: Sophomore standing.

**Comparative Literature 251. The Fiction of Asia.** Three credits. A comparative study of selected themes and forms in Oriental fiction. Prerequisite: Sophomore standing.

**Comparative Literature 252. The Drama of Asia.** Three credits. A comparative study of selected works of Oriental drama. Prerequisite: Sophomore standing.

**Comparative Literature 253. The Poetry of Asia.** Three credits. A comparative analysis of selected poetry of India, China, and Japan. Prerequisite: Sophomore standing.

**Comparative Literature 300. Classical Poetry.** Three credits. A comparative analysis of selected reading from the poetry of Homer, Sappho, Pindar, Anacreon, Theocritus, Lucretius, Catullus, Vergil, and Horace.

**Comparative Literature 301. Classical Prose.** Three credits. A comparative analysis of selected reading from the prose of Plato, Aristotle, Livy, Cicero, Plutarch, Tacitus, Petronius, Suetonius, and Marcus Aurelius.

**Comparative Literature 302. Medieval Literature in Translation.** Three credits. A comparative analysis of selected reading 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.

**Comparative Literature 303. Literature of the Renaissance.** Three credits. A comparative analysis of selections from the works of such writers as Petrarch, Erasmus, Castiglione, Machiavelli, Rabelais, Cellini, Montaigne, and Cervantes.

**Comparative Literature 317. The Novel before 1850.** 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.

**Comparative Literature 324. Literature and the Arts.** Three credits. 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 sub-title each time it is offered.

**Comparative Literature 350. Special Problems.** Two or three credits. 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 sub-title indicating the focus will be added each time the course is offered; any needed foreign language preparation will be indicated. Prerequisite: language preparation by the student for the problem to be handled.

**Comparative Literature 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. Prerequisite: Consent of instructor, and approval of the Chairman of the department of Foreign Languages and Comparative Literature.

## COMPUTER SCIENCE

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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.

**Computer Science 106. Introduction to Computers.** Two credits. Computers, their history and applications; representation of information; flow charting and elementary FORTRAN programming; use of software. Prerequisite: Eligibility for Mathematics 107 or concurrent registration in Mathematics 105.

**Computer Science 107. Computer Programming.** Three credits. Programming techniques utilizing FORTRAN IV; algorithms; program design for larger problems; debugging and testing; documentation; program optimization. Prerequisite: Computer Science 106 or consent of the chairman of the Mathematics department.

**Computer Science 210. Information Processing with Large Data Base.** Three credits. 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. Prerequisite: Computer Science 107.

**Computer Science 230. Computer Organization and Assembler Language.** Three credits. Structure and language of computers; representation of instructions and data; instruction interpretation; direct and indirect addressing; program linkage; application of assembler language programming. Prerequisite: Computer Science 107 or consent of the chairman of the Mathematics department.

**Computer Science 302. Data Structures.** Three credits. Basic structures used for representing information in the computer, and techniques for operating on them: arrays, stacks, queues and deques, general linear lists, trees, graphs, symbol tables, and multi-linked structures. Prerequisite: Computer Science 210 and 230.

**Computer Science 315. Introduction to System Design.** Three credits. 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. Prerequisite: Computer Science 302.

**Computer Science 321. Models and Simulation.** Three credits. Types and construction of models; simulation of models; random number generation; design of simulation experiments; feasibility of implementation and model validation; selected applications. Prerequisite: Computer Science 302.

**Computer Science 390. Special Topics In Computer Science.** Three credits.

Topic will be announced in the Time Table. Prerequisite: Consent of the chairman of the Mathematics department.

**Computer Science 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.

## COOPERATIVE EDUCATION

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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 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.

**Cooperative Education 001. First Work Period.** No credit. Prerequisite: Approval by the Coordinator's office and by the Chairman of the student's major department; acceptance by the employing organization.

**Cooperative Education 002. Second Work Period.** No credit. Prerequisite: Satisfactory completion of Cooperative Education 001; approval by the Coordinator's office and by the Chairman of the student's major department; acceptance by the employing organization.

**Cooperative Education 003. Third Work Period.** No credit. Prerequisite: Satisfactory completion of Cooperative Education 002; approval by the Coordinator's

office and by the Chairman of the student's major department; acceptance by the employing organization.

**Cooperative Education 004. Fourth Work Period.** No credit. Prerequisite: Satisfactory completion of Cooperative Education 003; approval by the Coordinator's office and by the Chairman of the student's major department; acceptance by the employing organization.

**Cooperative Education 005. Fifth Work Period.** No credit. Prerequisite: Satisfactory completion of Cooperative Education 004; approval by the Coordinator's office and by the Chairman of the student's major department; acceptance by the employing organization.



## DANCE

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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** also 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 listings under **Dance Education** in the next section of the catalog.

**Dance 101. History and Appreciation of Dance.** Three credits. Cultural history of dance, theory and philosophy of dance, and laboratory experience in dance technique. Two hours lecture, one and one-half hours laboratory per week.

**Dance 103. Beginning Modern Dance I.** Two credits. Modern dance technique, composition, and improvisation. Three hours per week. One credit of Dance 103 may be used toward the Physical Education requirement.

**Dance 104. Beginning Modern Dance II.** Two credits. Continuation of Dance 103. Three hours per week. One credit of Dance 104 may be used toward the Physical Education requirement. Prerequisite: Dance 103, or consent of instructor.

**Dance 105. Beginning Ballet I.** Two credits. Instruction in basic barre exercises and floor work. Three hours per week. One credit of Dance 105 may be used toward the Physical Education requirement.

**Dance 106. Beginning Ballet II.** Two credits. Continuation of Dance 105, with the addition of floor progressions and combinations. Three hours per week. One credit of Dance 106 may be used toward the Physical Education requirement. Prerequisite: Dance 105, or consent of instructor.

**Dance 108. Folk and Square Dance.** One credit. Instruction in beginning international folk dance. Two hours per week. May be used toward the Physical Education requirement.

**Dance 110. Social Dance.** One credit. Instruction in beginning ballroom dance. Two hours per week. May be used to-

ward the Physical Education requirement.

**Dance 205. Intermediate Ballet I.** Two credits. 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 Dance 205 may be used toward the Physical Education requirement. Prerequisite: Dance 106, or consent of instructor.

**Dance 206. Intermediate Ballet II.** Two credits. Continuation of Dance 205. May be repeated once, with consent of instructor, for a total of four credits. One credit of Dance 206 may be used toward the Physical Education requirement. Prerequisite: Dance 205, or consent of instructor.

**Dance 211. Specialty Dance and Stage Movement.** Two credits. 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 Dance 211 may be used toward the Physical Education requirement.

**Dance 216. Fundamentals of Rhythm and Dance.** One credit. Instruction in rhythmic structure of music and movement basic to dance forms. Two hours per week. Prerequisite: Sophomore standing.

**Dance 218. Intermediate Modern Dance I.** Two credits. Instruction in 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 Dance 218 may be used toward the Physical Education requirement. Prerequisite: Dance 104, or consent of instructor.

**Dance 219. Intermediate Modern Dance II.** Two credits. Continuation of Dance 218. Four hours per week. May be repeated once, with consent of instructor, for a total of four credits. One credit of Dance 219 may be used toward the Physical Education requirement. Prerequisite: Dance 218, or consent of instructor.

**Dance 227. Dance Workshop.** One to six credits. Dance training in workshops and institutes. The workshop area of concentration will appear as a subtitle each time the course is offered. Prerequisite: Sophomore standing; open to freshmen by consent of instructor and Chairman of the Department.

**Dance 301. Pantomime.** Three credits. Instruction in pantomime technique, composition, and improvisation. Four hours per week. Prerequisite: Dance 206 or 219, or Drama 272, or consent of instructor.

**Dance 302. Dance Composition I.** Three credits. Experience in creative manipulation of the basic elements of movement into brief choreographed forms. Four hours per week. Prerequisite: Consent of instructor; sophomores may enroll with special permission of instructor and Chairman of the Department.

**Dance 303. Advanced Modern Dance I.** Two credits. Instruction in 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 Dance 303 may be used toward the Physical Education requirement. Prerequisite: Consent of instructor.

**Dance 304. Advanced Modern Dance II.** Two credits. Continuation of Dance 303.

Four hours per week. May be repeated twice, with consent of instructor, for a total of six credits. One credit of Dance 304 may be used toward the Physical Education requirement. Prerequisite: Consent of instructor.

**Dance 305. Advanced Ballet I.** Two credits. Instruction in advanced ballet techniques and combinations. May be repeated twice, with consent of instructor, for a total of six credits. One credit of Dance 305 may be used toward the Physical Education requirement. Prerequisite: Consent of instructor.

**Dance 306. Advanced Ballet II.** Two credits. Continuation of Dance 305. May be repeated twice, with consent of instructor, for a total of six credits. One credit of Dance 306 may be used toward the Physical Education requirement. Prerequisite: Consent of instructor.

**Dance 309. Dance Theatre.** Two credits. 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 Dance 309 may be used toward the Physical Education requirement. Prerequisite: Audition with instructor; open to sophomores by consent of instructor and chairman of the department of Theatre Arts.

**Dance 399. Special Work.** One to six credits. 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.

**Dance 410. Dance Production.** Three credits. Instruction and practical experience in all aspects of the theatrical production of dance. Three hours per week.

Prerequisite: Consent of instructor; open to juniors by special permission of instructor and chairman of the department of Theatre Arts.

## DANCE EDUCATION

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**Dance Education 217. Methods of Teaching Recreational Dance.** One credit. Techniques of teaching social and folk dance. Two hours per week. Prerequisite: Dance 216.

in Dance Education workshops and institutes. The workshop area of concentration will appear as a subtitle each time the course is offered. Prerequisite: Consent of instructor.

**Dance Education 220. Dance in the Elementary School.** One credit. Instruction in dance forms basic to a balanced elementary school physical education program. Two hours per week. Prerequisite: Sophomore standing.

**Dance Education 420. Dance Practicum.** Two credits. Controlled experience in teaching dance. Three hours per week. Prerequisite: Consent of instructor; open to juniors with special permission of instructor and chairman of the department of Theatre Arts.

**Dance Education 327. Dance Workshop.** One to six credits. Advanced training

## DIETETICS

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See **Home Economics**.

## DRAMA

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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 45 credits, of which 36 shall be in Drama courses as listed below. This major satisfies certification requirements in the academic area designated DRAMA by the Wisconsin Department of Public Instruction.

1. Drama 130, 171, 240, 375—12 credits.
2. Twelve to 15 credits from the following areas: Aesthetics of Theatre, Drama Theory and Criticism, Dramatic Literature, History of Theatre, Playwriting.
3. Nine to 12 credits from the following areas: Acting, Children's Theatre, Creative Dramatics, Directing, Dance/Movement, Oral Interpretation, Technical Theatre, Theatre Management. **Students seeking teacher certification** will be required to complete **Drama Education 382**—Teaching Drama in the

Secondary School, as part of the 20 credits of the professional education sequence. These credits will not be counted toward the 45 credits in the major.

Since the department of Theatre Arts expects majors to participate in departmental productions, optional credit for such participation is available for all students. Students may enroll in Drama 126 and 226 for a total of two credits, in Drama 326 for a total of two credits, and in Drama 426 for a total of two credits.

- 4. A minimum of nine credits is required in one or more of the following: Art, Communication, History, Literature, Music, Philosophy, Psychology. **Students seeking teacher certification** will be required to complete **Education 340—Techniques in Secondary Education: Speech.**

**B. An Interdepartmental major in Communication and Drama for teacher certification** consists of 39 credits, 14 of which must be in courses numbered 300 or above. The following are required:

- 1. Drama 130, 171, 240, 375; three credits of Drama electives.
- 2. Communication 101 or equivalent; Communication 317 or 318; Drama Education 382; Communication or Drama electives (three or more credits) selected to satisfy the Humanities requirement.
- 3. Fifteen credits of Communication courses approved by the chairman of the department of Communication. Communication 105, 107, 219, and six credits of electives are recommended.
- 4. Students enrolled in the Interdepartmental major in Communication and Drama must have the approval of advisers in each department for courses in the respective departments.

(This major satisfies certification requirements in the academic area designated SPEECH by the Wisconsin Department of Public Instruction.)



**C. A minor in Drama** consists of 22 credits, including Drama 130, 171, 240, and 375; and ten 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.

**D. A minor in Drama with emphasis on Dance** consists of 22 credits, including Drama 130, 171, 240, 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** in the next section of the catalog.

**Drama 105. Appreciation and History of Theatre.** Three credits. A survey of the development of theatre including the modern media of television and motion pictures; emphasis on preparation for intelligent criticism as a member of an audience.

**Drama 126. Laboratory Work (Dramatics and Forensics).** One credit. Practical work in dramatics or forensics by special arrangement with the instructor. May be repeated for a maximum of two credits.

**Drama 129. Drama Workshop.** One to six credits. A program 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.

**Drama 130. Introduction to Interpretative Reading.** Three credits. Fundamentals of oral interpretation.

**Drama 132. Voice and Diction.** Two credits. 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.

**Drama 171. Theories and Techniques of Acting I.** Three credits. Fundamentals

of acting; character analysis; techniques and practice; relation of the role to the play as a whole. Four hours per week.

**Drama 172. Theories and Techniques of Acting II.** Three credits. Continuation of Drama 171, with emphasis on character development. Four hours per week. Prerequisite: Drama 171 or consent of instructor.

**Drama 212. Forensic Activities.** Three credits. Theory and practice for all public school forensic and dramatic activities; recommended for prospective teachers. Prerequisite: Sophomore standing or consent of the instructor.

**Drama 213. Survey of Dramatic Literature (Tragedy).** Three credits. Styles, theories and literature of world drama; emphasis on the classic heritage; representative plays studied in the context of their times. Prerequisite: Sophomore standing.

**Drama 215. Survey of Dramatic Literature (Comedy).** Three credits. Styles, theories, and literature of world drama; emphasis on the classic heritage; representative plays studied in the context of their times. Prerequisite: Sophomore standing.

**Drama 226. Laboratory Work (Dramatics and Forensics).** One credit. Practical work in dramatics or forensics by special arrangement with the instructor. This may be repeated for a maximum of two credits.

**Drama 230. Interpretive Reading.** Three credits. Principles and techniques of oral interpretation of modern forms of literature; Chamber Theatre and Reader's Theatre. Prerequisite: Drama 130, or consent of instructor.

**Drama 240. Elements of Stagecraft.** Three credits. Elementary theory and practice in the technical aspects of theatre. Prerequisite: Sophomore standing.

**Drama 242. Stage Lighting.** Three credits. Theory and practice in the application of methods and principles of lighting for theatrical production. Two hours lecture, two hours laboratory per week. Prerequisite: Drama 240, or consent of instructor.

**Drama 243. Stage Costume Design and Construction.** Three credits. The study and application of the principles of design as applied to stage costume with emphasis on the drafting of patterns and construction of workable, stage-worthy costumes. One hour lecture and four hours lab per week. Prerequisite: Sophomore standing.

**Drama 251. History of Theatre: Beginning through Renaissance.** Three credits. Study of the development of the arts and techniques of the theatre from the beginning through the Renaissance. Prerequisite: Sophomore standing.

**Drama 252. History of Theatre: Restoration through Twentieth Century.** Three credits. Study of the development of the arts and techniques of the theatre

from the Renaissance to the present. Prerequisite: Sophomore standing.

**Drama 255. Introduction to Stage Costume.** Three credits. Survey of the historical development and fundamental principles of the art of costuming for the stage in their relation to theory and practice. Two hours lecture, two hours lab per week. Prerequisite: Sophomore standing.

**Drama 270. Stage Make-up.** Two credits. The purpose and techniques of application of theatrical make-up; the use of make-up in the various theatrical media; emphasis on stage use. One hour lecture, two hours laboratory per week. Prerequisite: Drama 171, or consent of instructor.

**Drama 271. Advanced Acting I.** Three credits. Intensive study in the art of acting; emphasis on production, styles of acting, development of techniques, rehearsal problems. Four hours per week. Prerequisite: Drama 171 and 172, or Drama 171 and consent of instructor.

**Drama 272. Advanced Acting II.** Three credits. Continuation of Drama 271. Four hours per week. Prerequisite: Drama 271.

**Drama 317/517. European Drama I.** Three credits. An intensive study of the European Drama and Theatre; representative plays; theatre trends.

**Drama 318/518. European Drama II.** Three credits. Continuation of Drama 317. Prerequisite: Drama 317, or consent of instructor.

**Drama 326. Laboratory Work (Dramatics and Forensics).** One credit. Practical work in dramatics or forensics by special arrangement with the instructor. May be repeated for a maximum of two credits.

**Drama 327/527. Fundamentals of Playwriting.** Three credits. Basic elements of the playwriting process; idea, structure, theme, plot, characterization, dialogue, language; project writing and class criticism.

**Drama 328/528. Advanced Playwriting.** Three credits. Continuation of Drama 327, with emphasis on project writing and performance. Prerequisite: Drama 327, or consent of instructor.

**Drama 340/540. Scene Design.** Three credits. Theory and practice in scenic design; special projects. Four hours per week. Prerequisite: Drama 240.

**Drama 375/575. Beginning Directing I.** Three credits. Theory of directing; exercises in blocking and performance of scenes. Four hours per week. Prerequisite: Drama 171; also recommended that the student have Drama 240 and at least three credits in dramatic literature.

**Drama 376/576. Beginning Directing II.** Three credits. Practice in directing scenes and one-act plays; development of skills in directing. Four hours per week. Prerequisite: Drama 375, or consent of instructor.

**Drama 382/582** has been replaced by **Drama Education 382.**

**Drama 383/583. Creative Dramatics.** Three credits. Philosophy and techniques of creative drama with emphasis on its relation to creative education in general.

**Drama 399. Special Work.** One to six credits. Upper class students majoring or minoring in Drama may, by agreement with the chairman of the Department of Theatre Arts, 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.

**Drama 410/610. Masters of the Theatre.** Two credits. An 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.) Prerequisite: Senior standing, or junior standing and consent of the instructor.

**Drama 412/612. Contemporary Theatre.** Three credits. A study of 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. Prerequisite: Senior standing, or junior standing and consent of the instructor.

**Drama 426/626. Laboratory Work (Dramatics and Forensics).** One credit. Practical work in dramatics or forensics by special arrangement with the instructor. May be repeated for a maximum of two credits.

**Drama 429/629. Drama Workshop.** One to six credits. A program 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. Prerequisite: Senior standing, or junior standing and consent of instructor.

**Drama 430/630. Classic Forms of Interpretation.** Two or three credits. 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. Prerequisite: Senior standing, or junior standing and consent of instructor.

**Drama 449/649. Special Technical Problems.** Three credits. Special projects and techniques of handling advanced technical theatre problems. Prerequisite: Drama 240, and any two of Drama 232, 243, and 340.

**Drama 462/662. Dramatic Criticism.** Three credits. Criticism of forms and styles based on major ancient and modern theories: includes play analysis and production evaluation. Prerequisite: Senior standing, or junior standing and consent of instructor.

**Drama 475/675. Advanced Directing I.** Three credits. Problems of directing with emphasis on full-length plays, including styles, forms, and production coordination. Four hours per week. Prerequisite: Drama 376, or consent of instructor.

**Drama 476/676. Advanced Directing II.** Three credits. Continuation of Drama 475. Four hours per week. Prerequisite: Drama 475.

**Drama 484/684. Children's Theatre.** Two credits. Selection, direction, and production of plays for children's audiences. Prerequisite: Senior standing, or junior standing and consent of the instructor.

**Drama 490/690. Seminar in Theatre.** Three credits. 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. Prerequisite: Senior standing, or junior standing and consent of instructor.

**Drama 702. Foundations of Dramatic Art.** Three credits. An intensive study of theatre as an art and as a cultural force. The approach is an aesthetic and historical consideration of dramatic literature and the interpretative arts of the stage, motion picture, radio, and television.

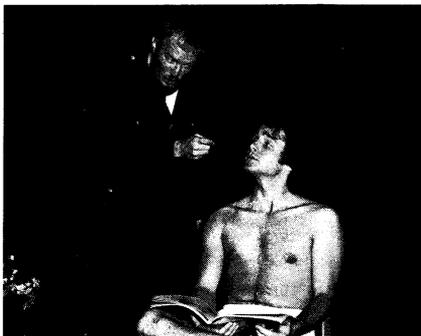
**Drama 725. Problems in Play Production.** Three credits. A lecture-laboratory course in the directing and mounting of productions.

**Drama 770. Seminar.** Three credits. Selected studies and advanced theory in drama and interpretation. Subtitle indicating the subjects will be added each term as course is offered. (May be taken more than once for credit as subject matter changes.)

**Drama 785. Creative Drama for Children.** Three credits. Survey of story materials; development of diction and bodily movements; characterization and improvisation.

**Drama 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Regularly scheduled conferences with a staff supervisor.

**Drama 799. Thesis.** Two to six credits.



## DRAMA EDUCATION \_\_\_\_\_

**Drama Education 382. Teaching Drama in the Secondary School.** Three credits. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in high school teaching.

## EARLY CHILDHOOD EDUCATION \_\_\_\_\_

Arthur Fritschel, in charge; Ruth Conone, Marge Miller.

**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, 12 credits: Home Economics 101, or Art 101; Home Economics 261 or Psychology 260; Home Economics 361 or 353; 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.), 380 (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 394 (2 or 3 cr.), 395 (2 cr.), and Home Economics 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** \_\_\_\_\_

See also **Business and Business Administration.**

James Jensen, chairman; Hiram Anderson, Darrell Christie, James Dunigan, Merl Farmer, Vance Gruetzmacher, Gordon Haferbecker, Peter Haigh, Jooh-Ki Hwang, Clifford Jacobsen, Robert Mabie, Russell Matuska, Francis Murans, Gerald O'Brien, Thomas Ryan, Judith Sage, Lloyd Sage, Bruce Sherony, Michael Sullivan, Lawrence Weiser.

**A. A major in Economics** consists of:

1. Required courses: Economics 200, 201, 330, 350, 360.
2. Controlled electives: 9 credits from the following courses: Economics 311, 315, 341, 345, 361, 365, 381.
3. Electives: additional Economics courses to total at least 30 credits. Sociology 260 may be counted toward the major.
4. Collateral Course: Mathematics 108, or 110, 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.

**Economics 200. General Economics I.** Three credits. An introduction to the 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. Prerequisite: Sophomore standing.

**Economics 201. General Economics II.** Three credits. Monopolistic competition and price theory; microeconomics, theory of distribution, public finance, international trade, and the balance of payments. Prerequisite Economics 200.

**Economics 203S. Principles of Economics.** Four credits. A basic survey of 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.

**Economics 204. Environmental Economics.** Three credits. 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. Prerequisite: Sophomore standing.

**Economics 311/511. Public Finance.** Three credits. Theories, practices, and problems of taxation; proposed tax reforms; fiscal policy. Prerequisite: Economics 201, or consent of instructor.

**Economics 312. Public Utilities.** Three credits. Development of public utilities in the United States; theoretical and institutional basis of public utility regulation; development of regulatory agencies; public versus private ownership. Prerequisite: Economics 200.

**Economics 315/515. Business and Government.** Three credits. A general survey of the problems of the relationship between government and business in an advanced technological society. Prerequisite: Economics 201.

**Economics 323. Consumer and Cooperative Economics.** Two credits. Economics for the consumer; purchasing, investing, consumer credit, taxation, and insurance; the development philosophy, and problems of consumer and marketing cooperatives.

**Economics 328. Social Insurance.** Two credits. Social security, unemployment insurance, workman's compensation, health insurance, private retirement plans, public assistance, welfare programs. Prerequisite: Economics 200 or consent of instructor.

**Economics 330. Statistical Methods.** Three credits. Sources of statistical data, tabulation, charting, averages, dispersion, sampling and probability, index numbers, trends, seasonal variations, economic cycles, correlation. Prerequisite: Economics 200.

**Economics 341. Corporation Finance.** Three credits. Business units, especially corporate, in present day enterprise; financial principles applicable to their operation. Prerequisite: Economics 201 and Business 211, or consent of instructor.

**Economics 345. Labor Problems.** Three credits. 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.

**Economics 350. Microeconomic Theory.** Three credits. The study of contemporary microeconomic theory, including consumption, production, pricing, and resources allocation. Prerequisite: Economics 201.

**Economics 360. Money and Banking.** Three credits. Monetary and banking principles and practice; employment and price-level analysis; interest-rate theory; international finance in the banking system. Prerequisite: Economics 200.

**Economics 361. Macroeconomic Theory.** Three credits. Determination of levels of national income, output, employment, and prices; national income accounting; theory and measurement of aggregate consumption and investment; government stabilization policy. Prerequisite: Economics 201.

**Economics 362. Economic Development.** Three credits. The stages of economic growth; study of economic conditions and policy in the underdeveloped and intermediately developed national economies. Prerequisite: Economics 201.

**Economics 365. International Economics.** Three credits. Foreign trade, theory and measurement of export and import patterns; foreign exchange markets, balance of payments, tariffs, and the contemporary international monetary system. Prerequisite: Economics 201.

**Economics 367/567. Comparative Economic Systems.** Three credits. Analysis and appraisal of the structure and function of diverse economic systems, such as capitalism, socialism, communism, and their modifications. Prerequisite: Economics 200.

**Economics 381. History of Economic Thought.** Three credits. A survey of

economic thought from the mercantilists to recent writers. Prerequisite: Economics 201.

**Economics 433. Econometrics.** Three credits. Introduction to quantitative methods as they apply to economic relationships; regression and correlation, statistical inference, economic models, and applications to economic theory. Prerequisite: Economics 201, 330; Mathematics 107, or 110, or 224.

**Economics 453. Managerial Economics.** Three credits. Application of price theory and economic theory of the firm to business management decisions; use of microeconomics and macroeconomics in forecasting for business policy. Prerequisite: Economics 201.

**Economics 499. Special Work.** Upper class students majoring or minoring in Economics may, by agreement with the chairman of the Economics and Business 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.

**Economics 704. The American Economy.** Three credits. 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.

**Economics 746. Labor Economics.** Three credits. A study of unions and the labor force, collective bargaining, and wages; unemployment, insecurity, and major trends in labor organizations and labor problems.

**Economics 756. Current Economic Problems.** Three credits. A study of national and international economic policies in

the light of commonly accepted social goals, such as efficient use of resources, stability of income and employment, economic growth and development, equitable distribution of income, decen-

tralization of power, personal security, freedom of choice, and peaceful and mutually beneficial international relations.

## EDUCATION

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Thomas McCaig, Acting Assistant Dean and Head of the School of Education; Margery Aber, Betty Allar, Roger Bauer, Donald Benz, John Bernd, Venita Burling, William Clements, Rayma Ditson, Barbara Farlow, Gail Fountain, Arthur Fritschel, Leonard Gibb, Shirley Gibb, Jane Graves, A. Irene Gray, Susan Hall, Thomas Hayes, Helen Heaton, Joyce Johnson, William Johnson, William Kirby, Hildegard Kuse, Charles LaFollette, John Larsen, Warren Lensmire, Neil Lewis, Claudine Long, Anna Maves, Darvin Miller, Marge Miller, Dawn Narron, Russell Oliver, Elizabeth Oman, John Pearson, Dorothy Price, Orland Radke, Phyllis Ravey, Robert Rossmiller, Mary Samter, E. Jane Sauer, Robert Schmatz, Ruth Schmatz, Terrence Snowden, Angelyn Stielstra, Ruth Sylvester, Herbert Wenger, Roger Wood, W. William Zimdars.

The major in **Early Childhood Education** is described under that heading.

See also course listings under **Art Education, Business Education, Dance Education, Drama Education, Home Economics Education, Instructional Resources, Mathematics Education, and Music Education.**

# 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).

**Education 001. Driver Education for Beginners.** No credit. 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.

**Education 145. Introduction to Early Childhood Education.** Two credits. Curricula, purposes and organization of programs in early childhood education. Includes field trips and observations.

**Education 241. Creative Activities for Young Children.** Three credits. 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 hour laboratory per week. Prerequisite: Sophomore standing.

**Education 242. Early Childhood Education Curriculum.** Four credits. Study of curriculum and materials in early childhood-kindergarten education; emphasis on reading readiness, language arts, social studies, science, and mathematics. Two hours laboratory per week. Prerequisite: Sophomore standing.

**#Education 301. Techniques in Kindergarten Education.** Two credits. Techniques used in kindergarten teaching; observation included.

**#Education 302. Techniques in Primary Education: Reading, Language Arts.** Four credits. Principles, aims, methods, and techniques.

**#Education 310. Techniques for Intermediate and Upper Grades: Reading, Language Arts.** Four credits. Principles, aims, methods, and techniques. Three hours lecture; observation and laboratory hours to be arranged.

**Education 311. Techniques for Intermediate and Upper Grades: Mathematics, Social Studies, Science.** Four credits. Principles, aims, methods, and techniques. Three hours lecture; observation and laboratory hours to be arranged.

**Education 320. Techniques in the Elementary School: Guidance.** Three credits. Policies and practices of organized guidance in the elementary school; personal, social, and educational adjustment problems and needs. Prerequisite: Education 383 and teaching experience.

**Education 321. Techniques in the Elementary School: Speech.** Three credits. Methods, materials and philosophy for the teaching of speech in the elementary school; curricular correlation.

**Education 322. Techniques in the Elementary School: Art.** Two credits. Methods, materials, and philosophy for the teaching of art in the elementary school.

\*\* IGE-MUS

# Admission to the Professional Education Program or to the School of Education is a prerequisite for this course.

The former **Education 232** is now **Music Education 323** and **324**.

**\*\*\*Education 324. Techniques in the Elementary School: Social Studies and Science.** Four credits. Principles, aims, methods, and techniques. Two hours lecture; and four hours observation, laboratory, and/or clinical experience per week.

**Education 326. Corrective Reading.** Three credits. Preventive and corrective measures in the teaching of reading in grades one through eight; diagnosis of causes and the application of corrective techniques. Prerequisite: Education 302 or 310.

The former **Education 327** (Remedial Reading Practicum) has been discontinued.

**#Education 327. Techniques in Elementary and Secondary Education: Health Education.** Two credits. Aims, methods, materials, techniques, planning, organization, testing, as applied in elementary and secondary school teaching.

**#Education 328. Techniques in Elementary and Secondary Education: Physical Education.** Two credits. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in elementary and high school teaching.

**#Education 329. Techniques in Elementary and Secondary Education: Speech Correction.** Three credits. Aims, methods, materials, techniques, planning, organization, testing, etc., as applied in elementary and high school teaching.

**#Education 330-340. Techniques in Secondary Education.** Two credits 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:

**Education 330. Accounting.**

**Education 331. Art.**

**Education 332. English.**

**Education 333. Foreign Language.**

**Education 335. Mathematics.**

The former **Education 336** is now

**Music Education 325 and 326.**

**Education 337. Science.**

**Education 338. Shorthand and Typewriting.**

**Education 339. Social Studies.**

**Education 340. Communication.**

**Education 349. Fieldwork in Early Childhood Education.** Five credits. Clinical and laboratory experiences in schools. Study of home and school in culturally differing areas. Prerequisite: Education 242 or concurrent registration.

**Education 350/550. Organization and Administration of Outdoor Education.** Three credits. 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.

**\*\*Education 351/551. The Exceptional Child.** Three credits. 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. Prerequisite: Psychology 200.

**Education 352/552. Workshop in Mental Health.** Four credits. A workshop 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.

**\*\*Education 353/553. Nature and Needs of Children with Learning Disabilities.** Three credits. Introduction to the major emphasis and points of view in theory and practice concerning the identification and remediation of children with learning disabilities. Prerequisite: Education 351, or concurrent registration, or consent of instructor.

**Education 360/560. Workshop in Elementary Education.** Three credits. Workshop techniques applied to problems of teaching in various curricular fields in the elementary school. A subtitle will be added to the title to describe the area considered each time the course is offered.

**\*\*Education 363/563. Diagnostic Procedure in Specific Learning Disabilities.** Three credits. Theory and practice in testing and evaluating for specific learning disabilities and in the basic interpretation of significant findings. Prerequisite: Education 353, and appropriate methods courses in elementary education.

**\*\* IGE-MUS**

# Admission to the Professional Education Program or to the School of Education is a prerequisite for this course.

**Education 364/564. Methods and Materials for Children with Learning Disabilities.** Three credits. Teaching methods described, demonstrated, and evaluated. Prerequisite: Education 363.

**Education 365/565. Seminar in Education of Children with Learning Disabilities.** Three credits. 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. Prerequisite: Education 353 and 364.

**370/570. Workshop in Education.** One to three credits. Workshop technique applied to problems of teaching in the elementary and secondary schools. A sub-title will be added to the title to describe the area each time the course is offered. Prerequisites may be stated for each sub-title.

**Education 371. Workshop in Education: Aerospace.** One to three credits. Workshop techniques applied to problems of teaching in the elementary and secondary schools.

**Education 372. Workshop in Education: Conservation.** One to three credits. Workshop techniques applied to problems of teaching in the elementary and secondary schools. Prerequisite: Open only to students majoring or minoring in Natural Resources Management; or Natural Resources 370.

**Education 373. Workshop in Education: Foreign Language.** One to three credits. Workshop technique applied to problems of teaching in the elementary and secondary schools.

**\*\*Education 374/574. Workshop in Education: Group Dynamics within the Secondary School.** Two or three credits. Consideration of 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.

**\*\*Education 375/575. Workshop in Education: Multi-unit Schools-Individually Guided Education.** Two or three credits. Analysis of multi-unit schools, team teaching, and individually guided education; theory and practice; major focus on development of multi-unit schools in Wisconsin.

**Education 377. Safety Education.** Three credits. Organization, administration, and teaching of safety in home, highway, water, athletic, recreational, and industrial areas.

**Education 378. Driver Education.** \*Three credits. 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.

**Education 379. Advanced Driver and Safety Education.** Three credits. 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. Prerequisite: Education 377 and 378.

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**Education 380. Principles of Education.** Three credits. Meaning and purposes of education in society; relationship of the teacher to the pupil, the school, the community, and the profession.

**\*\*Education 381. Educational Psychology.** Three credits. 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. Prerequisite: Psychology 200.

**Education 382. Philosophy of Education.** Three credits. 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.

**\*\*Education 383/583. Tests and Measurements.** Three credits. 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.

**Education 384/584. Computers, Systems, and Education.** Three credits. 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.

**\*\* IGE-MUS**

# Admission to the Professional Education Program or to the School of Education is a prerequisite for this course.

**\*\*Education 385. The Junior High School.** Two or three credits. History and development of the modern junior high school; philosophy and objectives, with emphasis on the resulting variations in curriculum programs, and teaching approaches.

**Education 386. Reading in the Secondary School.** Three credits. Materials and techniques of teaching developmental reading in the secondary school.

**Education 387. Corrective Reading in the Secondary School.** Three credits. Procedures for analysis and correction of students' reading problems for the teacher in the subject-matter areas. Prerequisite: Education 386.

**\*\*Education 388. Interpersonal Relations for Teachers.** Three credits. Examination of 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.

**Education 389/589. Issues in Vocational and Technical Education.** Two or three credits. The administration and organization of vocational and adult education on the national, state, and local level.

**Education 390/590. Seminar.** One to three credits. Studies and discussions of current problems in education. A subtitle will be added when specific areas are treated.

**\*\*Education 391. Teaching Minorities in the Classroom.** Three credits. A study of minority groups resulting from

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, the majority group will be identified in a sub-title.) May be repeated once, with a different focus, for a total of six credits.

**Education 392. Behavioral Aspects of Accident Prevention.** Three credits. 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. Prerequisite: Education 377, 378, and 379; Psychology 315 highly recommended.

**Education 393. Alcohol and Other Drugs: Implications for Traffic Safety.** Three credits. 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. Prerequisite: Education 377, 378, and 379; Psychology 315 highly recommended.

**\*\*\*Education 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.

**Education 399. Special Work.** Upper class students in the School of Education may, by agreement with the chair-

man of the Education 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.

**Education 701. Philosophical Foundations of Education.** Three credits. An examination of critical issues in education; their ideological and social bases. Prerequisite: Teacher certification, or consent of instructor.

**\*\*Education 702. Psychological Foundations of Education.** Three credits. Psychological background relative to human abilities and behavior; individual differences; human relations; learning and evaluation with implications for teaching. Prerequisite: Teacher certification, enrollment in MAT program, or consent of instructor.

**\*\*Education 703. Theories of Learning.** Three credits. A study of classical and contemporary theories of learning. A critical analysis of learning theories with implications for classroom learning situations.

**Education 705. Basic Statistical Methods in Education.** Three credits. Fundamentals of statistical analysis with application in education and other fields according to needs of students. Use of critical ratios and the test for paired, pooled, and unpooled samples. Straight line and curvilinear regression for simple and multiple correlations of variables. Introduction to the use of probability, simple and two-way analysis, chi-square, and other non-parametric statistics. Prerequisites: Education 380 or 580 or 751 and consent of instructor.

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# Admission to the Professional Education Program or to the School of Education is a prerequisite for this course.

**Education 706. Experimental and Statistical Methods in Education Research.** Three credits. 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.

**Education 711. Seminar Problems in Teaching, Elementary.** Three credits. 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 elementary school teachers with certification.

**Education 712. Seminar Problems in Teaching, Secondary.** Three credits. 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.

**Education 713. Seminar: Problems in Teaching, Music.** Four credits. 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 music teachers with certification.

**Education 720. Research Studies in Elementary Education.** Three credits. A survey of research covering the following aspects of the elementary school curriculum: reading, science, social studies, language arts, math, music, art, administration, policy development and curriculum organization. Taught by a team from the School of Education Graduate Faculty.

**\*\*Education 721. Fundamentals of Curriculum.** Three credits. Fundamental ideas in developing curriculum; emphasis on the human aspects in curriculum design.

**\*\*Education 722. Elementary School Curriculum.** Three credits. Basic concept of curriculum; the relationship of foundation areas to the problems of curriculum development. Modern trends in developing educational programs for children.

**\*\*Education 731. Mathematics in the Elementary School.** Two or three credits. The teaching of modern arithmetic with emphasis on curriculum content as well as method. Prerequisite: recent undergraduate course in Mathematics 310-Education 108-Arithmetic.

**\*\*Education 732. Language Arts in the Elementary School.** Three credits. A survey and critical appraisal of programs, basic practices and trends. Emphasis on oral and written expression including spelling and handwriting; specific study of individual problems.

**\*\*Education 733. Science in the Elementary School.** Three credits. A survey of the philosophy and nature of science, new elementary science curricula, innovative and experimental programs in elementary school science, and research in science education in the elementary school.

**\*\*Education 734. Social Studies in the Elementary Schools.** Three credits. Curriculum trends and approaches; new content, materials, innovations; and needed research in the field.

**\*\*Education 741. Improvement in Reading.** Three credits. The study of the

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various trends and programs in developmental reading, the reading curriculum and the related research. Prerequisite: consent of instructor.

**\*\*Education 746. Diagnosis and Evaluation of Reading Abilities.** Three credits. The study of formal and informal evaluative instruments in reading. Course experiences will include testing to identify remedial readers, construction of a diagnostic profile, and written interpretations of test results. Prerequisite: Education 841. Improvement of Reading or consent of instructor.

**\*\*Education 747. Remedial Reading.** Three credits. Instruction in the materials and techniques of remedial reading. Designed for classroom teachers, reading specialists, and administrators of reading programs who are responsible for instruction, curriculum development and leadership in this area. Prerequisite: Education 746 or consent of instructor.

**\*\*Education 748. Remedial Reading Practicum.** Three credits. Clinical appraisal of remedial reading problems, interpretation of the findings, and the development and execution of corrective measures. During 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. Prerequisite: Education 747 or consent of instructor.

**\*\*Education 749. Seminar in Reading.** Three credits. The nature and treatment of problems in reading instruction.

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**\*\*Education 750. Supervision and Administration of Reading Programs.** Organization, administration, supervision, and improvement of school wide reading programs.

**Education 751. Advanced Tests and Measurements.** Two or three credits. Testing batteries and systems, factor analytic studies, regression prediction, traditional and modern theories, educational change.

**\*\*Education 756. Guidance in the Elementary Schools.** Three credits. A study of instruments and techniques used in guidance in the elementary school such as observation, concepts of individual appraisal and methods in group procedures.

**\*\*Education 758. Education for Cooperating Teachers.** Three credits. Study of 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. Designed for in-service teachers who are or wish to be cooperating teachers.

**\*\*Education 760. M.A.T. Seminar-Secondary.** Three credits. 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.

The former **Education 761** is now **763 and 764.**

The former **Education 762** is now **765.**

**\*\*Education 763. (Formerly 761) Secondary Instruction I. Methodology and Techniques.** Methodology and techniques, instructional strategies; multi-media materials and approaches; classroom management. Prerequisite: Acceptance in the MAT program, or consent of instructor.

**\*\*Education 764. (Formerly 761) Secondary Instruction II. Special Problems and Materials.** Special problems, methods, and materials in area of specialization. Prerequisite: Acceptance in the MAT program, or consent of instructor.

**\*\*Education 765. Professional Experience—Secondary.** Eight credits. The student is assigned to a selected team of at least two teachers, a school ad-

ministrator, 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.

**\*\*Education 770. The Adviser's Function—Student Activities Program.** One credit. The role of student activities with particular emphasis on the function of the adviser.

**Education 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Regular scheduled conferences with a staff supervisor.

**Education 799. Thesis.** Two to six credits.

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## EDUCATION OF THE DEAF \_\_\_\_\_

Gary Nix, Director.

**The major in Education of the Deaf** is administered by the School of Communicative Disorders.

**A Major in Education of the Deaf** for teacher certification consists of:

1. Forty credits in Communicative Disorders: Communicative Disorders 108, 259, 260, 264, 266, 295, 351, 352, 355, 356, 357, 358, 369, 395.
2. Education 351, 381, 383, 398.
3. Psychology 200, 260.
4. Ten credits in education methods approved by the Director of Education of the Deaf.

**NOTE:** There is currently a moratorium on student enrollment in this major.

## ENGINEERING GRAPHICS \_\_\_\_\_

Mr. Lampert.

**Engineering Graphics 101. Engineering Graphics.** Three credits. 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.

**Engineering Graphics 102. Engineering Graphics and Descriptive Geometry.** Three credits. 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. Prerequisite: Engineering Graphics 101, or one year of engineering drawing in high school.

## **ENGLISH**

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Leon Lewis, chairman; Sylvia Becker, Verlene Bernd, Ann Bloom, Thomas Bloom, Patricia Bray, Richard Bray, Mary Jo Buggs, Lee Burress, Abraham Chapman, William Clark, Anne Clauss, Helen Cornelli, Mary Croft, Imogene DeSmet, Richard Doxtator, David Engel, Kurt Fanstill, Donna Garr, Thomas Getz, Rachel Heldt, David Holborn, Virginia Kirsch, Hazel Koskenlinna, Abigail Kreitzer, Neal Kreitzer, Alan Lehman, James McIntyre, Joel Mickelson, James Missey, Richard Montgomery, Nancy Moore, Wendell Nelson, Stephen Odden, Donald Pattow, Joseph Rondy, Ruth Rondy, Mardee Rose, Mary Shumway, Mary Elizabeth Smith, David Steingass, Isabelle Stelmahoske, Lynn Stewart, Alan Young.

- A. A major in English** consists of 32 credits beyond Freshman English, including English 200 and electives from the specified categories under C.1., below; 18 credits in courses numbered 300 and above must be included.
- B. A minor in English** consists of 24 credits beyond Freshman English, including English 200 and electives from the specified categories under C.1., below; 12 credits in courses numbered 300 and above must be included.

### **NOTES:**

- (1) The department has two types of majors and minors: (a) a **general** English major and minor; and (b) a major and minor for those **preparing to teach** at the secondary school level. The major and minor for **teacher certification** require additional specified electives, as outlined under C.2., below.
- (2) English 345, 355, 375, and 381 count toward the major/minor in English only for those seeking teacher certification, or for those who need them as collateral requirements in other departments.
- (3) English 275 will not count toward the major or minor unless the student demonstrates a need for it as a collateral requirement, such as for a minor in library science or a major in elementary education.
- (4) University regulations permit a sophomore to take a course at the 300-level with the approval of the head of the department. Courses at the 200-level are open to English majors as second semester freshmen.

C.1. The English major and minor 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, 345\*, 346.

**British literature**, six credits: English 211, 212, 315, 316, 321, 322, 323, 324, 325, 326, 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, 317, 318, 328, 329, 360, 370, 371, 377 (marked "Am" after course description); and 309, 382, 383, and 385 when the topic is appropriate.

**Masters**, three credits: English 330, 333, 334, 336, 385.

**Literature before 1850**, three credits: English 211, 315, 317, 321, 322, 323, 324, 328, 330, 333, 334, 336, 361; and 309 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 head of the department prior to registration.)

C.2. The major and minor for **teacher certification** require, in addition to A.1., above:

Writing, three credits: English 250, 253, 350, 351, 353, 355\*.

The following are also recommended: English 345\*, 355\*, 375\*, 381\*.

C.3. Within the English major, **several options** are available.

Students planning to teach in the public schools should consider complementary minors and course work in related fields. Desirable minors to accompany the major are: a foreign language, communication, theatre arts, history, and a social science.

The School of Education requires a grade point ratio of 2.25 or better in the major and minor fields for admission to student teaching, and 2.50 for internship.

Students interested in traditional graduate work and college teaching should include major author and period courses. Knowledge of a foreign language is usually required for graduate work in English.

Those interested in applied writing positions in business, natural resources, industry, or science should work out programs in consultation with the chairman of the respective department: English and Business, English and Natural Resources, etc.

A major in English with emphasis in writing consists of completion of the requirements described in section C.1., including twelve credits among English 250, 253, 350, 351, 353.

\*Courses identified with \* count toward the major/minor in English only for those seeking teacher certification, or for those who need them as collateral requirements in other departments. After July 1, 1977, at least one course in reading will be required for teacher certification.

**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.

**English 100. Developmental English.**

Three credits. 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 per week of classes; additional weekly work in the writing laboratory to be arranged. Credit will not be granted for both English 100 and 101.

**English 101. Freshman English.** Three credits. Improvement of skills in critical reading, logical reasoning, and effective writing; selected readings in fiction and non-fiction.

**English 102. Freshman English.** Three credits. Development of language skills through more complex reading and writing assignments, including the effective handling of longer papers. Prerequisite: English 100 or 101.

The former **English 103** has been discontinued and is replaced by:

**English 103. The Myth of . . . .** Three credits. (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).

**English 108. Reading the Drama.** No credit, or three credits. 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 **English 308**.)

**English 170. Folklore.** Two or three credits. Introduction to folklore in its literary forms with reference to the ballad, the folk tale, and folk sayings.

**English 200. Introduction to the Study of Literature.** Three credits. 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. Prerequisite: Sophomore standing, except for English majors.

**English 203. The Myth of . . . .** Three credits. (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). Prerequisite: Sophomore standing.

**English 207. Introduction to the Novel.** Three credits. 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. Prerequisite: Sophomore standing.

**English 211. English Literature.** (Br) Three credits. A study of selections taken from English literature with emphasis on the major writers from Beowulf through the Pre-Romantics, stressing insight into the works. Prerequisite: Sophomore standing, except for English majors.

**English 212. English Literature.** (Br) Three credits. A study of selections taken from English literature with emphasis on the major writers from the Romantics to the present, stressing insight into the works. Prerequisite: Sophomore standing, except for English majors.

**English 213. American Literature.** (Am) Three credits. A study of selections taken from American literature with emphasis on the major writers from Emerson through Twain, stressing insight into the works. Prerequisite: Sophomore standing, except for English majors.

**English 214. American Literature.** (Am) Three credits. A study of selections taken from American literature with emphasis on the major writers from James to the present, stressing insight into the works. Prerequisite: Sophomore standing, except for English majors.

**English 215. British and American Literature since WW II.** Two or three credits. Selections from British and American Literature with emphasis on the major writers from World War II to the present, stressing insight into the works. Three hours per week. Prerequisite: Sophomore standing except for English majors.

**English 240. Introduction to Linguistics.** Three credits. A survey of the fundamental concepts and methods of the scientific study of languages in their structural, historical, and geographical aspects. Prerequisite: Sophomore standing, except for English majors.

**English 250. Intermediate Composition.** Two or three credits. Practice in descriptive, narrative, and expository projects with special emphasis on expository writing. Prerequisite: Sophomore standing, except for English majors.

**English 253. Introduction to Creative Writing.** Three credits. Training and practice for the beginning writer in the various forms of poetry and fiction; class discussion of student work. Prerequisite: Sophomore standing, except for English majors.

**English 275. Children's Literature.** Three credits. Literature for children, with emphasis upon the reading, selection, and presentation of materials suitable for the various grades in an elementary school. Prerequisite: Sophomore standing, except for English majors. (See note 3 above.)

**English 280. American Indian Literature.** (Am) Three credits. An introduction to the literature concerning the American Indian from oral and written materials by Indian authors, and from materials by other American writers. Prerequisite: Sophomore standing, except for English majors.

**English 281. Frontier Literature.** (Am) Three credits. 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. Prerequisite: Sophomore standing, except for English majors.

**English 282. Contemporary Literature.**

Three credits. A study of international poetry, drama, and fiction since 1945, including works from a variety of cultures. Prerequisite: Sophomore standing, except for English majors.

**English 283. Mythology in Literature.**

Three credits. An examination of 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. Prerequisite: Sophomore standing, except for English majors.

**English 285. Women in Literature.**

Three credits. A study of the characterization of women by authors from various periods and countries, such as Sophocles, Chaucer, Shakespeare, Jane Austen, Flaubert, and D. H. Lawrence. Prerequisite: Sophomore standing, except for English majors.

**English 286. Speculative Fiction.**

Three credits. Science fiction, fantasy, and utopian literature, including such writers as Verne, Wells, Huxley, Capek, Tolkien, and Vonnegut. Prerequisite: Sophomore standing, except for English majors.

**English 287. Mystery Literature.**

Three credits. A study of mystery literature, emphasizing insight into the works and designed to improve the student's ability to understand literary formulas in the works of such authors as Poe, Doyle, Dickens, Stevenson, Dorothy Sayers, Graham Greene, Willkie Collins, and Shirley Jackson. Prerequisite: Sophomore standing, except for English majors.

**English 288. The Literature of Human Love and Sexuality.**

Three credits. A

survey of the literature of love, using such representative works and authors from various cultures and times as Lystrata, The Song of Solomon, Ovid, Chaucer, Donne, Swift, DeSade, D. H. Lawrence, and James Joyce. Prerequisite: Sophomore standing, except for English majors.

**English 303. The Myth of . . . .**

Three credits. (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).

**English 308. Reading the Drama.**

No credit, or three credits. Same as English 108, offered for students eligible for courses numbered 300 or above. May be taken for credit twice: once each as 108 and as 308.

**English 309. Forms and Modes in Literature.**

Three credits. 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.

**English 310. The Modern Short Story.**

Three credits. Representative short stories of world literature with emphasis on literary structure, form, and theme.

**English 312. Modern Drama.**

Two or three credits. Representative dramas of world literature from Ibsen to the present; emphasis on literary structure, form, and theme.

**English 314. Modern Poetry.**

Two or three credits. A study of contemporary poetry.

**English 315. The English Novel.** (Br) Three credits. The English novel from Defoe to George Eliot.

**English 316. The English Novel.** (Br) Three credits. The English novel since George Eliot.

**English 317/517. The American Novel.** (Am) Three credits. The American novel from Brockden Brown to Mark Twain.

**English 318/518. The American Novel.** (Am) Three credits. The American novel from Stephen Crane to the present.

**English 319. The Novel Since 1850.** Three credits. Representative novels of world literature with emphasis on literary structure, form, and theme, including works from a variety of cultures.

**English 321. Poetry and Prose of the Sixteenth Century.** (Br) Three credits. Renaissance literature from Skelton to Hooker, including such authors as More, Sidney, Shakespeare, Marlowe, Spenser, Lyly, Green, and Nash.

**English 322/522. Poetry and Prose of the Early Seventeenth Century.** (Br) Three credits. The literature from the death of Elizabeth to Restoration, including such authors as Donne and the other Metaphysicals, Jonson, Bacon, Hobbes, Burton, Browne, and the Cavalier poets.

**English 323/523. Eighteenth Century Literature.** (Br) Three credits. Development of English poetry, drama, and prose fiction from 1660 to the late eighteenth century, through a study of selected authors.

**English 324/524. The Romantic Movement.** (Br) Three credits. Development of romanticism in English, its theory and its creation, including a rapid survey of the pre-Romantic movement.

**English 325/525. Victorian Poetry.** (Br) Three credits. From Browning and Tennyson through the Pre-Raphaelites and Swinburne.

**English 326/526. Nineteenth Century Non-Fiction.** (Br) Three credits. Prose works of such writers as Wordsworth, Coleridge, Hazlitt, DeQuincy, Newman, Arnold, Carlyle, Ruskin, and Pater.

**English 327/527. Victorian Literature in Transition.** (Br) Three credits. Work of such writers as Conrad, Ford, Hardy, Shaw, Yeats, and the Aesthetes and Decadents.

**English 328. The Beginnings of American Literature.** (Am) Three credits. American literature of the Colonial and Federalist periods.

**English 329/529. The American Renaissance.** (Am) Three credits. The American literary renaissance of the mid-nineteenth century with major emphasis on the works of Emerson, Thoreau, Hawthorne, Melville, and Whitman.

**English 330/530. Chaucer.** (Br) Three credits. Life and works of Chaucer, with major emphasis on the *Canterbury Tales* and the historical, social, linguistic background necessary for their comprehension and enjoyment.

**English 333. Shakespeare.** (Br) Three credits. The early plays.

**English 334. Shakespeare.** (Br) Three credits. The tragedies and later plays.

**English 336/536. Milton.** (Br) Three credits. Milton's poetry and selected prose.

**English 342. The Grammar of English.** Three credits. Form and function in modern English.

**English 344/544. History of the English Language.** Three credits. Standards of sounds, inflection, and syntax of the language.

**English 345/545. English Language for Teachers.** Three credits. Contemporary approaches to language change, analysis, history, usage, etc., with emphasis on the problems of the teacher.

**English 346/546. Old English.** Three credits. Introduction to Old English language and literature.

**English 350. Expository Writing.** Three credits. An advanced course in the principles and practices of expository writing.

**English 351. Writing Techniques (Poetry or Fiction).** Three credits. 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. Prerequisite: Consent of instructor or of a committee of faculty writers.

**English 353. Creative Writing (Poetry or Fiction).** Three credits. Training and practice in writing various forms of poetry or fiction; class discussion of student work. May be taken twice under each focus. Prerequisite: Consent of instructor or of a committee of faculty writers.

**English 355. English Composition for Teachers.** Three credits. 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.

**English 360. Regional Literature.** (Am) Three credits. 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.

**English 361. World Literature.** Three credits. Representative selections of world literature from the earliest times to the seventeenth century.

**English 362. World Literature.** Three credits. World literature from the seventeenth century to the present.

**English 367/567. English Renaissance Drama, Excluding Shakespeare.** (Br) Three credits. A critical study of representative Tudor and Stuart plays, with emphasis of form, theme, and dramatic conventions of the period.

**English 370/570. The Afro-American in the Literature of the United States.** (Am) Three credits. A critical study of the image of the Afro-American and racial attitudes in American literature.

**English 371/571. Afro-American Literature.** (Am) Three credits. A critical study of Afro-American literature and the image of American in Black American writing.

**English 372. The New Literature of Africa.** Three credits. 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.

**English 375/575. Literature for Adolescents.** Three credits. Selecting and reading of literature suitable for adolescents. (See note 2, above.)

**English 377. Current Trends in American Poetry.** (Am) Three credits. Poetry of the last decade.

**English 378. Contemporary Fiction.** Three credits. Contemporary fiction since World War II with emphasis on experimental narrative techniques and/or thematic relationships.

**English 380/580. Literary Criticism.** Two or three credits. Principles of literary criticism based on the chief ancient and modern theories.

**English 381/581. Reading for the Teacher of English.** Three credits. 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.

**English 382/582. Ethnic Minority Literature of the United States.** (Am) Three credits. An examination of 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.

**English 383. Themes in Literature.** Three credits. 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.

**English 384. Literature and Criticism.** The application of one or more critical

approaches to the selected works of a number of authors, to be determined by the special interest of the staff member offering the course. A subtitle indicating the critical approach (e.g. A Psychological Reading of Poe, Hawthorne, and Melville) will be added each time the course is offered.

**English 385. Masters of Literature.** Two or three credits. 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.

**English 386/586. A Literary Masterwork.** Three credits. An intensive study of a complex, representative work of a major writer, with special attention to its historical, intellectual, and aesthetic context. A subtitle will be added each time the course is offered. May be repeated under different subtitles.

**English 395. Workshop in English.** Two or three credits. Study of contemporary scholarship in the English language.

**English 399. Independent Study.** Upper class students may, by agreement with the chairman of the English Department, 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. Prerequisite: Consent of instructor.

**English 712. Modern Drama.** Three credits. The works of contemporary continental, British, and American playwrights.

**English 714. Modern Poetry.** Three

credits. British and American poetry from 1913 to the present.

**English 715. The English Novel, I.** Three credits. The English novel from its eighteenth century beginnings to the Victorian writers Dickens, Thackeray, and Eliot.

**English 716. The English Novel, II.** Three credits. Major development in the English novel from the 1860's to the present. Representative novelists such as Trollope, Meredith, Hardy, Joyce, Lawrence, and Conrad will be studied.

**English 717. American Novelists, I,** Two or three credits. The works of Cooper, Hawthorne, Melville, Howells, Mark Twain, Henry James, and Crane.

**English 718. American Novelists, II.** Two or three credits. The works of Norris, Dreiser, Wharton, Cather, Glasgow, Lewis, Dos Passos, Steinbeck, Hemingway, and Faulkner.

**English 722. Seventeenth Century English Literature.** Three credits. Metaphysical, cavalier and Spenserian poetry exclusive of Milton, and a study of prose from Bacon to Walton.

**English 723. Eighteenth Century English Literature.** Three credits. English Neoclassicism (1660-1789) and its achievements as seen in the work of such representative figures as Dryden, Pope, Swift, and Johnson, and as seen in such literary modes as Restoration Drama, the rise of the periodical essay, and the development of the novel.

**English 724. Major Romantic Writers.** Three credits. The poetry and prose of Wordsworth, Coleridge, Byron, Shelley, and Keats.

**English 725. Victorian Poetry.** Three credits. Major Victorian poets and important movements within the context of the nineteenth century.

**English 726. Victorian Prose.** Three credits. The works of such representative prose writers of Victorian England as Carlyle, Arnold, Mill, Newman, Ruskin, Huxley, and Pater.

**English 733. Shakespeare.** Two or three credits. Study of Shakespeare's plays to increase understanding and enjoyment. While emphasis remains on the plays themselves, the study will include matters of source, text, the times, type and structure, the stage, poetry, and twentieth century criticism.

**English 740. Language in Society.** Three credits. 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. For experienced teachers who have completed the lower division course requirements in English and who have not had similar work.

**English 745. American English Usage.** Three credits. American English usage. Prerequisite: English 342 or equivalent.

**English 746. Comparative Grammar.** Three credits. The various kinds of grammars and the theories which gave rise to them, with particular attention to those systems to which English has been subjected in the last few years; with emphasis on syntax. Prerequisite: English 342 or equivalent.

**English 750. Rhetoric of Written Communication.** Three credits. Provides for a considerable amount of writing by students, who will also read a number of

modern essays and other types of good writing, and examine the methods and styles used. Practice will be given in the criticism and judging of composition, both that of the students themselves and that of high school students, and a re-examination of the principles and standards on which these judgments may be based.

**English 760. Literature and Human Experience.** Three credits. An introduction to the study of literature as an instrument for man's understanding and taking possession of his own experience. A few central works in poetry and prose will be studied. For experienced teachers who have completed six credits in sophomore literature and who have not had similar work.

**English 762. American Transcendentalism.** Three credits. The characteristics of American transcendentalism, its sources, principal figures, and literary achievements.

**English 767. American Poetry of the**

**18th and 19th Centuries.** Three credits. American poetry from Taylor to Dickinson.

**English 770. Theory of Literature.** Three credits. The nature of literature, the elements of the literary process and the nature and modes of narrative fiction.

**English 772. Poetry: Forms, Functions, and Meanings.** Three credits. The forms and structures of poetry in English and the ways that poems convey meaning.

**English 785. Selected Literary Topics or Authors.** Two or three credits. The specific author(s) or topic(s) will be announced for each semester.

**English 790. Bibliographical Procedures and Research Methods.** Two credits.

**English 794. Thesis.** Two to six credits.

**English 799. Directed Research.** Two or three credits. Supervised study under the direction of an instructor.



## ENVIRONMENTAL LAW ENFORCEMENT

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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 of Natural Resources. It is designed to provide a law enforcement background which can be utilized by students with a major in resource management.

**A minor in Environmental Law Enforcement** is administered by the College of Natural Resources and consists of 22 credits in the following courses: Three credits of Natural Resources 393; Natural Resources 473; Philosophy 315, 380; Physical Education 252; Political Science 250, 313; Sociology 230.



## ENVIRONMENTAL STUDIES

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Richard Christofferson, adviser.

**A minor in Environmental Studies** consists of a minimum of 24 credits distributed as follows:

1. Required courses:
  - a. Biology 204 or 205 (Majors in Biology and in Natural Resources are not eligible to enroll in 204);
  - b. Natural Resources 370 (Majors in Natural Resources are not eligible to enroll in 370, but may complete the minor by substituting one of the courses from 2., below).
2. The remaining credits are to be selected from courses listed below, with three to nine credits in each of a, b, and c:
  - a. Biology 100 (not available to students electing Biology 205); Geography 101, or Geology 100 or 101; Geography 340; Physics 333.
  - b. Anthropology 350; Economics 204; History 366; Political Science 301; Sociology 260.
  - c. Art 342; Communication 400; Natural Resources 475; Philosophy 380.

## **EXPERIMENTAL FOOD AND NUTRITION** \_\_\_\_\_

See **Home Economics**.

## **FOOD AND NUTRITION** \_\_\_\_\_

See **Home Economics**.

## **FOOD SERVICE MANAGEMENT** \_\_\_\_\_

See **Home Economics**.

## **FOREIGN LANGUAGES AND COMPARATIVE LITERATURE** \_\_\_\_\_

Michael Fortune, chairman; Howard Adams, M. Roberto Assardo, Melvin Bloom, Alexandra Kaminska, Peter Kroner, Suzanne Lewis, Kina Mintcheff, Michael Morgan, Robert Price, Jan Seiler, Mark Seiler, Samuel Zeoli.

The Department of Foreign Languages and Comparative Literature offers courses in Chinese, French, German, Greek, Polish, Russian, Spanish, and Comparative Literature. Courses in these categories are described under appropriate headings in this section of the catalog.

All entering students who elect courses in French, German, Polish, Russian, or Spanish, and who have previously studied the language, are required to take a placement examination in that language. 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.

Majors and/or minors are offered in French, German, Russian, Spanish, and Comparative Literature; they are described under the appropriate headings. All Foreign Language minors lead to teacher certification.

To be accepted as a major, to be retained as a major, and to be approved for graduation with a major in a Foreign Language, the student must have a minimum grade point ratio of 2.00 in courses taken within the major. The chairman of the department may allow exemptions on a conditional basis.

The department urges its majors either (a) to minor in Comparative Literature, or (b) to fulfill the humanities requirement by taking courses in Comparative Literature.

**Foreign Language 010. English as a Foreign Language.** No credit. A two-semester, non-credit course in English for foreign students who do not have adequate facility in English for university work.

**Foreign Language 301.** (Formerly French 420, German 420, and Spanish 420)

**Contrastive Linguistics.** Three credits. A comparison of the phonological, morphological, and syntactic structures of English with French, German, Russian, and Spanish. This course counts toward a language major or minor. Pre-

requisite: French 212, or German 212, or Russian 212, or Spanish 212, or equivalent.

**Foreign Language 340. Advanced Language Study.** One to three credits. 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. Prerequisite: One year of study in a foreign language.

## **FORESTRY**

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Courses in Forestry are taught by members of the College of Natural Resources which also administers the major and minor in Forestry, under the general degree requirements of the College of Natural Resources.

**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, 427, 428, 429, 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 two 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 103.
  - 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 301, 320, 342, 350, 351, 354, 356, 420; Psychology 270, 320; Sociology 311, 312, 356, 456.

**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.

In addition to the general requirements of the College of Natural Resources, the following should be noted:

1. Courses in Forestry 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 major in Forestry 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.

**Forestry 120. Introduction to Forest Resources.** Three credits. 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 hours lecture, two hours laboratory per week.

**Forestry 320. Forest Measurement and Surveying.** Two credits. See Summer Camp Program, which is described under Natural Resources.

**Forestry 321/521. Dendrology.** Three credits. Identification, classification, distribution, and economic importance of

the principal forest trees of the United States. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor.

**Forestry 322/522. Forest Mensuration.** Three credits. Measurement of forest stands, products, and growth, including the construction and use of appropriate instruments, tables, and surveys. Two hours lecture, three hours laboratory per week. Prerequisite: Mathematics 105 or 107 or eligibility for 110; Summer Camp or consent of instructor.

**Forestry 324/524. Forest Protection I: Abiotic Agents.** Two credits. 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. Prerequisite: Summer Camp or consent of instructor.

**Forestry 325/525. Principles of Range Management.** Three credits. Technical study of sustained yield management practices applicable to rangelands with consideration of proper stocking and grazing systems and methods of range surveying. Prerequisite: Biology 130; Soils 260; Summer Camp or consent of instructor.

**Forestry 332/532. Silvics.** Three credits. Ecological foundations of silviculture with reference to forest site factors; influence of forests on the environment; growth and development of trees and stands; origin, development, and classification of forest communities. Two hours lecture, three hours laboratory per week. Prerequisite: Forestry 320; Summer Camp or consent of instructor.

**Forestry 333. Urban Forestry.** Three credits. Management of trees and other vegetation in metropolitan areas to enhance the urban environment. Prerequisite: Forestry 332 or consent of instructor.

**Forestry 425/625. Forest Management and Finance.** Three credits. Principles of organizing and regulating forest properties; valuation and investment analysis. Two hours lecture, two hours laboratory per week. Prerequisite: Forestry 321, 322, 332, 432; Summer Camp or consent of instructor.

**Forestry 426/626. Forest Protection II: Biotic Agents.** Four credits. The important insects, disease organisms, and other living agents which damage forest products, or trees in natural and urban

environments; identification, ecology, and control of major species, with emphasis on principles of integrated control. Two hours lecture, four hours laboratory per week. Prerequisite: Forestry 321, Summer Camp, or consent of instructor.

**Forestry 427/627. Recreational Use of Forests and Parks.** Three credits. Principles and methods involved in the development and administration of recreational and interpretive programs on recreational lands. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor.

**Forestry 428/628. Wood Technology.** Three credits. Structure of wood; identification of native woods by microscopic and macroscopic features; physical and chemical properties; uses. Two hours lecture, two hours laboratory per week. Prerequisite: Forestry 321; Summer Camp or consent of instructor.

**Forestry 429. Forest Products.** Two credits. Source, character, and methods of manufacture of natural and derived forest products. Prerequisite: Summer Camp, or consent of instructor.

**Forestry 432/632. Silviculture.** Two credits. 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 hour lecture, three hours laboratory per week. Prerequisite: Forestry 332; Summer Camp or consent of instructor.

**Forestry 493/693. Forestry Field Seminar.** One or two credits. See Field Seminar Program, which is described under Natural Resources.

**Forestry 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 each week, or its equivalent, devoted exclusively to a special project.

**Forestry 720. Forest Tree Improvement.** Four credits. Distribution of genetic variation in forest tree populations; in-

roduction, selection, progeny testing, species hybridizations, and polyploidy to obtain superior tree population. Prerequisite: Mathematics 225 or equivalent.

**Forestry 730. Tree Physiology.** Four credits. The principal physiological processes of trees, including synthesis and use of foods, and growth phenomena. Prerequisite: Biology 551 and Chemistry 220 or equivalent.

## FRENCH

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Courses in French are taught by members of the Department of Foreign Languages and Comparative Literature, which also administers the major and minor in French.

Freshmen and sophomores who have demonstrated proficiency in French may be placed in the appropriate 300- or 400-level course by the department.

**A. A major in French** consists of 31 credits beyond the first year level. Students seeking **teacher certification** should take the following: French 313, 314, 317, 320 or 420, 331 or 332; and nine to 12 credits of French literature.

**B. A minor in French** consists of 21 credits beyond the first year level, with the following courses suggested: French 313, 314, 320, 331 or 332; and three credits of French literature.

**French 101. First Year French.** Four credits. For students with no previous training in the language, or by placement examination.

**French 102. First Year French.** Four credits. Continuation of French 101. Prerequisite: French 101, or by placement examination.

**French 103. First Year Aural-Oral French.** Four credits. Audio-visual approach; for students with no previous training in the language, or by placement examination.

**French 104. First Year Aural-Oral French.** Four credits. Continuation of French 103. Prerequisite: French 103,

or by placement examination.

**French 105. Reading Proficiency in French.** Four credits. Readings in technical prose with a view to developing accuracy and facility in translating. This course does not count toward the major or minor nor toward the foreign language requirement.

**French 106. Reading Proficiency in French.** Four credits. Continuation of French 105. (Restriction applies.) Prerequisite: French 105.

**French 211. Second Year French.** Four credits. Intensive grammar review in reading and speaking French. Prerequisite: French 102 or 104, or by placement examination.

**French 212. Second Year French.** Four credits. As cited in 211. Prerequisite: French 211, or by placement examination.

**French 313. Intermediate Conversation.** Two or three credits. Prerequisite: French 212, or by placement examination.

**French 314. Intermediate Composition.** Two or three credits. Prerequisite: French 212, or by placement examination.

**French 317. Advanced Conversation and Composition.** Two credits. Prerequisite: French 313 or 314; or equivalent.

**French 320. Phonetics and Diction.** Two credits. Prerequisite: French 212, or by placement examination.

**French 331. French Culture and Civilization.** Three credits. Special focus on one or more aspects of French culture. The particular era and emphasis will vary each time the course is offered; it may be repeated for credit under different emphases. Prerequisite: French 313 or equivalent.

Courses in **French Literature** numbered 350 and above will have a sub-title indicating the focus of the course each time it is offered. With a different focus, these courses may be repeated for credit.

**French 350. Seventeenth Century Literature.** Three credits. Prerequisite: French 340, or consent of instructor.

**French 355. Eighteenth Century Literature.** Three credits. Prerequisite: French 340, or consent of instructor.

**French 360. Nineteenth Century Literature.**

The former **French 332** has been combined with **French 331**.

**French 340. Introduction to French Literature.** Three credits. Intensive reading in French literature, methods of literary analysis of the various genres; introduction to fundamental techniques of literary criticism. Prerequisite: French 212, or by placement examination.

**French 341. Survey of French Literature.** Three credits. French literature to 1800. Prerequisite: French 340 or consent of instructor.

**French 342. Survey of French Literature.** Three credits. Nineteenth century French literature to the present. Prerequisite: French 340 or consent of instructor.

**French 343. French Literature in Translation.** Three credits. Selected readings from the seventeenth and eighteenth centuries. This course will not apply to the French major or minor.

**French 344. French Literature in Translation.** Three credits. Selected readings from the nineteenth and twentieth centuries. This course will not apply to the French major and minor.

**French 350. Seventeenth Century Literature.** Three credits. Prerequisite: French 340, or consent of instructor.

**French 370. Twentieth Century Literature.** Three credits. Prerequisite: French 340, or consent of instructor.

The former **French 420** is now **Foreign Language 301**.

**French 493. Special Literature Studies.** Two or three credits. 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. Prerequisite: 300-level literature course, and consent of instructor.

**French 499. Independent Research.** One to three credits. Individual study under the direction of a consenting faculty member. May be taken by junior and senior majors and minors with the consent of the chairman of the department.

## **GENERAL SCIENCE**

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Allen Blocher, Gregory Kulas, advisers (Department of Physics).

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 sciences.

5. Collateral requirement: Mathematics 107 or eligibility for 110.

**C. 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.

Mathematics 107 or eligibility for 110 is a collateral requirement.

## **GEOGRAPHY AND GEOLOGY** \_\_\_\_\_

Alvin Johnson, chairman; Robert Anderson, Philip Bjork, Lawrence Brandt, T. K. Chang, Winthrop Difford, Lyman Echola, Jerry Gerlach, Ronald Janke, John Kapter, William McKinney, Clarence Milfred, Delmar Multhauf, Marshall Parry, Maurice Perret, Richard Sanders, David Sengenberger, David Smit, Raymond Specht, Donald Stetzer, Adrian VanLieshout.

### **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 251, 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 369, 370, 371, 372, 373, 374, 375.
4. Sufficient additional credits to total 34 or more. This may include Latin American Studies 423.

**B. A minor in Geography** consists of 22 credits to include the following:

1. Geography 101, or 102 and 103; 110 or 251.
2. At least one course from each of the following groups:
  - a. Geography 213, 214, 226 or 326, 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.

Geography 101, 102, 103, 352, 353, and 354 are physical geography courses. All others, except Geography 376, 377, 378 and 479, are cultural.

**Geography 100. Fundamentals of Physical Geography.** Three credits. An introductory inquiry into the distribution of the earth's landforms, climates, natural vegetation, and soils. Two hours lecture, two hours laboratory 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.

**Geography 101. Survey of Physical Geography.** Five credits. Map interpretation, earth-sun-moon relationships, weather and climate, and landforms. Three hours lecture, four hours laboratory 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 Geography 102 and 103 (or equivalent) are counted.

**Geography 102. Physical Geography.** Five credits. Elements of weather and climate, including earth-sun relationships, temperature, pressure and winds, humidity, and storms; world climate

classification and vegetation zones. Three hours lecture, four hours laboratory per week.

**Geography 103. Physical Geography.** Five credits. Analysis of the composition and areal distribution of the earth's features, including landforms, soils, rocks and minerals, surface and ground water; map interpretation; field trips. Three hours lecture, four hours laboratory per week.

**Geography 110. Economic Geography.** Three credits. Production and distribution of the world's commodities of commerce—its foodstuffs, raw materials, manufactured goods, and trade.

**Geography 211. Wisconsin.** Two or three credits. A geographic analysis of the natural and cultural features of the state. Prerequisite: Sophomore standing.

**Geography 213. World Regional Geography.** Three credits. 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. Prerequisite: Sophomore standing.



The former **Geography 214, Regional World Geography**, has been replaced with the following course:

**Geography 214. The Northlands.** Three credits. An analysis of the Arctic and Subarctic regions of North America, the North Atlantic, and Eurasia. Prerequisite: Sophomore standing.

**Geography 226. United States and Canada.** Three credits. Regional geography of the United States and Canada. Prerequisite: Sophomore standing.

**Geography 251. Human Geography.** Three credits. An analysis of cultural features as products of an ever changing interaction of human groups both with each other and with their inherited environments. Prerequisite: Sophomore standing.

**Geography 253. Ethnic Geography of the United States.** Three credits. A study of 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. Prerequisite: Sophomore standing.

**Geography 276. Map Analysis and Use.** Two credits. 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 hour lecture, two hours laboratory per week. Prerequisite: Sophomore standing.

**Geography 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 equivalent. Prerequisite: Consent of instructor.

**Geography 300. Africa.** Three credits. 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.

**Geography 301. Middle America.** Two credits. Mexico, Central America, and the Antilles: landforms, climate, natural vegetation, resources, population, historical evolution, political divisions, and economic organization.

**Geography 302/502. Southwest Pacific.** Three credits. 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.

**Geography 326. Historical Geography of the United States.** Three credits. 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.

**Geography 327. Asia.** Three credits. Study of the 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.

**Geography 328. Europe.** Three credits. 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).

**Geography 329. South America.** Three credits. A topical and regional analysis of the geography of South America.

**Geography 330/530. The Soviet Union.** Three credits. A regional and topical geographic interpretation of the USSR in terms of environmental conditions, historical influences, technological development, and Marxist-Leninist ideology.

**Geography 331. China.** Three credits. Regional concept of physical and cultural characteristics of China with special emphasis on resources, population, and economic development.

**Geography 332. Brazil.** Three credits. A regional geography of Brazil, viewing the physical and cultural characteristics, with emphasis on the development of the population, resources, and economy. Prerequisite: Geography 213 or 329, or History 353, or consent of instructor.

**Geography 340. Environmental Degradation: A World Survey.** Three credits. A systematic review of critical locations representing man's destructive effects on the physical environment.

**Geography 352. Landforms.** Three credits. Form and origin of landforms; field trips in the local area to supplement classroom activities. Prerequisite: Geography 101 or 103, or consent of instructor.

**Geography 353. Analytical Climatology.** Three credits. Study of the composition, characteristics, and circulation of the atmosphere. Prerequisite: Geography 101 or 102, or consent of instructor.

**Geography 354. Regional Climatology.** Three credits. A descriptive explanatory analysis of world climatic patterns and

classification systems. Prerequisite: Geography 101 or 102, or consent of instructor.

**Geography 369. Political Geography.** Three credits. A geographic interpretation of political areas; the political significance of cultural and physical aspects of such areas.

**Geography 370. Transportation Geography.** Three credits. Survey and analysis of carriers, terminals, and routes of the world, with emphasis on commodity flow and traffic patterns.

**Geography 371. Geography of Domesticated Plants and Animals.** Three credits. Historical study of the beginnings of agriculture and origins and dispersals of domesticated plants and animals in the world.

**Geography 372. Geography of Manufacturing.** Three credits. The distribution of manufacturing with emphasis on northeastern United States, the nations of Europe, and eastern Asia.

**Geography 373. Urban Geography.** Three credits. Physical characteristics, spatial patterns, functions, populations, land use, and livelihood structures of cities.

**Geography 374. Agricultural Geography.** Three credits. Characteristics, development, and location factors of world agricultural production, including both a topical and a regional analysis.

**Geography 375. Mineral Resources.** Three credits. Distribution and production of world mineral resources, including conservation principles.

**Geography 376. Cartography.** Four credits. History and development of

maps, mathematical principles and projections; globes and models; relief; thematic and statistical cartography. Two hours lecture, four hours laboratory per week.

**Geography 377. Air Photo Interpretation.** Three credits. 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 lecture, two hours laboratory per week.

**Geography 378. Field Study.** Three credits. Direct observation of geographical factors, both physical and cultural, and their influence in a given region. Preparation and presentation of a report. Prerequisite: Geography 376, or consent of instructor.

**Geography 379. Remote Sensing of the Environment.** Three credits. Introduction to the 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. Prerequisite: Any geology or physical geography course, or consent of instructor.

**Geography 386. Advanced Cartography.** Three credits. Scribing, photographic reproduction techniques, dry transfer techniques, electronic cartography (including use of field plotter; advanced map analysis and statistical cartography). One hour lecture, four hours laboratory per week. Prerequisite: Geography 376.

**Geography 390. Selected Field Study.** Same as Geography 290, for juniors and seniors. One credit for each week, or its

equivalent. Prerequisite: Consent of instructor.

**Geography 395. Directed Study.** One to three credits. Students may, by prior arrangement with an instructor, arrange for directed study of a geographical topic. Prerequisite: One course in geography, and consent of the department chairman.

**Geography 399. Research.** One to three credits. Students may, by prior agreement with an instructor, arrange for a special research problem. Research results will be publicly presented. Prerequisite: Consent of department chairman.

**Geography 479. Seminar.** One credit. Problems of geography pertaining to concepts, methods, and practices, regional and topical. Prerequisite: Geography major with senior standing, or consent of instructor.

**Geography 701. World Populations and Resources.** Three credits. 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.

**Geography 713. Agricultural Geography.** Three credits. Origin and dispersal of agriculture, development characteristics, and localization of world agricultural production. Prerequisite: Introductory course in geography or consent of instructor.

The former **Geography 751** is now **Geography 330/530**.

The former **Geography 752** is now **Geography 302/502**.

**Geography 754. Geography of the Far East.** Three credits. Development of agriculture, industry, and trade in rela-

tion to physical setting, resources, and population; study of one selected region for each session. Prerequisite: Introductory course in geography, or consent of instructor.

## 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 295, 339, 370, and 395.

**Geology 100. Geology and Man.** Three credits. The origin and distribution of earth materials as related to human activity. Two hours lecture, two hours laboratory 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.

**Geology 101. Principles of Geology.** Five credits. An introduction to geological processes integrated with a survey of earth history. Three hours lecture, four hours laboratory per week; field trips.

**Geology 104. Physical Geology.** Four credits. Introduction to the study of minerals and rocks and processes which act upon and within the earth. Three hours lecture, two hours laboratory per week; field trips.

**Geology 105. Historical Geology.** Four credits. Survey of the history of the earth and life; emphasis on the evolution of continents. Three hours lecture, two hours laboratory per week; field trips. Prerequisite: Geology 104.

**Geology 295. Directed Study.** One or two credits. Students may, by prior agreement with an instructor, arrange for directed study of a geological topic. Prerequisite: Consent of instructor.

**Geology 300. Mineralogy.** Three credits. An introduction to crystallography and descriptive mineralogy with emphasis on the rock forming minerals. Two hours lecture, two hours laboratory per week. Prerequisite: Geology 104 or Chemistry 105 or 115.

**Geology 339. Fossil History of the Vertebrates.** Three credits. A survey of the evolutionary history of the major vertebrate groups as revealed by the fossil record.

**Geology 340. Sedimentology.** Three credits. The processes of weathering, transportation, deposition, and lithification which produce the detrital, biochemical, and chemical sedimentary rocks. Two hours lecture, two hours laboratory per week; field trips. Prerequisite: Geology 104.

**Geology 370. Pleistocene Geology.** Three credits. The origin and develop-

ment of glacial features and related phenomena over the last three million years; field trips. Prerequisite: Geology 104 or Geography 103 or consent of instructor.

**Geology 395. Directed Study.** One to three credits. Students may, by prior agreement with an instructor, arrange for directed study of a geological topic. Prerequisite: Consent of instructor, and a 300-level course in geology.

## GERMAN

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Courses in German are taught by members of the Department of Foreign Languages and Comparative Literature, which also administers the major and minor in German.

Freshmen and sophomores who have demonstrated proficiency in German may be placed in the appropriate 300- and 400-level courses by the department.

- A. A major in German** consists of 31 credits beyond the first year level. Students seeking **teacher certification** should take the following: German 313, 314, 317, 320 or 420, 331 or 332; and nine to 12 credits in German literature.
- B. A minor in German** consists of 21 credits beyond the first year level, with the following courses suggested: German 313, 314, 320, 331 or 332; and three credits in German literature.



**German 101. First Year German.** Four credits. For students with no previous training in the language, or by placement examination.

**German 102. First Year German.** Four credits. Continuation of German 101. Prerequisite: German 101, or by placement examination.

**German 105. Reading Proficiency in German.** Four credits. Readings in technical prose, with a view to developing accuracy and facility in translating. This course does not count toward the major or minor nor toward the foreign language requirement.

**German 106. Reading Proficiency in German.** Four credits. Continuation of German 105 (restriction applies). Prerequisite: German 105 or consent of instructor.

**German 211. Second Year German.** Four credits. Intensive grammar review. Prerequisite: German 102, or by placement examination.

**German 212. Second Year German.** Four credits. Continuation of German 211. Prerequisite: German 211, or by placement examination.

**German 313. Intermediate Conversation.** Two or three credits. Prerequisite: German 212, or by placement examination.

**German 314. Intermediate Composition.** Two or three credits. Prerequisite: German 212, or by placement examination.

**German 317. Advanced Conversation and Composition.** Two or three credits. Prerequisite: German 313 or 314, or equivalent.

**German 320. Phonetics and Diction.**

Three credits. Prerequisite: German 212, or by placement examination.

**German 331. German Culture and Civilization.** Three credits. Special focus on one or more aspects of German culture. The particular era and emphasis will vary each time the course is offered; it may be repeated for credit under different emphases. Prerequisite: German 313 or equivalent.

The former **German 332** has been combined with **German 331**.

**German 340. Introduction to German Literature.** Three credits. Intensive reading in German literature, methods of literary analysis of the various genres; introduction to fundamental techniques of literary criticism. Prerequisite: German 212, or by placement examination.

**German 343. German Literature in Translation.** Three credits. Selected readings from the eighteenth and the mid-nineteenth centuries. This course will not apply to the German major or minor.

**German 344. German Literature in Translation.** Three credits. Selected readings from the late nineteenth and twentieth centuries. This course will not apply to the German major or minor.

**German 356. Goethe.** Three credits. Works of Goethe. Prerequisite: German 340 or consent of instructor.

**German 357. The Enlightenment and the Classical Period.** Three credits. Background to the Enlightenment and Classical periods; works of Lessing, Schiller, and Goethe. Prerequisite: German 340 or consent of instructor.

**German 360. Literature of the Nineteenth Century.** Three credits. Special

focus on one or more of the following: drama, prose, or poetry. A subtitle will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: German 340 or consent of instructor.

**German 369. Literature at the Turn of the Century.** Three credits. German literature from Naturalism to Expressionism. Prerequisite: German 340 or consent of instructor.

**German 370. Literature of the Twentieth Century.** Three credits. Special focus on one or more of the following: drama, prose, or poetry. A subtitle will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: German 340 or consent of instructor.

The former **German 420** is now **Foreign Language 301**.

**German 441. Survey of German Literature.** Three credits. From the beginnings to the eighteenth century. Pre-

requisite: One 300-level German literature course, or consent of instructor.

**German 442. Survey of German Literature.** Three credits. From the eighteenth century to the present. Prerequisite: One 300-level German literature course, or consent of instructor.

**German 493. Specialized Studies in German Literature.** One to three credits. 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. A subtitle will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: One 300-level German course and consent of instructor.

**German 499. Independent Research in German.** One to three credits. Individual study under the direction of consenting faculty member. May be taken only by upper level majors and minors, with the consent of the chairman of the department.

## GREEK

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Courses in Greek are administered by the Department of Foreign Language and Comparative Literature.

**Greek 105. New Testament Greek.** Four credits. Fundamentals of New Testament Greek necessary to develop reading ability. Not to be counted toward the Foreign Language requirement of the general degree requirements.

**Greek 106. New Testament Greek.** Four credits. Readings from the New Testament. Not to be counted toward the Foreign Language requirement of the general degree requirements. Prerequisite: Greek 105, or consent of the instructor.

## HEALTH EDUCATION

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**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** \_\_\_\_\_

Justus Paul, chairman; Rene Allmont, Robert Artigiani, Frank Crow, Donald Dietrich, Richard Face, Guy Gibson, Rhys Hays, Ronald Hogeland, Randolph Klein, Robert Knowlton, Frederick Krempel, Carol Marion, Paul Mertz, Clifford Morrison, Russell Nelson, William Paul, Stephen Pistono, Charles Rumsey, Elwin Sigmund, William Skelton, Waclaw Soroka, William Stielstra, Hugh Walker, Terry Wick, David Wrone.

**A. A major in History** consists of at least 36 credits:

1. History 211-212.
2. Six credits selected from History 101, 102, 104, 105, 106, 107, 108. (Majors taking 101 will not receive credit toward the major for 105 or 106; majors taking 102 will not receive credit toward the major for 107 or 108.)
3. Six credits selected from History 215, 216, 219, 220, 253, 254.
4. At least 18 advanced credits selected from courses numbered 300 or above, including either 489 or 490 taken during the senior year. These 18 credits must be divided between at least two of the following three fields, with at least six credits in each of the two fields.
  - a. European History: History 301, 302, 304, 305, 307, 308, 309, 310, 311, 314, 315, 316, 317, 319, 320, 321, 322, 323, 324, 325, 326, 327, 330, 331, 332, 333, 334, 335, 339, 340, 399, 490.
  - b. Non-Western History: History 337, 338, 341, 343, 345, 346, 347, 348, 349, 350, 352, 399, 490. Latin American studies 423 may also apply toward this requirement.
  - c. United States History: History 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 382, 383, 384, 385, 387, 388, 389, 399, 490.

Geography 102-103, Political Science 101, and Economics 200 are recommended as corollary courses, but are not required.

**B. A minor in History** consists of at least 24 credits, including:

1. History 211-212.
2. Six credits selected from History 101, 102, 104, 105, 106, 107, 108, 215, 216, 219, 220, 253, 254. (Minors taking 101 will not receive credit toward the minor for 105 or 106; minors taking 102 will not receive credit toward the minor for 107 or 108.)

3. Minors who omit all European surveys must select three credits of European History at the junior-senior level.

4. Twelve advanced credits selected from courses numbered 300 or above.

**History 101. European Civilization I.** Three credits. The origins and development of European institutions and culture, from late antiquity to the fifteenth century.

**History 102. European Civilization II.** Three credits. The development of European institutions and culture, from the fifteenth century to the present.

**History 104. Ancient History.** Three credits. History and civilization of the ancient Near East, Greece, and Rome.

**History 105. Medieval History.** Three credits. Europe from the fourth century to the twelfth century.

**History 106. Medieval History.** Three credits. Europe from the twelfth century to the sixteenth century. Prerequisite: History 105 or consent of instructor.

**History 107. Modern European History.** Three credits. Europe from the sixteenth century to the nineteenth century.

**History 108. Modern European History.** Three credits. Europe in the nineteenth and twentieth centuries.

**History 211. United States History.** Three credits. The United States to 1865. Prerequisite: Sophomore standing.

**History 212. United States History.** Three credits. The United States since 1865. Prerequisite: Sophomore standing.

**History 215. East Asia.** Three credits. A survey of East Asian civilizations, their

institutional and cultural development to the nineteenth century. Prerequisite: Sophomore standing.

**History 216. East Asia.** Three credits. East Asia in the nineteenth and twentieth centuries. Prerequisite: Sophomore standing.

**History 219. A Survey of the Middle East from the Rise of Islam to 1798.** Three credits. Islamic Civilization from Mohammed through the decline of the Ottoman Empire. Prerequisite: Sophomore standing.

**History 220. The Middle East Since 1798.** Three credits. Development of the Middle East from the Napoleonic invasion of Egypt to the present. Prerequisite: Sophomore standing.

**History 241/341. Problems in Russian Cultural History.** Two or three credits. An interpretive approach to Russian Cultural History through the study of selected topics in the fine arts. Prerequisite: Sophomore standing.

**History 253. History of Latin America.** Two or three credits. Colonial Latin America from the discoveries to independence. Prerequisite: Sophomore standing.

**History 254. History of Latin America.** Two or three credits. Recent Latin America from independence to the present. Prerequisite: Sophomore standing.

**History 301/501. History of Western Culture.** Three credits. The nature of

civilization, the development of the practical and fine arts, of government and of human communication, from Pre-history through the Roman period.

**History 302/502. History of Western Culture.** Three credits. Continuation of History 301, from the Roman period to contemporary times.

**History 304/504. Greek History.** Three credits. The history of Ancient Greece.

**History 305/505. Roman History.** Three credits. The history of Ancient Rome through the Republic and Empire.

**History 307/507. Problems in the Early Middle Ages.** Two or three credits. The study of selected problems from the early medieval period. Prerequisite: History 101 or 105, or consent of instructor.

**History 308/508. Problems in the High Middle Ages.** Two or three credits. The study of selected problems from the later medieval period. Prerequisite: History 101 or 106, or consent of instructor.

**History 309/509. The Medieval Church.** Three credits. The history of Western Christianity in the Middle Ages.

**History 310/510. Medieval Thought and Letters.** Three credits. Intellectual history of Europe from the fourth century to the fifteenth century.

**History 311/511. Europe in the Age of the Crusades.** Two or three credits. Europe and the Mediterranean world; the inception of European expansion; the Crusades and their consequences.

**History 314/514. Expansion of Europe, 1415-1660.** Two or three credits. European powers and their colonies during the age of the great discoveries.

**History 315/515. The Renaissance.** Two or three credits. The politics, the arts, the literature, and recovery of the classics during the fourteenth and fifteenth centuries.

**History 316/516. The Age of the Reformation.** Two or three credits. The Protestant and Catholic reformations of the sixteenth and seventeenth centuries.

**History 317/517. The Age of Absolutism.** Two or three credits. Europe from the Treaty of Westphalia to the French Revolution: government and society in the major states; the development of absolute monarchy; benevolent despotism and rivalry among the great powers.

**History 319/519. Economic History of Europe.** Three credits. Development of agricultural, commercial, and industrial institutions of Europe, from the fourth century to 1750.

**History 320/520. Economic History of Europe.** Three credits. Continuation of History 319, from 1750 to the present.

**History 321/521. European Social and Intellectual History.** Three credits. The development of social and intellectual movements in Europe, from the Renaissance to the Enlightenment.

**History 322/522. European Social and Intellectual History.** Three credits. Continuation of History 321, from Romanticism to the present.

**History 323/523. European Diplomatic History, 1500-1815.** Two or three credits. A survey of major problems in European diplomacy from the Renaissance to the end of the Napoleonic era.

**History 324/524. European Diplomatic History, 1815 to the Present.** Two or three credits. A survey of the major

problems in European diplomacy from the Congress of Vienna to the present.

**History 325/525. History of Science.** Three credits. From the Greeks to Galileo.

**History 326/526. History of Science.** Three credits. Since Galileo.

**History 327/527. History of Recent World Politics.** Three credits. Selected topics in world history, 1919 to the present. Prerequisite: History 108 and 212

**History 330/530. England in the Middle Ages.** Three credits. History of England from Anglo-Saxon times to 1485.

**History 331/531. History of England.** Two credits. Tudor and Stuart England; the beginning of modern England, 1485-1714.

**History 332/532. History of England.** Two credits. England since 1714.

**History 333/533. The French Revolution and Napoleon.** Two or three credits. The revolutionary period in Europe and the beginnings of our modern democratic ideals.

**History 334/534. History of France Since 1815.** Two or three credits. The political, economic, and cultural history of France from the Congress of Vienna to the present.

**History 335/535. History of Germany, 1860 to Date.** Three credits. An analysis of Imperial and Republican Germany; the National Socialist State and the period following World War II.

**History 337/537. Russian History and Civilization.** Three credits. From the

tenth century to the eighteenth century; an analysis of Kievan Russia, early Russian principalities, and the rise of Moscow, with emphasis on Byzantine and Mongolian influences.

**History 338/538. Russian History and Civilization.** Three credits. The nineteenth and twentieth centuries; Tsarist Russia, its background, institutions and problems; a survey of the Communist Revolution, the USSR between the two World Wars, in World War II, and after.

**History 339/539. Eastern and Central Europe.** Three credits. History of eastern and central Europe from origins to the Congress of Vienna.

**History 340/540. Eastern and Central Europe.** Three credits. History of eastern and central Europe in the nineteenth and twentieth centuries.

**History 343/543. Africa South of the Sahara.** Three credits. History of European contact with Africans in the nineteenth and twentieth centuries; policies of assimilation and separate development; the independence of African states; federation of pan-Africanism.

**History 345/545. History of China.** Three credits. Chinese civilization, thought, and institutions of 1644; development of a Confucian state; the rise of gentry society; the influence of foreign invasions.

**History 346/546. History of China.** Three credits. China since 1644; political, social, economic, and cultural conflict of the Chinese with the West; the transition to Communist society.

**History 347/547. History of Japan.** Three credits. Japanese culture and institutions to 1854; assimilation of Chinese

influence; the development of feudalism; unification, Tokugawa control and the system of exclusion and seclusion.

**History 348/548. History of Japan.** Three credits. Japan since 1854; Western influence, modernization, the rise to world-power status, and imperialism; the rise of militarism, World War II, and post-war development.

**History 349/549. History of Korea.** Three credits. Korean culture and institutions to 1800; Korea's pivotal role in East Asia; Chinese influence, unification and growth of the state; foreign invasions and domination.

**History 350/550. History of Korea.** Three credits. Korea since 1800; the end of isolation; power rivalries, Western influence and Japanese annexation; independence struggles, division, the Korean War and after.

**History 352/552. Independent Mexico.** Two or three credits. The development of Mexico from the Wars of Independence to the present, with emphasis on the Reform Era and the Revolution of 1910.

**History 356/556. Colonial Era.** Two or three credits. History of the American Colonies to the American Revolution.

**History 357/557. Era of the American Revolution.** Two or three credits. History of the transition from colony to republic, 1763-1787.

**History 358/558. The Early National Period.** Three credits. Framing and ratification of the Constitution; the Washington administration; the Hamilton program; the Adams Federalists; Jeffersonian democracy; the War of 1812.

**History 359/559. The Age of Jackson.** Three credits. The Era of Good Feelings; the election of 1824; J. Q. Adams; Jacksonian democracy; the nullification controversy; the Whigs; the Bank War; the later Jacksonians.

**History 360/560. The Era of Controversy.** Two or three credits. The history of the United States from 1840 to 1860.

**History 361/561. Civil War and Reconstruction.** Two or three credits. The history of the United States from 1860 to 1877.

**History 362/562. United States History, 1877-1917.** Three credits. The age of enterprise, world power, and reform.

**History 363/563. United States History, 1917-1933.** Two or three credits. World War, peace, normalcy, and depression.



**History 364/564. United States History, 1933-1945.** Two or three credits. The New Deal, foreign policy, global war, and peace.

**History 365/565. United States History Since 1945.** Two or three credits. Diplomatic, political, economic, social, intellectual, and constitutional development since World War II.

**History 366/566. Resource Development and Policy in the United States.** Three credits. Development of the agricultural, mineral, forest, and water resources of the United States, including conservation practices and public policies, since the Colonial era.

**History 367/567. The American Frontier.** Three credits. A study of westward expansion to the Mississippi valley and frontier problems.

**History 368/568. The American West.** Three credits. A study of westward expansion from the Mississippi valley to the Pacific Ocean.

**History 369/569. History of the South.** Three credits. The Old South; social and cultural history to 1865.

**History 370/570. History of the South.** Three credits. The New South; social and cultural history since the Civil War.

**History 371/571. Economic History of the United States.** Three credits. American economic life through the Civil War.

**History 372/572. Economic History of the United States.** Three credits. American economic life since the Civil War.

**History 373/573. Constitutional History of the United States.** Two or three credits. Origin and elaboration of

colonial theories and practices; evolution of guarantees for personal liberty; constitutional development to 1877.

**History 374/574. Constitutional History of the United States.** Two or three credits. Constitutional development since the Civil War.

**History 375/575. History of American Diplomacy.** Three credits. Foundations of America's foreign policy during the late eighteenth and nineteenth centuries to 1881.

**History 376/576. History of American Diplomacy.** Three credits. Relations of the United States with the rest of the world from 1881 to the present.

**History 377/577. American Social and Intellectual History.** Two or three credits. The development of social and intellectual movements in the United States to 1865.

**History 378/578. American Social and Intellectual History.** Two or three credits. The development of social and intellectual movements in the United States since the Civil War.

**History 379/579. Afro-American History.** Three credits. A study of the contributions of Afro-Americans to United States History, their institutional life, and the impact of society upon their development, from the Colonial Period to 1865.

**History 380/580. Afro-American History.** Three credits. A study of the contributions of Afro-Americans to United States History, their institutional life, and the impact of society upon their development, from 1865 to the present.

**History 382/582. The North American Indian.** Three credits. The history of

the North American Indian from earliest times to the present.

**History 383. United States Labor History.** Three credits. American workers from colonial times to the present.

**History 384/584. The History of American Military Institutions.** Three credits. The role of the military in American life from the colonial period to the present.

**History 385/585. The American Woman.** Three credits. A social-intellectual history of the American woman from the colonial period to the present.

**History 387/587. American Reform Movement.** Two or three credits. A study of American ideas 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.

**History 388/588. Representative Americans.** Two credits.

**History 389/589. Wisconsin.** Two or three credits. History of Wisconsin from 1634 to the present.

**History 399. Special Work.** Upper class students majoring or minoring in History may, by agreement with the chairman of the History 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.

**History 489. Great Historians and the Sense of History.** Two or three credits. A study of the great historians and their conceptions of history based on readings from their works.

**History 490. Selected Historical Problems.** Two or three credits. An inte-

grative course for analysis of a selected problem(s) common to two or more areas or periods of history. Open to students with senior standing majoring or minoring in History. Open to other seniors with the consent of the department chairman. The specific problem(s) to be treated will be announced in advance each semester.

**History 701. Great Issues in Western History.** Three credits. Discussion of 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.

**History 707. Life in the Middle Ages.** Three credits. The social history of western medieval Europe. Each student will present a paper on a particular aspect of medieval society.

**History 711. English Medieval Constitutional Developments.** Three credits. The development of English institutions of government and law from the Anglo-Saxon period to the advent of the Tudor Dynasty. Prerequisite: History 106 or equivalent.

**History 717. Soviet Russia from 1917 to the Present.** Three credits. The Union of Soviet Socialist Republics, its political, social and economic changes, its place in the Second World War and post-war relations.

**History 720. Recent World Politics.** Three credits. 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. Prerequisite: History 108 and History 212 or equivalent.

**History 746. Problems in the Civil War and Reconstruction.** Three credits. 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. The 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 will be stressed.

**History 748. American Society in Transition 1865-1914.** Two or three credits. 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.

**History 751. The United States in the Second World War.** Two or three credits. The social, economic, intellectual, constitutional, political, military, and diplomatic history of the United States' participation in World War II.

**History 752. The United States Since the Second World War.** Two or three credits. Developments in the history of the United States in recent times in the social, economic, constitutional, political, military, and diplomatic areas.

**History 755. Key Issues in American Constitutional Development.** Three credits. 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.

**History 771. European Historians.** Three credits. Theory and methods in the writing of European history. Special attention is given to the methods, purposes, interpretations, ideas and work of leading historians.

**History 773. American Historians.** Three credits. Theory and methods in the writing of American history. Special attention is given to the methods, purposes, interpretations, ideas, and works of leading historians.

**History 780. Historical Method.** Three credits. Securing and evaluating historical evidence. Construction of historical papers based upon various kinds of source and secondary materials.

**History 782. Seminar in American History.** Three credits. (The specific topic will be indicated each time the seminar is offered.)

**History 784. Seminar in European History.** Three credits. (The specific topic will be indicated each time the seminar is offered.)

**History 786. Seminar in Non-Western History.** Three credits. (The specific topic will be indicated each time the seminar is offered.)

**History 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Regularly scheduled conferences with a staff supervisor.

**History 799. Thesis.** Two to six credits.

## HOME ECONOMICS

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Agnes Jones, Assistant Dean and Head of the School of Home Economics; Mary

Ann Baird, Anita Barsness, Fay Clifford, Ruth Conone, Doris Davis, Orthula Doescher, Jane Febock, Ellen Felician, Grace Hendel, Ethel Hill, Fern Horn, Donald Hosie, Joan Kramer, Bonnie McDonald, Naomi Nash, Edith Pankowski, Shirley Randall, Alice White.

**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.), 380 (3 cr.); Education 351 (3 cr.), 353 (3 cr.); Physical Education 231 (3 cr.).

**2. Home Economics option**, 21 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** consists of the following:

1. Core courses, 12 credits: Home Economics 101, 104, 261, 366.
2. Twenty-four to 31 credits required as follows: Home Economics 105, 253, 345, 347, 377, 448, 455, 457, 397 (1-8 credits).
3. 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).
4. 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 Education 392.
5. Completion of an approved internship.

**Note:** Fulfilling the degree requirements in the Dietetics Option and completing an American Dietetic Association approved internship will satisfy the requirements for membership in the American Dietetic Association.

Those who are selected for the **Coordinated Undergraduate Program in Dietetics** will complete the following courses in lieu of an internship: Home Economics 294, 295, 394, 395, 494, 495.

**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, 377, 381, 383, 446, 448, 455, 457.
- 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, 371, 485.

- b. Twenty-four credits required as follows: Home Economics 105, 253, 345, 381 or 383, 446, 448, 455, 457, 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 Education 392.

**3. Food Service Management:**

- a. Core courses, 16 credits selected from the following, with Home Economics 104 required: Home Economics 101, 102, 104, 211, 261, 366, 371, 485.
- b. Twenty-four credits as follows: Home Economics 105, 253, 345, 347, 377, 383, 448, 449, 455 or 457.
- c. Required collateral courses, 37-39 credits: Biology 101 or 160, 281, 333; Chemistry 105 and 106, or 115 and 116; Chemistry 260; Business 210, 211, 370; Economics 200.
- d. Choice of one of the following, three credits: Business 320, 340; Economics 345; Psychology 270.

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 options two and three 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, 397, 416, to total at least 39 credits.
- b. Collateral courses, 18 credits: Art 102; Business 211, 330, 370 (or Psychology 270); Communication 210 or 217; Economics 201.

### 3. Food and Equipment:

- a. Home Economics 101, 102, 104, 105, 253 or 351, 301, 345, 351 or 366, 371, 381, 397, 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.

### Areas of Study in Home Economics

**Child Development and Family Relations:** Home Economics 116, 261, 361, 364, 366, 397, 399, 467, 490.

**Family Economics and Management:** Home Economics 371, 381, 397, 399, 485, 490.

**Food, Nutrition, and Institution Management:** Home Economics 104, 105, 107, 253, 294, 295, 343, 345, 347, 348, 351, 353, 357, 377, 383, 394, 395, 397, 399, 446, 448, 449, 450, 455, 457, 490.

**Housing and Interiors:** Home Economics 101, 201, 211, 212, 301, 303, 309, 311, 312, 397, 399, 412, 413, 416, 417, 490.

**Textiles and Clothing:** Home Economics 102, 103, 233, 322, 323, 324, 329, 330, 333, 397, 399, 490.

See also course listings under **Home Economics Education** in the next section of the catalog.

**Home Economics 101. Color and Design.** Three credits. Fundamentals of color and design in relation to personal and home problems. One hour lecture, four hours laboratory per week. Students may not receive credit for both Home Economics 101 and Art 101.

**Home Economics 102. Selection of Clothing for Men and Women.** Two credits. Art principles related to the selection of fabric and style for individuals; evaluation of apparel in terms of aesthetic, economic, and social needs.

**Home Economics 103. Clothing Construction.** Three credits. Study and application of basic principles of clothing construction as related to fabric, style, and fit. One hour lecture, four hours laboratory per week.

**Home Economics 104. Human Nutrition and Food Preparation.** Three credits. 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.

**Home Economics 105. Human Nutrition and Food Preparation Laboratory.** Two credits. Basic ingredients and techniques used in food preparation with emphasis on theory; food preparation stressing nutritive value and the man-

agement of money and time. Four hours laboratory per week. Prerequisite: Home Economics 104 or concurrent registration.

**Home Economics 107. Food and Man.** Three credits. Role of food and nutrition affecting man's food habits and beliefs; cultural, socio-psychological, and economic aspects.

**Home Economics 116. Individual and Family Health.** One credit. Health care in relation to current health concerns and resources. One two-hour session per week.

**Home Economics 201. Rendering Techniques.** Three credits. Presentation techniques in the areas of architectural exteriors, interior design, furnishings, and apparel to visually communicate design concepts. Prerequisite: Home Economics 101 or Art 101.

**Home Economics 211. Living Space Design.** Three credits. Matrix aspects, regulations, psychological, and economic factors of housing; design elements applied to space relationships and furnishings to create a satisfying environment. Prerequisite: Home Economics 101 or Art 101.

**Home Economics 212. Housing and Home Furnishings Laboratory.** Two credits. Studio problems in housing and home furnishings; field trips. Four hours laboratory per week. Prerequisite: Home

Economics 211 or concurrent registration.

**Home Economics 233. Textiles.** Three credits. From fiber to finished fabric; recognition, testing, purchase, use and care of textiles. Two hours lecture, two hours laboratory per week. Prerequisite: Sophomore standing.

**Home Economics 253. Nutrition.** Three credits. Dietary standards at different stages in the life cycle; nutrient requirements and interrelationships: digestion and metabolism of foods. Prerequisite: Home Economics 104.

**Home Economics 261. Development of the Young Child.** Three credits. 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 hours lecture, two hours observation per week. Prerequisite: Psychology 200.

**Home Economics 294. Introduction to the Health Professions.** One credit. Roles of various medical, nursing, and allied health professionals in the total care of patients. Prerequisite: Declared major in Food and Nutrition. Field trips are required.

**Home Economics 295. Introduction to Dietetics.** One credit. Dietetics in relation to patient service, food service management, teaching, commercial, research and others. One hour lecture or two hours laboratory per week. Open only to students enrolled in the Coordinated Undergraduate Program in Dietetics. Prerequisite: Home Economics 294, and a physical examination given by the hospital.

**Home Economics 301. Techniques in Illustration and Display.** Three credits. Application of design elements and principles in commercial display and development of creative design techniques; various media explored. Prerequisite: Art 101 or Home Economics 101.



**Home Economics 303. Fashion Illustrating and Design.** Three credits. Problems in designing, sketching, and rendering, as met in the professional practice of fashion illustration; execution of original designs included. Prerequisite: Home Economics 323.

**Home Economics 309. History of Decorative Arts.** Three credits. Historical development of furniture, textiles, and accessories, as they relate to housing and interior design. Prerequisite: Art 101 or Home Economics 101.

**Home Economics 311/511. Advanced Interior Design.** Three credits. Advanced studies in the application of design theory and philosophy to interior living space design.

**Home Economics 312. Structural Decorative Textiles.** Three credits. 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. Prerequisite: Art 101 or Home Economics 101.

**Home Economics 322/522. Clothing Economics.** Three credits. Consumer clothing problems in relation to market conditions. Prerequisite: Home Economics 102; Economics 200.

**Home Economics 323. Applied Dress Design.** Three credits. Study, construction, and fitting of a basic pattern using design principles as applied to flat pattern drafting; construction of a garment. One hour lecture, four hours laboratory per week. Prerequisite: Home Economics 102, 233; or consent of instructor.

**Home Economics 324/524. Tailoring.** Three credits. The application of tailoring techniques to the construction of a

garment. One hour lecture, four hours laboratory per week. Prerequisite: Home Economics 323 or consent of the instructor.

**Home Economics 329/529. History of Costume.** Three credits. The history of costume from ancient times to the present day.

**Home Economics 330. Textiles and Clothing Retailing.** Three credits. Investigation of retailing factors, trade practices, and ethics involved in fashion merchandising. Prerequisite: Economics 201.

**Home Economics 333/533. Experimental Textiles.** Three credits. Standard procedures and equipment for testing fabrics; emphasis on research techniques. One hour lecture, four hours laboratory per week. Prerequisite: Home Economics 233; Chemistry 101 or 103; or consent of instructor.

**Home Economics 343/543. School Food Service.** Two credits. History and philosophy of school food service; legislation, trends, and educational roles; principles of organization and management of school food programs. Prerequisite: Home Economics 104, or consent of instructor.

**Home Economics 345. Meal Planning and Serving.** Three credits. Advanced food preparation with emphasis on meal planning, management and table service; each student has experience in demonstration and guest meal techniques. One hour lecture, six hours laboratory per week. Prerequisite: Home Economics 104; Chemistry 101 or 105 or 115.

**Home Economics 347/547. Organization and Management of Food Service.** Four credits. Principles of financial and

production controls and the selection and the layout of equipment in food service systems. Three hours lecture, two hours laboratory per week. Prerequisite: Home Economics 104, or consent of instructor.

**Home Economics 348/548. Quantity Food Production.** Three credits. 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 hour lecture, six hours laboratory per week. Prerequisite: Home Economics 104, 253; Chemistry 260; or consent of instructor.

**Home Economics 351. Elementary Nutrition.** Three credits. The food needs of the individual and the foods which supply those needs, with special emphasis on the food needs of children.

**Home Economics 355/555. Diet Therapy.** Three credits. Application of nutrition principles in the study of the dietary treatment of certain conditions and diseases. Two hours lecture, two hours laboratory per week. Prerequisite: Home Economics 104, 253; Chemistry 260.

**Home Economics 357/557. Advanced Nutrition.** Three credits. Chemistry of foods and nutrition and the interrelationships in meeting the nutritional needs in humans. Two hours lecture, two hours laboratory per week. Prerequisite: Home Economics 104, 253; Chemistry 260; or consent of instructor.

**Home Economics 361. Theory and Guidance of Play for Young Children.** Three credits. Theory and guidance of play activities which provide for growth through art, music, dramatic play, science, and other materials. One hour lecture, four hours of participation in

pre-school laboratory per week. Prerequisite: Home Economics 261 or Psychology 260 or consent of instructor.

**Home Economics 364. Administration of Early Childhood Education Programs.** Two credits. Organization and supervision including community relations, certification standards, budgeting, staffing, program design, facilities, and health protection.

**Home Economics 366. Family Relationships.** Three credits. Interpersonal relationships within the family at all stages in the life cycle. Prerequisite: Psychology 200 or Sociology 101 or consent of instructor.

**Home Economics 371. Family Economics and Management.** Three credits. Factors important in individual and family buying; evaluation of consumer information; management and economics principles in relation to use of resources.

**Home Economics 377/577. Institution Purchasing.** Two credits. Principles and methods of purchasing food in quantity. One hour lecture, two hours laboratory per week. Prerequisite: Home Economics 104 or consent of instructor.

**Home Economics 381/581. Equipment for the Home.** Two credits. Selection, use, and care of household equipment. Lecture and laboratory, four hours per week. Prerequisite: Home Economics 371 or consent of instructor.

**Home Economics 383/583. Institution Equipment and Layout.** Two credits. Selection, arrangement, installation, use and care of various types of equipment and furnishings for institutional food service departments. Lecture and laboratory, four hours per week. Prerequisite: Home Economics 104 or consent of instructor.

**Home Economics 391/591. Study Tour.**

One to six credits. Study tours to appropriate industries, museums, or facilities for students in various curricular areas in Home Economics. A sub-title will be added to describe the area each time the course is offered.

**Home Economics 394. Dietetic Practicum. I.**

Two credits. Supervised experiences in patient services, food service management, teaching, commercial, research, and other aspects of applied nutrition. Forty hours required per credit. Prerequisite: Home Economics 295, consent of instructor, and a physical examination given by the hospital. Open only to students in the Coordinated Undergraduate Program in Dietetics.

**Home Economics 395. Dietetic Practicum II.**

Two credits. A continuation of Home Economics 394. Forty hours required per credit. Prerequisite: Home Economics 394, consent of instructor, and a physical examination given by the hospital. Open only to students in the Coordinated Undergraduate Program in Dietetics.

**Home Economics 397. Field Work.**

One to eight credits. A supervised training work program in a cooperating off-campus establishment; work experience and supervision followed by an evaluation of individual progress.

**Home Economics 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.

**Home Economics 412/612. Institutional Interior Design.**

Three credits. Individ-

ual assigned problems in interior design; solutions, presentations, and evaluation. Prerequisite: Home Economics 212.

**Home Economics 413/613. Problems of Housing.**

Three credits. Housing as a cultural, economic, and institutional force; future development and needs. Prerequisite: Home Economics 211.

**Home Economics 416/616. Furniture and Accessory Design.**

Two or three credits. Utilization of art principles and theories in the creative design of applied products such as furniture and accessories in a living space environment. Prerequisite: Home Economics 101 or Art 101.

**Home Economics 417. Applied Textile Design.**

Three credits. 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. Prerequisite: Home Economics 101 or Art 101, and Home Economics 233 or consent of instructor.

**Home Economics 446/646. Experimental Foods.**

Three credits. Application of scientific principles and experimental procedures in food preparation. One hour lecture, four hours laboratory per week. Prerequisite: Home Economics 104; Chemistry 101 or 105 or 115; Biology 333; or consent of instructor.

**Home Economics 449/649. Food Service Administration.**

Three credits. 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 hour lecture, four hours laboratory per week.

Prerequisite: Home Economics 347, 448; or consent of instructor.

**Home Economics 450/650. Social and Cultural Aspects of Food.** Three credits. Foods and food customs of various regional, national, and ethnic groups. Two hours lecture, three hours laboratory per week.

**Home Economics 467/667. Parent Education.** Two or three credits. Principles, procedures, and current research implications for working with parents and families. Prerequisite: Home Economics 361 or consent of instructor.

**Home Economics 485. Home Management.** Two credits. 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. Prerequisite: Home Economics 345.

**Home Economics 490/690. Workshop in Home Economics.** One to four credits. Workshop techniques applied to various curricular areas in Home Economics. A subtitle will be added to describe the area considered each time the course is offered.

**Home Economics 492. Demonstration Techniques.** Two credits. Analysis, application, and evaluation of demonstration techniques.

**Home Economics 494. Dietetic Practicum III.** Four credits. Experience and practice in therapeutic dietetics in an affiliated clinical setting approved by the American Dietetic Association. Prerequisite: Home Economics 395 and current Hospital Physical Examination.

Open only to students in the Coordinated Undergraduate Program in Dietetics.

**Home Economics 495. Dietetic Practicum IV.** Four credits. Experience and practice in administrative dietetics in an affiliated clinical setting approved by the American Dietetic Association. Prerequisite: Home Economics 395 and current Hospital Physical Examination. Open only to students in the Coordinated Undergraduate Program in Dietetics.

**Home Economics 700. Trends in Home Economics.** Three credits. New developments in the field of home economics. Implications in research for individual and family needs.

**Home Economics 712. Perspectives in Related Art.** Three credits. 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.

**Home Economics 719. Seminar in Housing and Home Furnishings.** Three credits. Critical review of current research data.

**Home Economics 721. Recent Developments in Textiles and Clothing.** Three credits. Recent trends in the field of textiles and clothing, with emphasis on related consumer problems.

**Home Economics 729. Seminar in Textiles and Clothing.** Three credits. Critical review of current research data.

**Home Economics 748. Recent Advances in Food.** Three credits. Developments in food and food science; legislation concerning food quality.

**Home Economics 749. Seminar in Food**

**and Nutrition.** Three credits. Critical review of current research data.

**Home Economics 753. Recent Advances in Nutrition.** Three credits. Lectures, reports, and demonstrations dealing with recent developments in nutrition.

**Home Economics 765. Issues in Family Living.** Two or three credits. Investigation of current literature to determine issues affecting the nature and variability of the family.

**Home Economics 769. Seminar in Human Development and Family Relationships.** Three credits. Critical review of current research data.

**Home Economics 771. Current Prob-**

**lems in Family Economics.** Two or three credits. The family role in the changing economy; providing for family financial security; individual problems.

**Home Economics 779. Seminar in Home Management and Family Economics.** Three credits. Critical review of current research data.

**Home Economics 796. Independent Study in Home Economics.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization.

**Home Economics 799. Thesis.** Two to six credits. Research project dealing with a specific problem in an academic area and culminating in a thesis.

## HOME ECONOMICS EDUCATION

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**The Master of Science Degree—Home Economics Education** is described in the section of the catalog on THE GRADUATE COLLEGE.

**Home Economics Education 391. Curriculum for Home Economics.** Three credits. Philosophy, curriculum, and evaluative materials for the home economics program K-12.

**Home Economics Education 392. Techniques for Teaching Home Economics.** Two credits. Techniques, materials, and administration for home economics programs K-12.

**Home Economics Education 394. Philosophy of Vocational and Adult Education.** Two to three credits. Philosophy, organization and administration of vocational, technical and adult education. Emphasis on programs in Wisconsin.

**Home Economics Education 395/595. Introduction to Vocational Guidance.** Two credits. Occupational opportunities and statutory requirements in vocational and technical education programs.

**Home Economics Education 396/596. Cooperative Occupational Education Programs.** Two credits. Philosophy, organization, and teaching techniques for cooperative vocational programs. Prerequisite: Student must meet requirements for admission to the Professional Education sequence.

**Home Economics Education 791. Curriculum in Home Economics.** Three credits. Curriculum trends, evaluation of

home economics programs, principles of curriculum structuring and development of guides for teaching home economics.

**Home Economics Education 792. Perspectives in Home Economics.** Two or three credits. Critical analysis of recent developments in home economics education; trends in curriculum development, techniques, and materials.

**Home Economics Education 793. Evaluation of Home Economics Programs.** Three credits. Techniques in the analysis of occupational and homemaking programs.

**Home Economics Education 798. Research in Home Economics.** Three credits. Definition of problems and issues; critical examination of the research literature; planning of experimental investigation.

## **INSTITUTION MANAGEMENT**

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See **Food Service Management** under the Home Economics listing.

## **INSTRUCTIONAL RESOURCES**

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Richard Boutelle, Clifford Cone, William Farlow, John Gillesby, Harlan Hoffbeck, Keith Lea, Robert Lewis, Susan Schrup, Ruth Steffen, Roy VanDreser.

Fulfillment of the requirements for the Learning 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 Learning Resources** consists of a minimum of 25 credits including:

1. Learning Resources 211, 222, 223, 321, 325, 331, and 332; English 275 and 375.
2. Remaining credits to be selected from Learning Resources 231, 322, 399.

**B. A minor in Library Science.** Meeting state licensing requirements for school librarianship, consists of a minimum of 25 credits including:

1. Learning Resources 222, 223, 321, 325, and 331; English 275 and 375.
2. Remaining credits to be selected from the Learning Resources curriculum.

**C. 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 Learning Resources 395 as a part of Education 398, in both of the minors described above.

The sequence of Learning 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 Learning Resources 331, and 231 or 332, and 18 credits in Education.

**Learning Resources 101. Effective Use of the Learning Resource Center.** One credit (Pass-Fail only). An introduction to the services, personnel, and organization of the Learning Resources Center and to the development of basic skills necessary for its use as an effective aid to study, research, and enjoyment.

**Learning Resources 211. The Learning Resources Approach in Education.** One credit. An introductory course in the development of the Learning Resources concept; a study of the 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. Prerequisite: Sophomore standing.

**Learning Resources 222. Introduction to Reference.** Two or three credits. 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. Prerequisite: Sophomore standing.

**Learning Resources 223. Building Learning Resources Collections.** Two or three credits. Problems and values in building library collections with full concern for all materials that have relevance to the needs of elementary and secondary schools. Prerequisite: Sophomore standing.

**Learning Resources 231. Basic Photography.** Two credits. 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. Prerequisite: Sophomore standing.

**Learning Resources 321. General Cataloging and Classification.** Four credits. 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. Prerequisite: Learning Resources 222 and 223, or consent of instructor.

**Learning Resources 322. Workshop in Learning Resources.** One to three credits. Workshop techniques applied to the 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.

**Learning Resources 325. Organization and Supervision of the Learning Resources Center.** Three credits. 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. Prerequisite: Learning Resources 211 or consent of instructor.

**Learning Resources 331/531. Audio-Visual Media.** Three credits. 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.

**Learning Resources 332. Local Production of Media.** Two credits. Techniques in the planning and production of such media as flannel boards, filmstrips, single concept films, motion pictures, and tapes, and multi-media presentations. Prerequisite: Learning Resources 231 or 331, or consent of instructor.

**Learning Resources 352.** (Formerly Bibliography 351) **Introduction to Library Resources.** Two credits. 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.

**Learning Resources 395. Practicum.** Two to five credits. 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.

**Learning Resources 399. Special Work.** Students minoring in Learning Resources may, with the approval of the chairman of the Learning Resources 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. A maximum of two credits for such work will be acceptable for the minor in Learning Resources.

**Learning Resources 711. Preparation and Utilization of Programmed Instruction.** Three credits. 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. Prerequisite: Psychology 450 or its equivalent is recommended.

**Learning Resources 713. Instructional Design.** Three credits. The application of the principles of system 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.

**Learning Resources 721. Utilization of Television in the School.** Two credits. A course to aid the experienced teacher in techniques necessary for utilization of educational television programs in large group, small group, and individualized instruction.



## LATIN AMERICAN STUDIES

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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 (Colonial Latin America), 254 (Recent Latin America), 352 (Independent Mexico); **Latin American Studies** 399 (Special Work), 423 (Latin American Development); **Political Science** 375 and 376 (Government and Politics of Latin America); **Spanish** 332 (Latin American Civilization), 471 (Contemporary Spanish American Literature), 353 (Survey of 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, 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.

**Latin American Studies 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.

**Latin American Studies 423. Latin American Development.** Three credits. 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. Prerequisite: Six hours of work in Latin American Studies content courses or consent of the Latin American Studies adviser.

**Latin American Studies 423. Latin Amer-**

## LEARNING DISABILITIES

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See **Special Learning Disabilities.**

## LEARNING RESOURCES

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See **Instructional Resources.**

**Learning Resources 101. Effective Use of the Learning Resources Center.** One credit (Pass-Fail only). An introduction to the services, personnel, and organiza-

tion of the Learning Resources Center and to 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; Richard Boutelle, Assistant Director of Instructional Development; Fred Buehler, Assistant Reference Librarian; Theresa Chao, Periodicals Librarian; Clifford Cone, Photography; Donald Ferguson, Assistant Cataloger; Arthur Fish, Documents Librarian; John Gillesby, Head Reference Librarian; David Graf, Producer-Director of Instructional TV; Kathleen Halsey, Assistant Reference Interlibrary Loan Librarian; Donald Lacock, Director of Instructional Media Services; Keith Lea, Director of Technical Services; Fredrick Michels, Assistant Cataloger; Barbara O'Neill, Assistant Circulation Librarian; Barbara Paul, Assistant Cataloger; Patricia Paul, Head Cataloger; Alice Randlett, Assistant Acquisitions Librarian; Susan Schrup, Head of Instructional Materials Center; Linette Schuler, Assistant Reference Librarian; Zophia Soroka, Bibliography Librarian; Ruth Steffen, Assistant Cataloger.

## **LECTURE-FORUM COURSE** \_\_\_\_\_

Alan Lehman in charge.

**Lecture-Forum 101, 102, 301, 302. Lecture-Forum Course.** Each one credit. 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 **Learning Resources**.

## **MATHEMATICS** \_\_\_\_\_

H. Howard Thoyre, chairman; Kenneth Brown, William Cable, Stanley Carlson, Jyotsna Chander, Richard Conlon, Charles Johnson, John Johnson, George Kung, Sonja Kung, Matthew Liu, Gilbert Mages, Gordon Miller, Oniel Mitter, Robert Morris, Kenneth Nelson, Duane Olson, Orville Rice, Richard Schoenecker, Mark Schuh, Martha Schuh, Bruce Staal, Edith Treuenfels, John Weiler, Wayne Wild.

**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 for acceptance and retention as a mathematics major. Students not meeting this standard may petition the department chairman for consideration.

A maximum of three credits from among the 18 credits required in courses numbered 300 or above may be at the "D" level. For each additional credit with a grade of "D" the student must earn additional compensating credit with a grade of at least "C."

A student majoring in mathematics is required to have his adviser's signature on his 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, 225 or 351, 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 Fine Arts, 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 Natural Resources 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.
3. **Level II preparation** in mathematics consists, in most cases\*, of three acceptable units of high school mathematics.
4. **Level III preparation** in mathematics consists, in most cases\*, of four acceptable units of high school mathematics.

\*Credit earned in a course in which the content covered is substantially less than that included in a traditional course will be evaluated accordingly.

**Mathematics 103. Great Ideas in Mathematics.** Four credits. Traditional and contemporary mathematical thought from aesthetic, historical, and practical viewpoints. Open only to students who present less than the prerequisite for Mathematics 105, or with consent of the chairman of the department.

**Mathematics 104. Essentials of Algebra and Geometry.** Two credits. Beginning algebra and geometry. Open only to students who present less than the prerequisite for Mathematics 105, or with consent of the chairman of the department. Does not apply toward the general mathematics requirements for a degree.

**Mathematics 105. College Algebra and Trigonometry.** Four credits. Beginning college algebra; trigonometric functions of acute angles. Prerequisite: **Level I** preparation in mathematics and a suitable placement score; or Mathematics

104; or consent of the chairman of the department.

**Mathematics 107. Integrated Algebra and Trigonometry.** Four credits. Concepts of algebra and trigonometry essential to subsequent mathematics courses. Prerequisite: **Level II** preparation in mathematics and a suitable placement score; or Mathematics 105; or consent of the chairman of the department.

**Mathematics 108. Mathematics of Finance.** Four credits. Simple and compound interest, equivalence, annuities, amortization, sinking funds, bonds, depreciation, life insurance. Prerequisite: Eligibility for Mathematics 107.

**Mathematics 110. Analytic Geometry and Calculus I.** Four credits. Analytic geometry of the plane; differentiation and integration of algebraic functions with some applications. Prerequisite:

**Level III** preparation in mathematics and a suitable placement score; or Mathematics 107; or consent of the chairman of the department.

**Mathematics 111. Analytic Geometry and Calculus II.** Four credits. Analytic geometry of the plane continued; differentiation and integration of transcendental functions; integration techniques; parametric equations and vectors; additional applications. Prerequisite: Mathematics 110.

**Mathematics 212. Analytic Geometry and Calculus III.** Four credits. Introduction to solid analytic geometry; differentiation of functions of several variables; multiple integrals; infinite series; applications. Prerequisite: Mathematics 111.

**Mathematics 213. Introduction to Linear Algebra.** Four credits. Logic; set theory; vector spaces over a field; linear transformation; matrices. Prerequisite: Mathematics 111.

**Mathematics 224. Calculus.** Four credits. 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. Mathematics 110 and Mathematics 224 may not both be taken for credit. Prerequisite: Eligibility for Mathematics 107.

The former **Mathematics 225** is now **355**.

**Mathematics 229. Foundations of Arithmetic for the Elementary School Teacher.** Three credits. Basic concepts of sets, logic, and number systems with special emphasis on structure. Two hours lecture and two hours laboratory per week. Prerequisite: Two acceptable units of high school mathematics, or Mathematics 104, or consent of the

chairman; and concurrent registration in Mathematics Education 229. Not to be counted toward a Mathematics major or minor.

**Mathematics 239. Modern Algebra for the Elementary School Teacher.** Three credits. Topics selected from linear and abstract algebra with emphasis on topics directly related to the elementary school mathematics curriculum. Two hours lecture and two hours laboratory per week. Prerequisite: Mathematics 229, and concurrent registration in Mathematics Education 239. Not to be counted toward a Mathematics major or minor.

**Mathematics 310. Concepts of Modern Elementary Mathematics.** Four credits. Basic structures and concepts of arithmetic, algebra, and geometry. Intended primarily for prospective elementary teachers. Not to be counted toward a Mathematics major or minor. This course not available to students enrolling as freshmen after June 1, 1971.

**Mathematics 320. Differential Equations.** Three credits. 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. Prerequisite: Mathematics 212.

**Mathematics 322. Vector Analysis.** Three credits. Vector algebra; vector calculus; gradient, divergence, and curl; divergence theorem. Stokes' theorem; line and surface integrals; introduction to tensor analysis; applications. Prerequisite: Mathematics 212.

**Mathematics 323. Foundations of Analysis.** Three credits. The elementary topological properties of the real line and

the Euclidean plane; connectedness, compactness, continuous and uniformly continuous functions. Prerequisite: Mathematics 213.

**Mathematics 324. Complex Variables.** Three credits. Complex numbers, functions of a complex variable; power series; elementary functions; conformal and bilinear transformations; integral theorems; Taylor and Laurent expansions; theory of residues; applications. Prerequisite: Mathematics 212.

**Mathematics 327. Advanced Calculus.** Three credits. Advanced treatment of infinite series, partial derivatives, exact differentials, lines, surface and volume integrals, and generalized integrals. Prerequisite: Mathematics 212.

**Mathematics 330. Intermediate Linear Algebra.** Three credits. Canonical forms (congruence, equivalence, similarities); applications. Prerequisite: Mathematics 213.

**Mathematics 331. Abstract Algebra.** Three credits. Introduction to groups, rings, fields, number systems, Euclidean domains, and polynomials. Prerequisite: Mathematics 213.

**Mathematics 335. Number Theory.** Three credits. Primes, composites, and divisibility; congruences and residue classes; number-theoretic functions; Diophantine equations. Prerequisite: Mathematics 111.

**Mathematics 340. College Geometry.** Three credits. Advanced topics in Euclidean geometry. Prerequisite: Mathematics 111.

**Mathematics 341. Non-Euclidean Geometry.** Three credits. The historical and logical development of hyperbolic and elliptic geometry. Prerequisite: Mathematics 111.

**Mathematics 342. Projective Geometry.** Three credits. Projective spaces; finite projective planes; the projective plane over the real numbers; special configurations, affine planes. Prerequisite: Mathematics 111.

**Mathematics 344. Advanced Analytic Geometry.** Three credits. Advanced topics in plane and solid analytic geometry. Prerequisite: Mathematics 111.

**Mathematics 348/548. Measurement and Computation for the Elementary School Teacher.** Three credits. 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. Prerequisite: Mathematics 310, or equivalent; or consent of instructor. Not to be counted toward a Mathematics major or minor.

**Mathematics 349. Geometry for the Elementary School Teacher.** Three credits. Metric and non-metric properties of Euclidean geometry; basic concepts of non-Euclidean geometry; finite geometries. Two hours lecture and two hours laboratory per week. Prerequisite: Mathematics 239, and concurrent registration in Mathematics Education 349. Not to be counted toward a Mathematics major or minor.

**Mathematics 351. Probability and Statistics I.** Three credits. An introduction to probability from a set-theoretic viewpoint, probabilities in discrete sample spaces; random variables; properties of distributions. Prerequisite: Mathematics 111.

**Mathematics 352. Probability and Statistics II.** Three credits. Probability density functions; moments; Student T and chi-square distributions; correlation and regression; tests of hypotheses; applications. Prerequisite: Mathematics 351.

**Mathematics 355.** (Formerly 225) **Elementary Statistical Methods.** Four credits. 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 hours lecture, two hours laboratory per week. Not open to students who have had Mathematics 225. Not to be counted toward a Mathematics major or minor, or the Mathematics major for teacher certification. Prerequisite: Eligibility for Mathematics 107.

**Mathematics 359. Probability and Statistics for the Elementary School Teacher.** Three credits. Concepts of probability and statistics with emphasis on topics related to the elementary school mathematics curriculum. Two hours lecture and two hours laboratory per week. Prerequisite: Mathematics 229. Not to be counted toward a Mathematics major or minor.

**Mathematics 360. Numerical Analysis.** Three credits. Differences and interpolation; function approximation; solution of equations; linear systems and matrices; numerical solutions of ordinary differential equations; least square approximation; quadrature. Prerequisite: Mathematics 212 and Computer Science 106, or consent of the chairman of the department.

**Mathematics 372. Topology.** Three credits. Topologies; topological spaces, relative topologies; separation axioms; connectedness; compactness, metrizable; continuity. Prerequisite: Mathematics 323.

**Mathematics 380. Seminar in the History of Mathematics.** Two credits. The historical development of selected mathematical ideas. Prerequisite: Mathematics 213.

**Mathematics 385/585. Historical Topics for the Elementary School Teacher.** Three credits. 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. Prerequisite: Mathematics 310, or equivalent; or consent of instructor.

**Mathematics 390. Special Topics in Mathematics.** Two or three credits. Topic and number of credits will be announced when the time table is published each semester. Prerequisite: Consent of the chairman of the department.

**Mathematics 499. Special Work.** Upper class students majoring in Mathematics 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. Normally no more than three credits may be counted toward the Mathematics major.

## **MATHEMATICS EDUCATION**

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**Mathematics Education 229. The Teaching of Elementary School Mathematics.**

One credit. 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. Prerequisite: Concurrent registration in Mathematics 229.

**Mathematics Education 239. The Teaching of Elementary School Mathematics.** One credit. Principles, aims, methods, and techniques of teaching elementary school mathematics with emphasis upon the teaching of algebraic concepts. Prerequisite: Concurrent registration in Mathematics 239.

**Mathematics Education 319. The Teaching of Elementary School Mathematics.** One credit. 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. Prerequisite: Mathematics 310, or concurrent registration in Mathematics 310.

**Mathematics Education 349. The Teaching of Elementary School Mathematics.** One credit. Principles, aims, methods, and techniques of teaching elementary school mathematics, with emphasis upon the teaching of geometry. Prerequisite:

Concurrent registration in Mathematics 349.

**Mathematics Education 375/575. A Laboratory Approach to Mathematics.** Three credits. 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 previous training in the use of a mathematics laboratory. Prerequisite: Mathematics Education 319 or Education 335; or equivalent; or consent of instructor.

**Mathematics Education 390. Special Topics.** One to three credits. Topic and number of credits will be announced when the Time Table is published. Prerequisite: Consent of the chairman of the department.

**Mathematics Education 399. Special Work.** One to three credits. 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. Prerequisite: Consent of the chairman of the department.

## MEDICAL TECHNOLOGY

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Mr. Temp, 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 and 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.

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, 225; Computer Science 106, 229.

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 twelve 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:

St. Elizabeth's Hospital, Appleton, Wisconsin  
James Erchul, M.D.; Robert Cihak, MT (ASCP)

Beaver Dam Community Hospitals, Inc., Beaver Dam, Wisconsin  
W. G. Richards, M.D.; Mary Ann Firehammer, MT (ASCP)

Madison General Hospital, Madison, Wisconsin  
Philip Piper, M.D.; Audrey Tessmer, MT (ASCP)

St. Mary's Hospital Medical Center, Madison, Wisconsin  
D. M. Conners, M.D.; Shirley Armstrong, MT (ASCP)

St. Joseph's Hospital, Marshfield, Wisconsin  
C. N. Reyes, M.D.; Virginia Narlock, MT (ASCP)

Doctor's Hospital, Milwaukee, Wisconsin  
R. F. Lipo, M.D.; Barbara Peplinsky, MT (ASCP)

Theda Clark Memorial Hospital, Neenah, Wisconsin  
Paul Gohdes, M.D.; Thom Pharmakis, MT (ASCP)

St. Anthony's Hospital, Rockford, Illinois  
Gilbert Stansell, M.D.; N. Eikenberry, MT (ASCP)

Swedish-American Hospital, Rockford, Illinois  
C. L. Lafler, M.D.; Jacqueline Parochka, MT (ASCP)

St. Michael's Hospital, Stevens Point, Wisconsin  
A. Milano, M.D.; Mary Lou Grantham, MT (ASCP)

Waukesha Memorial Hospital, Waukesha, Wisconsin  
Robert Kascht, M.D.; B. E. Rankin, MT (ASCP)

Wausau Hospital, Inc., Wausau, Wisconsin  
R. Bartholomew, M.D.; Erla Schuette, MT (ASCP)

West Allis Memorial Hospital, West Allis, Wisconsin  
H. J. Conlon, M.D.; Joyce Cissel, MT (ASCP)

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. The director of the school in which the student interns must notify the University Registrar that the internship has been successfully completed before the degree is awarded.

## **MILITARY SCIENCE** \_\_\_\_\_

Lieutenant Colonel John Porter, Chairman; Captain Theodore Blasche, Captain Linda Burch, Major Nick Green, Captain Paul Rohde.

The Military Science Department offers to male and female students alike, 16 credit hours of courses which may be taken on either a selected basis for credit only, or as a complete program to qualify the student for a commission as a second lieutenant in the U. S. Army Reserve or the Regular Army upon graduation and satisfactory completion of program requirements. The Reserve Officer Training Corps (ROTC) Program is designed to provide leadership and management skills which are desired in a civilian career and required for entry in the military service in a leadership capacity. Commissioning of U. S. Army officers from this source provides a civilian academic influence into the military and augments the number of future U. S. Army leaders available in time of emergency. ROTC instruction may commence with either the first or the second semester. It is undertaken concurrently with the individual's selected undergraduate curriculum and may overlap graduate study. A detailed Military Science Program orientation is available upon request.

The four-year curriculum provides a progressive course of study in leadership and management and consists of a two-year basic course and a two-year advanced course. The basic course is voluntary and involves no obligation either for military service or even for continuation of the individual Military Science offering. The two-year advanced course is also voluntary, but a three month to two year active duty obligation plus an obligation for reserve component duty is incurred by program students. Service veterans may qualify for direct enrollment in the advanced course and receive all financial benefits of ROTC in addition to their GI Bill benefits.

Advanced course program students are paid a \$100.00 untaxed subsistence allowance for up to 10 months of each school year. A six week advanced ROTC Summer Camp must be attended by all program students, usually between the junior and senior year. While at the advanced ROTC Summer Camp, the student is paid travel expenses and one-half of the base pay of a second lieutenant.

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 apply while still a sophomore, be selected by a committee composed of military and civilian faculty members, and attend a paid "Basic" summer camp for six weeks during the summer following that sophomore year. Students who are further along in school, but who have a minimum of two years of undergraduate and/or graduate study remaining at UW-SP 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 last two years of the four-year program.

Four-year, 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 \$100.00 per month for up to ten months of each school year are included in the scholarship.

The Regular Army commissions may be obtained on a competitive basis. A fellowship program providing scholarships in graduate school is also available.

Army-financed flight training is open to MS IV (senior year) students as an extra-curricular activity. Ranger and Airborne training may also be made available to outstanding advanced program participants. The wide variety of ROTC activities in which ROTC students may participate includes: precision drill, intramural athletic participation, social events, marksmanship, visits to military facilities, and survival training.

Basic Course: Military Science 017, 018, 027, 028, 101, 102, 211, 212. Advanced Course: Military Science 037, 038, 047, 048, 301, 302, 451, 452, 453.

**Military Science 101. United States Defense Establishment.** One credit. Analysis of United States Army organization, its missions and functions in peace and wartime. Study of the Department of Defense, the United States Navy and the Air Force. Discussion of squad and platoon organizations.

**Military Science 102. United States Defense Establishment.** One credit. Analysis of definitions and causes of war, the principles of war and its changing aspects; goals, factors and instruments that influence national power, their implications and the objectives of national security and defense.

**Military Science 017. Leadership Laboratory.** No credit. Fundamentals of leadership, drill, and exercise of command; military courtesy, discipline, and esprit de corps.

**Military Science 018. Leadership Laboratory.** No credit. Continuation of Military Science 017.

**Military Science 211. Map Reading and**

**Leadership of Small Units.** Two credits. Utilization of maps and aerial photographs to include terrain appreciation and evaluation; principles of offensive and defensive operations; communications and command control.

**Military Science 027. Leadership Laboratory.** No credit. Continuation of Military Science 017 and 018; emphasis on functions, duties, and responsibilities of junior military leaders. Prerequisite: Satisfactory completion of Military Science 017 and 018 or constructive credit therefore.

**Military Science 212. United States Military History.** Two credits. A study of American history emphasizing factors which contributed to the development of the military establishment, military art and related social and economic trends. Taught in conjunction with the University's History Department.

**Military Science 028. Leadership Laboratory.** No credit. Continuation of Military Science 027. Prerequisite: Satisfactory completion of Military Science 027 or constructive credit therefore.

**Military Science 301. Leadership and Teaching Principles.** Two credits. Principles, objectives and techniques of leadership and methods of instruction; functions of the leader and special problems in military leadership and methods of instruction.

**Military Science 037. Leadership and Management I.** No credit. Application of principles of leadership to the problems of platoon leaders and company commanders; development of leadership potential by participation in planning and conducting drill and ceremonies. Prerequisite: Basic course or credit for same through basic summer camp at-

tendance or service veteran status; and consent of the department chairman.

**Military Science 302. Command and Control.** Three credits. Techniques of directing and coordinating individual and military team efforts; functions of various branches in their support of the Army and its field forces; analysis of the military communications system and fundamentals of internal defense development.

**Military Science 038. Leadership and Management I.** No credit. Continuation of Military Science 037. Prerequisite: Military Science 037.

**Military Science 451. Operations, Logistics and Administration.** Three credits. Advanced instruction in management skills; processes for arriving at sound and timely decisions and translating these decisions into plans and orders; principles of administration and logistics.

**Military Science 452. Military Law.** One credit. Fundamental concepts of military justice in the armed forces of the United States; requirements for a separate body of law for the military.

**Military Science 453. United States in World Affairs.** One credit. The United States and its position in the international affairs of the world today, emphasizing analysis of power factors, individual competing powers and power blocks, alliances, commitments and their impact on the armed forces.

**Military Science 047. Leadership and Management II.** No credit. 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. Prerequisite: Military Science 038.

**Military Science 048. Leadership and Management II.** No credit. Continuation of Military Science 047. Prerequisite: Military Science 047.

## **MUSEUM TECHNIQUES**

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Charles Long, Advisor.

**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.
3. Either a or b:
  - a. Anthropology 290 and 340S.
  - b. One of the following: Biology 277, 342, 360, 372, 374, 376, 378.
4. The remaining credits to be selected from the following: Anthropology 111; Biology 205, 379, 388; Communication 330, 400; Computer Science 106; Geology 300, 399; Natural Resources 374.

## **MUSIC**

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Donald Greene, chairman (on leave 1973-74); Julius Erlenbach, acting chairman; Jack Abell, Margery Aber, David Beadle, Donald Chesebro, Ronald Combs, Rebecca Erlenbach, Constance Faig, Marjorie Gerson, Charles Goan, Robert Goodberg, Donald Hildebrandt, Carol Hopper, Kenneth Hopper, J. Michael Keller, S. Caroline Knell, Geary Larrick, Raymond Luedeke, Elvin McLott, Lee Mendyk, Richard Metzger, Elizabeth Oman, Donald Ripplinger, Kenyard Smith, Leon Smith, Daniel Stewart, John Thomas, Robert VanNuys.

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.**

### **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, 12 credits: Music 110, 111, 210 and 211. 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. Ensemble, eight credits.
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, 72 to 74 credits of music are required in one of the following options:

1. **Piano.** Students will be admitted to this program 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, 18 credits: Music 110, 111, 210, 211; 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. Ensemble, eight credits.
2. **Organ.** Students will be admitted to this program 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, 18 credits: Music 110, 111, 210, 211, 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. Ensemble, six credits—choral area preferred.
- 3. Voice.** Students will be admitted to this program 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, 17 credits: Music 110, 111, 210, 211, 317; and three 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, 321, 322, 422, 423.
  - d. Vocal pedagogy, two credits; Music 491.
  - e. Vocal ensemble, nine credits.
- 4. String instrument.** Students will be admitted to this program 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, 22 credits: Music 110, 111, 210, 211, 315, 317; and six 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, 10 credits: Music 120, 121, 320, 321.
  - d. Ensemble, 12 credits.
- 5. Wind instrument.** Students will be admitted to this program 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, 22 credits: Music 110, 111, 210, 211, 315, 317; and six 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, 10 credits: Music 120, 121, 320, 321.
  - d. Brass or woodwind pedagogy, two credits: Music 492 or 493.
  - e. Ensemble, 12 credits.
- 6. Percussion.** Students will be admitted to this program 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, 22 credits: Music 110, 111, 210, 211, 315, 317, and six 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. Ensemble, 12 credits.
- 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, 36 credits: Music 110, 111, 210, 211, 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. Ensemble, eight credits.

**C. Bachelor of Music in Music Literature.**

All general requirements listed for the Bachelor of Science Degree in the College of Fine Arts will be completed along with the following credits in Music:

1. Theory, 12 credits: Music 110, 111, 210, 211. 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. Ensemble, eight credits.
5. Music literature, 24 credits: Music 120, 121, 320, 321, 326, 327, 426, 427; and 101 or 323 or 428.

**D(1). Bachelor of Music Degree for teacher certification—Instrumental Emphasis.**

All general requirements will be completed along with the following credits in Music, Music Education, and Education.

1. Education, 16 credits: Education 380, 381, 398.
2. Music Education, four credits: Music Education 324, 326.
3. Music, 62 credits:
  - a. Theory, 12 credits: Placement examination is required; students with insufficient background must take Music 109 as a prerequisite. Music 110, 111, 210, 211.
  - 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.
  - f. Conducting, five credits: Music 317, 385.
  - g. Ensembles, seven credits: Music 143, 243, 343; or 142, 242, 342.
  - h. Music electives, six credits: Any Music course, with the following exceptions: Maximum of two credits in Class Applied Music; Music 100, 101, 109, 150, 200, 300; Ensembles; Private Applied Music.

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). Bachelor of Music Degree for teacher certification—Vocal Emphasis.**

All general requirements will be completed along with the following credits in Music, Music Education, and Education.

1. Education, 16 credits: Education 380, 381, 398.
2. Music Education, six credits: Music Education 323, 325, 382.
3. Music, 62 credits:
  - a. Theory, 12 credits: Placement examination is required; students with insufficient background must take Music 109 as a prerequisite. Music 110, 111, 210, 211.
  - b. Vocal Literature, two credits: Music 422/622.
  - \*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. Ensembles (major), seven credits: 141, 241, 341.
    - h. Opera Workshop, two credits: Music 180.
    - i. Music in the Junior High School: Music Education 382.
    - j. Music electives, six credits: Any Music course, with the following exceptions: Private Applied Music; Class Applied Music; Ensembles; Music 100, 101, 109, 200, 300.

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).

\*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.

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 22 credits, as follows:

1. Ten credits: Music 110, 111, 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 at least two of the following groups:
  - a. Music 140, 141, 142, 143, 180.
  - b. Music 321, 323, 326, 327, 426, 427.
  - c. Music 210, 211, 310.



**Music 100. Appreciation and History of Music.** Three credits. A survey of the 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.

**Music 101. American Music.** Two credits. A survey of music from the time of the Pilgrims to the present, with special emphasis on Jazz and its influence on contemporary music.

**Music 109. Fundamentals of Music Theory.** Two credits. 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.

**Music 110. Elementary Theory.** Three credits. Review of theory fundamentals, introduction to part-writing, harmonic and structural analysis in the diatonic idiom; music reading, dictation, keyboard. Prerequisite: placement examination; students with insufficient background must take Music 109.

**Music 111. Elementary Theory.** Three credits. Extension of written and applied musicianship skills in elementary techniques of modulation and chromaticism. Prerequisite: Music 110.

**Music 120. Music Literature I.** Two credits. Introduction to the more important compositions in music from the eighteenth century to the present time; required listening. Open to all students with previous experience in music.

**Music 121. Music Literature II.** Two credits. Symphonic literature, with emphasis on form and analysis; required

listening. Open to all students with previous experience in music.

**Music 130-139. First Year Small Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Consent of instructor.

**Music 130**—Vocal; **131**—String; **132**—Flute; **133**—Clarinet; **134**—Saxophone; **135**—Mixed Woodwind; **136**—Low Brass; **137**—Mixed Brass; **138**—Percussion; **139**—Jazz Band.

**Music 140-143. First Year Large Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Consent of instructor.

**Music 140**—Oratorio Chorus; **141**—Choir; **142**—Orchestra; **143**—Band.

**Music 150-157. Class Applied Music.** Two credits in each of the following courses. The elements of each medium taught by class participation and observation.

**Music 150**—Piano; **151**—Voice; **152**—Violin; **153**—Strings; **154**—Double Reeds/Flute; **155**—Single Reeds; **156**—Brass; **157**—Percussion.

**Music 160-170. First Year of Applied Music.** Two credits in each of the following courses. Prerequisite: Consent of department chairman.

**Music 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.

**Music 180. First Year of Opera Workshop.** One credit. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit.

**Music 181. Accompanying.** Two credits. Basic techniques of accompanying, through the actual preparation of musical works for performance; participation in both class and student recitals. Prerequisite: Consent of instructor.

**Music 200. Music in Recreation.** Two credits. Recreational relation of music to community activities; work with barbershop quartets, folk dancing, music for playgrounds, community singing and recreational instruments such as the ukulele and recorder. Prerequisite: Consent of instructor. Not to be counted toward a Music major or minor or toward the Bachelor of Music degree.

**Music 210. Intermediate Theory.** Three credits. Part-writing, harmonic and structural analysis in the chromatic idiom; advanced music reading, dictation, and keyboard. Prerequisite: Music 111.

**Music 211. Intermediate Theory.** Three credits. Extension of theory and musicianship to the contemporary idiom; historical survey of musical form and style, with extensive use of the standard literature and individual creativity. Prerequisite: Music 210.

**Music 230-239. Second Year Small Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Music 130-139.

**Music 230**—Vocal; **231**—String; **232**—Flute; **233**—Clarinet; **234**—Saxophone; **235**—Mixed Woodwind; **236**—Low Brass; **237**—Mixed Brass; **238**—Percussion; **239**—Jazz Band.

**Music 240-243. Second Year Large Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Music 140-143.

**Music 240**—Oratorio Chorus; **241**—Choir; **242**—Orchestra; **243**—Band.

**Music 260-279. Second Year of Applied Music.** In each of the following courses, students who are working toward the Bachelor of Music Degree in Applied Music receive four credits; other students receive two credits. May be repeated once for credit. Prerequisite: Music 160-178; and consent of department chairman.

**Music 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.

**Music 280. Second Year of Opera Workshop.** One credit. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit. Prerequisite: Music 180.

**Music 300. Music Here and Now.** Three credits. 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.

**Music 310. Advanced Theory I.** Three credits. Contrapuntal styles of the eighteenth century including analysis and writing of examples. Prerequisite: Music 211.

**Music 311. Advanced Theory II.** Three credits. Contrapuntal styles of the sixteenth century including analysis and writing of examples. Prerequisite: Music 211.

**Music 313/513. Composition.** Two credits. Exploration of twentieth century compositional techniques with projects in short chamber forms, both vocal and instrumental. Prerequisite: Music 211 or consent of instructor.

**Music 314/514. Composition.** Two credits. Exploration of twentieth century compositional techniques with projects in large forms for chamber ensembles. Prerequisite: Music 211 or consent of instructor.

**Music 315. Orchestration I.** Two credits. Modern band and orchestra instruments in regard to their ranges, playing characteristics, physical properties, history, and advisable use. Prerequisite: Music 110.

**Music 316. Orchestration II.** Two credits. Arranging of music for small and large ensembles with the accent on written work to produce proper blend and color; some correlated study of examples from the masters. Prerequisite: Music 315.

**Music 317. Conducting.** Two credits. Problems of organizing and coaching techniques for vocal and instrumental groups; experience in conducting the college ensembles. Prerequisite: Music 110.

**Music 320. History of Music.** Three credits. Major events and trends in history and their effect on the culture of the era, music in particular, from the Greeks to 1600.

**Music 321/521. History of Music.** Three

credits. Same as Music 320, from 1600 to the present.

**Music 322. Choral Literature.** Two credits. Survey of literature for vocal ensembles with particular attention to mass, motet, and cantata.

**Music 323/523. Operas and Oratorios.** Two credits. Study of the great oratorios, masses, and other choral masterpieces from classics through the modern period.

**Music 324/524. Organ Literature I.** Three credits. A survey of the 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. Prerequisite: Keyboard proficiency of grade 4.

**Music 325/525. Organ Literature II.** Three credits. 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. (Music 324 and 325 need not be taken in sequence.) Prerequisite: Keyboard proficiency of grade 4.

**Music 326/526. Baroque Period—1600 to 1750.** Three credits. Music idioms and styles of the period, with emphasis on the development and rise of new forms; music in the general culture of the period.

**Music 327/527. Classic Period—1750 to 1800.** Three credits. Same as Music 326, covering the Classic Period.

**Music 328. Hymnology.** Two credits. 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. Prerequisite: Music 320, 321.

**Music 330-339. Third Year Small Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Music 230-239.

**Music 330**—Vocal; **331**—String; **332**—Flute; **333**—Clarinet; **334**—Saxophone; **335**—Mixed Woodwind; **336**—Low Brass; **337**—Mixed Brass; **338**—Percussion; **339**—Jazz Band.

**Music 340-343. Third Year Large Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Music 240-243.

**Music 340**—Oratorio Chorus; **341**—Choir; **342**—Orchestra; **343**—Band.

**Music 344. Service Playing Techniques.** One credit. 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. Prerequisite: Music 211; Organ proficiency of Grade IV.

**Music 360-379. Third Year of Applied Music.** In each of the following courses, students who are working toward the Bachelor of Music Degree in Applied Music receive four credits; other students receive two credits. May be repeated once for credit. Prerequisite: Music 260-279 and consent of department chairman.

**Music 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.

**Music 380. Third Year of Opera Workshop.** One credit. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit. Prerequisite: Music 280.

The former **Music 381** is now **Music Education 381**.

The former **Music 382** is now **Music Education 382**.

The former **Music 383** is now **Music Education 383**.

**Music 384. Advanced Choral Conducting and Rehearsal Techniques.** Three credits. Detailed study of conducting and rehearsal techniques with emphasis on organization and stylistic considerations, and the development of technical proficiencies. Prerequisite: Music 317.

**Music 385. Advanced Instrumental Conducting and Rehearsal Techniques.** Three credits. 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. Prerequisite: Music 317.

**Music 410. Advanced Theory III.** Three credits. Formal and harmonic analysis of nineteenth century styles. Prerequisite: Music 211.

**Music 411. Advanced Theory IV.** Three credits. Analysis of works from each of the following twentieth century styles:

neo-classicism, expressionism, total-serialism, and indeterminacy. Prerequisite: Music 211.

**Music 413/613. Composition.** Two credits. Exploration of twentieth century compositional techniques with projects in multi-sectional forms for large ensembles. Prerequisite: Music 211 or consent of instructor.

**Music 414/614. Composition.** Two credits. Exploration of twentieth century compositional techniques with projects in improvisation and experimental media. Prerequisite: Music 211 or consent of instructor.

**Music 415/615. Band Arranging Techniques.** Two credits. Special attention to arranging needs of high school wind ensembles with particular emphasis on production numbers, solo backgrounds, small ensembles, and accompaniments.

**Music 420/620. Piano Literature I.** Three credits. Study of keyboard literature from 1700 to 1825 with emphasis on major composers and their contributions to this field.

**Music 421/621. Piano Literature II.** Three credits. Same as Music 420, except covering the period from 1825 to the present.

**Music 422/622. Voice Literature I.** Two credits. Survey of solo vocal literature designed to broaden the singer's performing and teaching repertoire with special attention to vocal interpretation. Open only to voice majors.

**Music 423/623. Voice Literature II.** Two credits. Continuation of Music 422 with special attention to program building. Prerequisite: Music 422.

The former **Music 424/624** is now **Music Education 424/624**.

The former **Music 425/625** is now **Music Education 425/625**.

**Music 426/626. Romantic Period—1800 to 1890.** Three credits. Music idioms and styles of the period, with emphasis on the development and rise of new forms; music in the general culture of the period.

**Music 427/627. Post-Romantic Period—1890 to the Present.** Three credits. Same as Music 426, covering the Post-Romantic Period.

**Music 428/628. Music Cultures of the Pacific, the Near East, and Asia.** Three credits. Survey of the basic kinds of music and musical instruments found in the major oriental civilizations and in the island cultures of the Eastern Hemisphere.

**Music 430-439. Fourth Year Small Ensembles.** One credit in each of the following courses. May be repeated once for credits. Prerequisite: Consent of instructor.

**Music 430**—Vocal; **431**—String; **432**—Flute; **433**—Clarinet; **434**—Saxophone; **435**—Mixed Woodwind; **436**—Low Brass; **437**—Mixed Brass; **438**—Percussion; **439**—Jazz Band.

**Music 440-443. Fourth Year Large Ensembles.** One credit in each of the following courses. May be repeated once for credit. Prerequisite: Consent of instructor.

**Music 440**—Oratorio Chorus; **441**—Choir; **442**—Orchestra; **443**—Band.

**Music 460-479. Fourth Year of Applied Music.** In each of the following courses, students who are working toward the

Bachelor of Music Degree in Applied Music receive four credits; other students receive two credits. May be repeated once for credit. Prerequisite: Music 360-379 and consent of department chairman.

**Music 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.

**Music 480. Fourth Year of Opera Workshop.** One credit. Elements of producing, staging, directing, and participation in opera, operetta, and musical comedy. May be repeated once for credit. Prerequisite: Music 380.

The former **Music 485/685** is now **Music Education 485/685**.

The former **Music 486/686** is now **Music Education 486/686**.

**Music 490. Piano Pedagogy.** Two credits. Effective skills in private and class piano, with discussion and performance of piano literature; observation of class and private instruction. Prerequisite: Piano proficiency IV.

**Music 491. Voice Pedagogy.** Two credits. Study of vocal teaching methods; observation of class and private instruction. Prerequisite: Voice proficiency Grade IV.

**Music 492. Woodwind Pedagogy.** Two credits. Methods of teaching woodwind instruments with special attention to specific problems of each instrument. Appropriate literature will be selected.

**Music 493. Brass Pedagogy.** Two credits. Methods of teaching brass instruments with special attention to specific problems of each instrument. Appropriate literature will be selected.

**Music 494. Percussion Pedagogy.** Two credits. Literature and reference material covering the field of percussion, including various method books, textbooks, and publisher sources. Prerequisite: Percussion proficiency Grade IV.

**Music 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 of the Music 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 in theory, conducting, composition, orchestration, or music history.



**Music 710. Theory for Junior and Senior High Schools.** Three credits. Latest teaching approaches for music theory including teaching machines, tape machine learning, programmed learning, and research applications, laboratory and reading projects.

**Music 711. Theory.** Three credits. A unifying course in the 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.

**Music 712. Form and Analysis.** Three credits. An examination of musical forms from all periods, with emphasis on structural analysis.

**Music 722. Mass, Motet, Cantata.** Two credits. A study of major choral forms; their beginnings and development with careful evaluation of representative works.

**Music 723. Music Literature for Junior and Senior High Schools.** Three credits. The selection and presentation of classic and modern literature for young people; styles and form and their implications for teaching.

**Music 750. Pedagogical Techniques for Music Teachers—Piano.** Two credits. Designed to assist the experienced teacher.

**Music 751. Pedagogical Techniques for Music Teachers—Voice.** Two credits. Designed to assist the experienced teacher.

**Music 752. Pedagogical Techniques for Music Teachers—Violin.** Two credits. Designed to assist the experienced teacher.

**Music 753. Pedagogical Techniques for**

**Music Teachers—Low Strings.** Two credits. Designed to assist the experienced teacher.

**Music 754. Pedagogical Techniques for Music Teachers—Flute.** Two credits. Designed to assist the experienced teacher.

**Music 755. Pedagogical Techniques for Music Teachers—Double Reeds.** Two credits. Designed to assist the experienced teacher.

**Music 756. Pedagogical Techniques for Music Teachers—Clarinet.** Two credits. Designed to assist the experienced teacher.

**Music 757. Pedagogical Techniques for Music Teachers—Trumpet.** Two credits. Designed to assist the experienced teacher.

**Music 758. Pedagogical Techniques for Music Teachers—Low Brass.** Two credits. Designed to assist the experienced teacher.

**Music 759. Pedagogical Techniques for Music Teachers—Percussion.** Two credits. Designed to assist the experienced teacher.

**Music 760. Artist Course in Applied Music—Piano.** Two credits. Designed to provide an opportunity for the gifted student to expand his repertoire and develop his musicianship. Eight lessons for each credit. Extensive repertoire in music literature will be explored.

**Music 761. Artist Course in Applied Music—Organ.** Two credits. (See course description under Music 760.)

**Music 762. Artist Course in Applied Music—Voice.** Two credits. (See course description under Music 760.)

- Music 763. Artist Course in Applied Music—Violin.** Two credits. (See course description under Music 760.)
- Music 764. Artist Course in Applied Music—Viola.** Two credits. (See course description under Music 760.)
- Music 765. Artist Course in Applied Music—'Cello.** Two credits. (See course description under Music 760.)
- Music 766. Artist Course in Applied Music—String Bass.** Two credits. (See course description under Music 760.)
- Music 767. Artist Course in Applied Music—Flute.** Two credits. (See course description under Music 760.)
- Music 768. Artist Course in Applied Music—Oboe.** Two credits. (See course description under Music 760.)
- Music 769. Artist Course in Applied Music—Clarinet.** Two credits. (See course description under Music 760.)
- Music 770. Artist Course in Applied Music—Bassoon.** Two credits. (See course description under Music 760.)
- Music 771. Artist Course in Applied Music—Saxophone.** Two credits. (See course description under Music 760.)
- Music 772. Artist Course in Applied Music—Trumpet.** Two credits. (See course description under Music 760.)
- Music 773. Artist Course in Applied Music—French Horn.** Two credits. (See course description under Music 760.)
- Music 774. Artist Course in Applied Music—Trombone.** Two credits. (See course description under Music 760.)
- Music 775. Artist Course in Applied Music—Baritone.** Two credits. (See course description under Music 760.)
- Music 776. Artist Course in Applied Music—Tuba.** Two credits. (See course description under Music 760.)
- Music 777. Artist Course in Applied Music—Percussion.** Two credits. (See course description under Music 760.)
- Music 781. New Developments in Elementary Music.** Three credits. Exploring the Kodaly and Orff approaches to classroom music and their relation to current research.
- Music 783. Problems in Curriculum and Supervision.** Three credits. A course for the experienced teacher who is, or will be, involved in working with curriculum as it relates to a total school program.
- Music 784. Rehearsal Techniques: Choral.** Three credits. Problems related to the organization and preparation of ensembles with particular emphasis to techniques of the rehearsal.
- Music 785. Rehearsal Techniques: Instrumental.** Three credits. Problems related to the organization and preparation of ensembles with particular emphasis to techniques of the rehearsal.
- Music 786. Seminar in Music Education I.** Three credits. An examination of the aesthetic and philosophical foundations of music education; emphasis on current trends in educational thought and their implications for music education.
- Music 787. Seminar in Music Education II.** Three credits. A consideration of the psychological foundations of music education; emphasis on the development of teaching objectives and didactic strategies.

**Music 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's

preparation in his area of specialization. Regularly scheduled conferences with a staff supervisor.

## MUSIC EDUCATION

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**Music Education 323.** (Formerly Education 323) **Music Teaching Techniques in the Elementary School: Vocal.** Two credits. 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. Prerequisite: Music 110; open only to Music majors and minors.

**Music Education 324.** (Formerly Education 323) **Music Teaching Techniques in the Elementary School: Instrumental.** 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. Prerequisite: Music 110; open only to Music majors and minors.

**Music Education 325.** (Formerly Education 336) **Music Teaching Techniques in the Secondary School: Vocal.** Two credits. Methods, materials, and curricular organization of vocal music in the high school, and its teaching strategies. Prerequisite: Music 110; open only to Music majors and minors.

**Music Education 326.** (Formerly Education 336) **Music Teaching Techniques in the Secondary School: Instrumental.** Two credits. Methods, materials, and curricular organization of instrumental music in the high school, and its teaching strategies. Prerequisite: Music 110; open only to Music majors and minors.

**Music Education 381.** (Formerly Music 381) **Music in the Elementary School.**

Three credits. 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.

**Music Education 382.** (Formerly Music 382) **Music in the Junior High School.** Two credits. Theory and application of effective teaching skills in the junior high school; aims, methods, materials, planning, testing.

**Music Education 383.** (Formerly Music 383) **Music Education Workshop.** Two credits. 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.

**Music Education 424/624.** (Formerly Music 424/624) **Survey of Choral Literature.** Two credits. A course to aid the experienced teacher in the selection and reading of solo and ensemble literature for the junior and senior high school student.

**Music Education 425/625.** (Formerly Music 425/625) **Survey of Instrumental Literature.** Two credits. A course to aid the experienced teacher in the selection and reading of solo and ensemble literature for the junior and senior high school student.

**Music Education 485/685.** (Formerly Music 485/685) **Band Pageantry.** Two credits. Marching and formation techniques for the street, parade, and the sport event.

**Music Education 486/686.** (Formerly

Music 486/686) **Theory and Practice of Instrumental Repair, Adjustment, Tuning, and Maintenance.** Two credits. Beginning and intermediate work with use of tools for woodwind, brass, and percussion.



## **NATURAL RESOURCES**

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The College of Natural Resources offers courses in **Forestry, Natural Resources, Soils, Water, and Wildlife.** These courses are described under appropriate headings elsewhere in this section of the catalog. The majors and minors which are offered in **Forestry, Outdoor Education, Resource Management, Soil Science, Water Resources, and Wildlife** are described under those headings. Students in these majors must meet the general degree requirements of the College of Natural Resources.

In addition to the general requirements of the College of Natural Resources, 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.

**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 and 106, or 115 and 116; 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 280; Political Science 301; Sociology 260.  
b. **Non-teaching** option: 31 or 32 credits in collateral courses including Biology 130, 160, 205; Chemistry 105 and 106, or 115 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.

**B. A minor in Resource Management** 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 Natural Resources department numbered 300 and above.

**C. The Master of Science Degree—Natural Resources** is described in the section of the catalog on THE GRADUATE COLLEGE.

**Natural Resources 090/390. Nature Interpretation in Central Wisconsin.** No credit/two credits. (A written report involving approximately thirty hours of research and study outside of class is required for credit in the course. First-hand 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.)

**Natural Resources 091/391. Nature Interpretation Agencies, Areas, and Issues.** No credit/two credits. (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.

**Natural Resources 092/392. Nature Interpretation Activities.** No credit/two credits. (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.

**Natural Resources 170. Introduction to Natural Resources.** One credit. Introduction to natural resources with emphasis on their integrated management and their role in man's social and economic welfare. Open to all students.

**Natural Resources 171. Elementary Surveying.** Three credits. Use of the tape, compass, level, and transit; U.S. land system; simple maps, traverse closure, and area computations; profiles, stadia, plane table. One hour lecture, six hours laboratory per week. Prerequisite: Mathematics 105 or equivalent training in trigonometry.

**Natural Resources 291. Internship in Natural Resources.** One to six credits. 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. Prerequisite: Consent of the Dean, College of Natural Resources.

**Natural Resources 370/570. Resource Management for Environmental Quality.** Three credits. A study of 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 hours lecture, two hours laboratory per week.

**Natural Resources 371/571. Conservation Administration.** Two credits. Administrative principles and organiza-

tional structure of private, local, state, and federal conservation agencies.

**Natural Resources 372/572. Resource Economics.** Three credits. Fundamental economics concepts and their application to resource use; traditional and revised theories of land use; problems of land policy management.

**Natural Resources 373/573. Agronomy.** Three credits. Grain and forage crops, with emphasis on management practices. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor. Purchase of a \$3.50 laboratory manual is required.

**Natural Resources 374/574. Environmental Interpretation Methods.** Three credits. 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.

**Natural Resources 380. Ecology of the Wisconsin River.** Six credits. 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.

**Natural Resources 390. Nature Interpretation in Central Wisconsin.** Two credits. See Natural Resources 090.

**Natural Resources 391. Nature Interpretation Agencies, Areas, and Issues.** Two credits. See Natural Resources 091.

**Natural Resources 392. Nature Interpretation Activities.** Two credits. See Natural Resources 092.

**Natural Resources 393. Environmental Law Enforcement.** One to three credits. 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 sub-titles up to a total of three credits. Prerequisite: Consent of instructor.

**Natural Resources 473/673. Resource Policy and Law.** Three credits. Legislation pertaining to natural resources with consideration given to the need for, purpose of, and implementation of such laws.

**Natural Resources 474/674. Integrated Resource Management.** Three credits. 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. Prerequisite: Forestry 120, Soils 260, Water 180, Wildlife 140.

**Natural Resources 475/675. International Environmental Studies Seminar.** Three or six credits. See **Field Seminar Program**, which is described on next page.

**Natural Resources 480/680. Urban and Regional Planning Practices.** Three credits. 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.

**Natural Resources 490. Natural Resources Seminar.** One credit. Individual and group investigation of current problems in conservation. Prerequisite: Senior standing for majors or minors in Natural Resources.

**Natural Resources 491. Internship in Natural Resources.** One to six credits. Supervised training program with a co-operating 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. Prerequisite: Consent of the Dean, College of Natural Resources.

**Natural Resources 499. Special Work.** Upper class students majoring or minor-ing 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.

**Natural Resources 781. Problems in Urban and Regional Planning.** Three credits. Practical application of urban and regional planning theory to specific and representative case studies.

**Natural Resources 790. Ecological Basis for Planning & Design.** Three credits. 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. Prerequisite: Consent of instructor.

**Natural Resources 792. Park Administration.** Three credits. Study of parks and related areas including 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.

**Natural Resources 793. Principles and Practice of Environmental Interpretation.** Three credits. 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.

**Natural Resources 795. Natural Resources Seminar.** One credit. Reports and discussions of recent published research in resource management and related fields.

**Natural Resources 796. Independent Study.** One to three credits. Advanced work on a specific natural resource problem.

**Natural Resources 797. Research Methods, Design & Analysis.** Three credits. Principles and methods regarding design and management of natural resources experimental investigations, statistical analysis of data, and preparation of research outlines. Prerequisite: Consent of instructor.

**Natural Resources 799. Thesis.** (Not on Plan B.) Two to six credits.

### **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.** One or two credits. (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. Prerequisite: Consent of instructor.

**Natural Resources 475/675. International Environmental Studies Seminar.** Three or six credits. 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. Prerequisite: Consent of instructor.

**Soils 493/693. Soils Field Seminar.** 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. Prerequisite: Consent of instructor.

**Wildlife 493/693. Wildlife Field Seminar.** One or two credits. 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. Prerequisite: Consent of instructor.

## Summer Camp Program

**Forestry 320. Forest Measurement and Surveying.** Two credits. Field practices in the application of forest measurement and surveying techniques.

**Soils 360. Techniques of Soil and Water Conservation.** Two credits. Field practices in the application of various soil and water conservation techniques, in-

cluding land use classification, various methods of erosion control, and public relations measures.

**Wildlife 340. Techniques in Fish and Wildlife Management.** Two credits. Field practices in the application of various fish and wildlife management techniques.

## OUTDOOR EDUCATION

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**A minor in Outdoor Education** is administered by the Natural Resources department under the general degree requirements of the College of Professional Studies. It 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** 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), 232 (Oil Painting), 241, 342 (Indian Crafts); **Astronomy** 311 (Introduction); **Biology** 244 (Trees and Shrubs), 277 (Ornithology), 342 (Plant Taxonomy), 372 (Natural History of Vertebrates), 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), 364 (Midwestern Literature); **Forestry** 427 (Recreational Use of Forests and Parks); **Geography** 101, 102 (Earth Science), 211 (Wisconsin), 352 (Landforms), 353, 354 (Climatology); **History** 389 (Wisconsin); **Learning Resources** 331 (Audio-Visual); **Music** 200 (Music in Recreation); **Natural Resources** 170 (Introduction), 370 (Management for Environmental Quality); **Physical Education** 213 or 214 (Individual Sports), 241 (Camp Leadership), 253 (First Aid Instructors), 342 (Community Recreation), 343 (Group Games).

## PAPER SCIENCE

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Michael Kocurek, chairman; Thomas Libby, Raymond Machacek, Donald Percival.

**A major in Paper Science** consists of:

- a. Paper Science courses to total 34 credits, including Paper Science 317, 370, 380, 435, 440, 441, 465, 470, 471, 480, 490, 491.
- b. Summer Mill Experience, two credits: Paper Science 300, 400.
- c. Chemistry courses to include 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); 372.
- d. Collateral courses to include: Computer Science 106; Economics 200; Mathematics 110, 111, 212; Mathematics 355, (or 351 or Economics 330); Physics 110, and 211 and 212, (or 103 and 104); Wildlife 441.

The former **Paper Science 090** is now **300**.

The former **Paper Science 091** is now **400**.

**Paper Science 101. Introduction to Pulp and Paper Processes.** Two credits. A survey of the history and technological development of the pulp and papermaking processes, with emphasis on present technology and use of forest, air, and water resources; field trips to observe commercial equipment in the pulp and paper industry.

**Paper Science 230. Mechanics of Deformable Media.** Two credits. 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. Prerequisite: Physics 110 or consent of instructor.

**Paper Science 240. Pulp and Paper Laboratory Methods.** Two credits. Precision laboratory methods in pulp, paper, and nonfibrous testing; microscopic techniques; emphasis on statistical analysis of data. One hour lecture, three hours laboratory per week. Prerequisite: Chemistry 116 or 106, or consent of instructor.

**Paper Science 300.** (Formerly 090) **Summer Mill Experience I.** One credit. In order to gain field experience, paper science majors are required to work ten weeks in a pulp and paper mill, with emphasis on manufacturing assignments. The student must submit a comprehensive report on the process to fulfill this requirement.

**Paper Science 315. Electrical Engineering Concepts.** One credit. Introduction to electrical engineering concepts with emphasis on electro-mechanical energy conversion systems; alternating and direct current machinery; automatic sequences relay logic, as applied to pulp and papermaking process systems. Prerequisite: Physics 212 or consent of instructor.

**Paper Science 317. Principles of Mass and Energy Balance.** Four credits. 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. Prerequisite: Chemistry 116 or 106, or consent of instructor.

**Paper Science 325. Metallurgy and Corrosion.** Two credits. Structure and properties of metals and alloys; ma-

materials performance; corrosion principles and prevention; examples oriented toward the pulp and papermaking processes. Prerequisite: Chemistry 330 or 335, or consent of instructor.

**Paper Science 370.** (Formerly 470) **Heat and Mass Transfer.** Three credits. Heat and mass transfer with introduction to rate equations and unsteady state balances; forced and free conduction, convection, radiation, humidification, gas absorption, cooling, air conditioning, drying; economic considerations as applied to the pulp and papermaking process. Two hours lecture, three hours laboratory per week. Prerequisite: Paper Science 317, or consent of instructor.

**Paper Science 380. Colloid and Surface Phenomena.** Three credits. 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. Prerequisite: Chemistry 330 or 335.

**Paper Science 399. Research Problem.** One to three credits. Upper class students majoring in Paper Science may, with consent of the chairman of the Paper Science department, 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.

**Paper Science 400.** (Formerly 091) **Summer Mill Experience II.** One credit. 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.

The former **Paper Science 405** is now **440.**

The former **Paper Science 406** is now **470.**

The former **Paper Science 407** is now **471.**

The former **Paper Science 418** is now **441.**

The former **Paper Science 430** is now **468.**

**Paper Science 435. Fluid Mechanics and Hydraulics.** Three credits. Momentum transfer; properties of fluids, compressible and noncompressible, isothermal and adiabatic; fundamentals of laminar and turbulent flow; measurement and control of flow; fluid machinery; hydrodynamics of fibrous suspensions; coating rheology. Two hours lecture, three hours laboratory per week. Prerequisite: Paper Science 317 or consent of instructor.

**Paper Science 440.** (Formerly 405) **Industrial Thermodynamics and Kinetics.** Three credits. Chemical reaction kinetics, thermodynamics of combustion, with application to the unit operations and systems of analysis of pulping, bleaching, and recovery systems; study of field operations. Two hours lecture, three hours laboratory per week. Prerequisite: Paper Science 370; Chemistry 372; Mathematics 225; or consent of instructor.

**Paper Science 441.** (Formerly 418) **Heat and Mass Transfer Operations.** Three credits. Evaporation and evaporator systems; filtration, pulp washing systems; sedimentation; size separation;

distillation; extraction; with applications to the unit operations and systems analysis of commercial pulping and paper-making recovery systems; study of field operations. Two hours lecture, three hours laboratory per week. Prerequisite: Paper Science 370 or consent of instructor.

**Paper Science 468.** (Formerly 430) **Process Simulation and Control.** Four credits. System dynamic modeling with the open and closed loop transfer functions; feed back control elements and transportation lag; analog computer use for modeling analysis; introduction to digital control and Z transforms, cascade control systems, steady state and dynamic feed forward, ratio control, and adaptive control with application to pulp and paper processes; study of field operations. Three hours lecture, three hours laboratory per week. Prerequisite: Mathematics 212.

The former **Paper Science 470** (Chemical Engineering Transport Phenomena) is now **370**.

**Paper Science 470.** (Formerly 406) **Transport Phenomena in Fibrous Systems.** Three credits. Dynamics of referring; dynamics of sheet formation and water removal; analysis of the drying process in terms of heat conduction, water and vapor mass transfer; heat and material balances performed in the field on full scale papermaking systems. Two hours lecture, three hours laboratory per week. Prerequisite: Paper Science 370 and 435, or consent of instructor.

**Paper Science 471.** (Formerly 407) **Paper and Fiber Physics.** Three credits. Mechanics of fiber networks; optical properties; inter-relationships between structure, ultimate properties, and the process consolidation factors that influence them; analysis of variance statisti-

cal techniques. Two hours lecture, three hours laboratory per week. Not to be counted toward the major or minor in physics. Prerequisite: Paper Science 440.

**Paper Science 480. Environmental Systems Design.** Three credits. Economic design analysis and theory of economic decision making as applied to complete systems for the control of air and water pollution, and recovery of useful chemicals and heat in the pulp and paper process; student design project applying principles presented; study of field operations. Two hours lecture, three hours laboratory per week. Prerequisite: Senior standing in Paper Science, or consent of instructor.

**Paper Science 490. Seminar.** One credit. Use of the literature, procedures in designing a research project, and the presentation of information by students, staff, and guest lecturers. Prerequisite: Senior standing or consent of instructor.

**Paper Science 491. Seminar.** One credit. Use of the literature, procedures in designing a research project, and the presentation of information by students, staff, and guest lecturers. Prerequisite: Senior standing or consent of instructor.



## PEACE STUDIES

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Joseph Harris, chairman of the Peace Studies Committee.

**Peace Studies 100. Dimensions of a Peaceful World.** Three credits. An interdisciplinary study of alternatives to violence and war, including biological, psychological, economic, political, philosophical, and humanistic alternatives.

**Peace Studies 200. The Social Matrix of War.** Three credits. Analysis of 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. Prerequisite: Sophomore standing.

**Peace Studies 230. Seminar in Non-violence.** Three credits. A study in the 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. Prerequisite: Sophomore standing.

**Peace Studies 240. The Personal Element in Peace.** Three credits. 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. Prerequisite: Sophomore standing.

**Peace Studies 300. Dimensions of a Peaceful World.** Three credits. Same as Peace Studies 100, for Juniors and seniors.

**Peace Studies 310. The Sociology of Peace and War.** Three credits. Analysis of 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.

**Peace Studies 370. Futures.** Three credits. 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.

**Peace Studies 389. Biological Factors and Effects of War and Aggression.** Two or three credits. The biological basis of cooperation and conflict in animals, including man; ecological effects of contemporary warfare on plants and animals.

**Peace Studies 399. Special Work.** One to three credits. Upper class students may, by 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

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John Zawadsky, chairman; John Bailiff, John Billings, J. Baird Callicott, Robert Cassidy, Richard Feldman, Karl Hein, Arthur Herman, William Kalke, Joseph Schuler, John Vollrath, Peter Wenz.

**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: Philosophy 221 or 322.
3. Value Theory: One course to be selected from Philosophy 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.

**C. 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.

**Philosophy 100. Introduction to Philosophy.** Three credits. 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 Philosophy 300.

**Philosophy 105. Philosophy and Religion of India and China.** Three credits. An introduction to the origin and development of Indian and Chinese thought and religion, with special emphasis on Hinduism, Taoism, and Confucianism.

**Philosophy 207.** (Formerly 307) **Classical Christian Metaphysics.** Three credits. An examination of the development of philosophy from St. Augustine through St. Thomas Aquinas to William of Occam. Prerequisite: Sophomore standing.

**Philosophy 217. History of Ancient Greek Philosophy.** Three credits. The pre-Socratics, Plato, Aristotle, and post-Aristotelian philosophers. Prerequisite: Sophomore standing.

**Philosophy 218. History of Early Modern Philosophy.** Three credits. Major philosophic movements and figures from the Renaissance through Immanuel Kant. Prerequisite: Sophomore standing.

**Philosophy 220. Problems in Political and Social Philosophy.** Three credits. 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. Prerequisite: Sophomore standing.

**Philosophy 221. Elementary Logic.** Three credits. 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. Prerequisite: Sophomore standing.

**Philosophy 230. Introduction to Philosophy of Education.** Three credits. Representative theories of education and issues of current educational concern. Prerequisite: Sophomore standing.

The former **Philosophy 280** is now **380**.

**Philosophy 300. Introduction to Philosophical Thinking.** Three credits. Problems and methods of philosophy; read-

ing and discussion of the works of classical and contemporary philosophers, such as Aristotle, Descartes, Hume, Sartre, Russell. Not open to those who have had Philosophy 100.

**Philosophy 303. Philosophy of Art.** Three credits. 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.

**Philosophy 305/505. Ethics.** Three credits. A critical examination of moral concepts and representative ethical systems.

**Philosophy 306. Philosophy of Science.** Three credits. An examination of scientific theories in terms of their content and structure, their explanatory function, and their confirmation. Prerequisite: Three credits in philosophy or consent of instructor.

The former **Philosophy 307** is now **207**.

The former **Philosophy 309** is now **308 and 309**.

**Philosophy 308. Nineteenth Century Philosophical Thought.** Three credits. 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. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 309. Contemporary Philosophy.** Three credits. The philosophic trends of the 20th century including Existentialism, Logical Positivism, Ordinary Language Philosophy, and Phenomenology. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 310. Metaphysics.** Three credits. Study of the nature and structure of ultimate reality and its relation to the sciences. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 312. Epistemology.** Three credits. A study of the nature, limits, and bases of human knowledge. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 314. Moral Issues in Law and Social Policy.** Three credits. 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.

**Philosophy 315. Philosophy of Law.** Three credits. An examination of legal concepts, natural law, and the logic of legal reasoning. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 316. Philosophy of History.** Three credits. 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. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 318. Philosophy of Language.** Three credits. An introduction to theories of meaning and the role played by language in man's conceptions of the world. Prerequisite: Three credits of philosophy or consent of instructor.

**Philosophy 320. Philosophy of Religion.** Three credits. The basic problems of the philosophy of religion, such as the existence of God, the problem of evil, religious language, and immortality.

**Philosophy 322/522. Symbolic Logic.** Three credits. A detailed study of truth functions, quantification theory and axiomatics, including the scope and limits of formal logic. Prerequisite: Philosophy 221 or consent of instructor.

**Philosophy 325/525. Educational Philosophy of Pragmatism.** Three credits. The educational philosophy of pragmatism, concentrating on the writings of John Dewey. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 330. Existential Philosophy.** Three credits. Phenomenology and the philosophy of human existence from Kierkegaard to Sartre.

**Philosophy 331/531. History of Pre-Revolutionary Russian Philosophy.** Three credits. The development of Russian religious and philosophic thought from its Byzantine origins to the end of the nineteenth century.

**Philosophy 332/532. Development of Soviet Ideology.** Three credits. An examination of the sources and evolution of historical and dialectical materialism—the philosophy of the Soviet Union.

**Philosophy 335. Basic Texts of Hinduism and Buddhism.** Three credits. A systematic examination of classical Indian philosophic texts such as the *Upanisads*, the *Yoga Sutras*, the *Bhagavad Gita*, or the *Prajnaparamita* literature of Buddhism. Prerequisite: Philosophy 105 or consent of instructor.

**Philosophy 336. Contemporary Indian Thought.** Three credits. A history of Indian thought from Ram Johan Roy to Mohandas Gandhi with special emphasis on the influence of both the classical Indian tradition and Western philosophy. Prerequisite: Three credits in philosophy or consent of instructor.

**Philosophy 337. Indian Yoga.** Three credits. The history, theory, and practice of Indian yoga from the Upanishads to the modern period. Prerequisite: Philosophy 105, Religious Studies 100, or consent of instructor.

**Philosophy 340. American Philosophy.** Three credits. Philosophical trends and thinkers in American religious, political, and scientific thought from the colonial period to the present century.

**Philosophy 380.** (Formerly 280) **Environmental Ethics.** Three credits. Philosophical, religious, and scientific concepts and values which have structured human attitudes toward the natural environment; alternative concepts and values will be explored.

**Philosophy 399.** (Formerly 499) **Independent Study.** One to three credits. 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.

**Philosophy 490/690. Seminar.** Three credits. 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. Prerequisite: Consent of instructor.

The former **Philosophy 499** is now **399**.

## **PHYSICAL EDUCATION**

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### **(School of Health, Physical Education, Recreation, and Athletics)**

Robert Bowen, Assistant Dean; Don Amiot, Mary Lou Biddlestone, Lynn Blair, Eugene Brodhagen, James Chaffin, Monte Charles, James Clark, Alice Clawson, Duaine Counsell, Charles Crandall, Wayne Gorell, Jerry Gotham, Judith Herrold, Donald Hoff, Peter Kasson, Richard Kottke, Robert Krueger, Norbert Miller, Mary Jo Mullen, Nancy Page, Jack Renken, Vera Rimnac, Marilyn Schwartz, Marjorie Spring, Ronald Steiner, Judith Tate, Rosalind Taylor, Reginald Wicks, David Wright.

**A. A major in Physical Education** (women) 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 377; 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 380.
  4. **Recreation:** Physical Education 342 (required); and six credits from the following: Art 241, 342; Biology 109, 244, 277, 309, 379; Education 241, 350; Dance 103, 104, 218, 219; Dance Education 217, 220; Forestry 427; Geography 101; Music 200; Natural Resources 170; Physical Education 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, 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 Sports Clinic participation. See description under course headings.
- g. Students preparing for teacher certification with a major in Physical Education must take 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 broadfield **non-teaching** major in Physical Education consists of 55 credits as outlined above under **Option I, items a through g**. The twenty-credit Education requirement should be replaced with 20 credits of courses numbered 300 and above approved by the student's adviser.

**Option III.** A 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.

**B. A minor in Coaching** consists of 22 credits:

1. Physical Education 271, 281, 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.

**C. A minor in Health Education** consists of 22 credits:

1. Biology 281; Home Economics 351; Physical Education 240, 340, 362; Psychology 260 or 315.
2. The remaining five credits shall be selected from the following: Anthropology 112; Biology 333; Communicative Disorders 380; Education 351, 377, 381, 388; Home Economics 261, 490; Physical Education 104, 252, 253, 254, 280, 353, 397; Psychology 301; Sociology 224, 240.

Students preparing to teach must take Education 327 as one of their techniques courses, and must take Education 398 (Student Teaching) at all levels in which certification is sought.

#### **NOTES:**

1. **All curricula 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.

- 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 and in Health 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 credit 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.



## Health

**Physical Education 104. Current Health Issues.** Two credits. Health Education in specific areas of importance to the college-age student, including physical and emotional assessment, sexuality, nutrition, drug use and abuse, health care delivery, infectious and non-infectious disease, with overall emphasis on prospective health. One hour lecture, one hour laboratory per week.

**Physical Education 240. Curriculum and Resources in Health Education.** Two credits. Comprehensive study of the content, scope, and sequence of health curricula, combined with practical application of current curricular resources. Prerequisite: Sophomore standing.

**Physical Education 252. Standard First Aid and Personal Safety.** One credit. American Red Cross first aid training with certificate issued on satisfactory completion of course. Prerequisite: Sophomore standing.

**Physical Education 253. Standard First Aid Instructors.** One credit. 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. Prerequisite: Valid Standard First Aid certificate.

**Physical Education 254. Advanced First Aid and Emergency Care.** Two credits. American Red Cross Advanced Training with certificate issued on satisfactory completion of course. Prerequisite: Valid Standard First Aid certificate (or Physical Education 252); Red Cross

requires that the candidate for certification must be 18 years of age before the certificate will be granted.

**Physical Education 280. Personal and Community Health.** Three credits. Health practices and problems in the fields of personal and community health. Prerequisite: Sophomore standing.

**Physical Education 340. Principles and Administration of School Health Programs.** Three credits. Basic principles of health education and administrative practices in all aspects of the school health program. Prerequisite: Physical Education 280 or consent of instructor.

The former **Physical Education 352** is now **253**.

**Physical Education 353. Advanced First Aid Instructors.** One credit. Preparation for teaching Advanced First Aid prescribed by American Red Cross. Certificate of authorization granted on satisfactory completion of course. Prerequisite: 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.

**Physical Education 362. Practicum in Health Education.** Two credits. Practical experiences and field problems in health education. One hour lecture, two hours laboratory per week. Prerequisite: Biology 281; Home Economics 351; Physical Education 240, 340; Psychology 260 or 315.

## Recreation

**Physical Education 241. Camp Leadership.** Two credits. Theory and practice in camp craft, problems of cabin living,

counselor training, waterfront laboratory, nature study, handicrafts and special projects; field trips and supple-

mentary reading. Prerequisite: Sophomore standing.

**Physical Education 342. Community Recreation.** Two credits. Study of the problems involved in setting up recreation programs on a yearly basis.

## Coaching

**Physical Education 281. Theory and Techniques of Officiating.** Two credits. Mechanics and techniques of officiating interscholastic athletic contests; field work required; preparation for WIAA certification. Prerequisite: Sophomore standing.

**Physical Education 282-393.** (Formerly 382 and 383) **Coaching of Specific Sports.** Two credits in each of the following courses. Theory and technique, training schedules, strategy, coaching methods, and conditioning. Prerequisite: Sophomore standing.

**Physical Education 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.

**Physical Education 351. Athletic Training and Taping.** Two credits. Cause, treatment, and prevention of injuries common to athletic activities; taping,

**Physical Education 343. Group Games and Social Recreation.** Two credits. Quiet games, singing and folk games, and games of low organization suitable for home, school, and community recreation; supplemental to Physical Education 342.

bandaging; discussion of such topics as rehabilitation, conditioning, and variable factors of athletic performance levels. Prerequisite: Valid first aid certificate or medical self-help certificate; Physical Education 271.

**Physical Education 361. Practicum in Coaching.** Two credits. Practical experiences in coaching teams in various sports at different educational levels. One hour lecture, two hours laboratory per week. Prerequisite: Physical Education 281 and at least two coaching theory courses.

**Physical Education 371. Scientific Concepts of Coaching.** Three credits. Principles of mechanics and laws of physics; physiological phenomenon of activity; psychological principles applied to human movement. Prerequisite: Physical Education 271.

The former **Physical Education 382 and 383** have been incorporated into the courses numbered **282-293**.

## Physical Education

**Physical Education 001-012. Sports Clinics.** No credit. Provides opportunity for the beginning major in physical education to meet the prerequisite profi-

ciencies for Physical Education 201, 202, 213, and 214.

**Physical Education 001**—Field Hoc-

key; **002**—Golf; **003**—Soccer; **004**—Archery; **005**—Volleyball; **006**—Bowling; **007**—Basketball; **008**—Badminton; **009**—Softball; **010**—Table Tennis; **011**—Track and Field; **012**—Tennis.

**Physical Education 101. Physical Education for Men and/or Women.** One credit. 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 hours 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). Physical Education 109, 110, 123, 124, 231, and 232 may be substituted if specified in the student's curriculum or minor.

**Physical Education 105. Introduction and Principles of Physical Education.** Two credits. An introductory course for all Physical Education majors and minors interpreting the history, philosophy, and principles of physical education.

**Physical Education 107. Physical Education for the Older Student.** Two credits. Primarily for the student over 30 years of age who wishes to elect this course in place of two credits in Physical Education 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.

**Physical Education 108. Physical Education for the Older Student.** Two credits. A continuation of Physical Edu-

cation 107, primarily for the student over 30 years of age who wishes to elect this course in place of two credits in Physical Education 101.

**Physical Education 109. Team Sports: Men.** Two credits. Instruction in football and volleyball, with emphasis on playing skills and teaching methods. Four hours per week.

**Physical Education 110. Team Sports: Men.** Two credits. Instruction in basketball and soccer, with emphasis on playing skills and teaching methods. Four hours per week.

**Physical Education 120. Foundations of Physical Education Activities.** Two credits. Instruction in the nature of exercise and conditioning, and fundamental movement patterns and basic skills. Four hours per week.

**Physical Education 123. Team Sports: Men.** Two credits. Instruction in swimming and wrestling, with emphasis on playing skills and teaching methods. Four hours per week.

**Physical Education 124. Team Sports: Men.** Two credits. Instruction in track and field, and baseball, with emphasis on playing skills and teaching methods. Four hours per week.

**Physical Education 201. Advanced Team Sports: Women.** Two credits. Instruction in the techniques of teaching field hockey, soccer, and volleyball. Four hours per week. Prerequisite: Beginning course, sports clinic, or proficiency in each of the three sports.

**Physical Education 202. Advanced Team Sports: Women.** Two credits. Instruction in the techniques of teaching basketball, softball, and track and field.

Four hours per week. Prerequisite: Beginning course, sports clinic, or proficiency in each of the three sports.

**Physical Education 213. Individual Sports.** Two credits. Instruction in the techniques of teaching golf, bowling, and archery. Four hours per week. Prerequisite: Beginning course, sports clinic, or proficiency in each of the three sports.

**Physical Education 214. Dual Sports.** Two credits. Instruction in the techniques of teaching badminton, tennis, and table tennis. Four hours per week. Prerequisite: Beginning course, sports clinic, or proficiency in each of the three sports.

**Physical Education 225. Advanced Gymnastics.** Two credits. Instruction in the techniques of teaching gymnastics, advanced techniques in competitive gymnastics activities. Four hours per week. Prerequisite: Beginning course, or proficiency in gymnastics.

**Physical Education 231. Physical Education for the Elementary Classroom Teacher.** Three credits. 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. Prerequisite: Sophomore standing.

**Physical Education 232. Physical Education for the Elementary Classroom Teacher.** Three credits. A continuation of Physical Education 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. Prerequisite: Sophomore standing.

**Physical Education 250. History and Philosophy of Physical Education.** Two credits. Historical development of philosophies of physical education as influenced by the political, economic, and social conditions of various countries. Prerequisite: Sophomore standing.

**Physical Education 271. Human Anatomy.** Three credits. The skeletal, muscular, circulatory, respiratory, and nervous systems of the human body; designed for Physical Education majors and minors. Prerequisite: Sophomore standing.

**Physical Education 331. Physical Education for the Elementary School.** Three credits. The physical education program at the elementary school, with emphasis on pre-school through grade three. Three hours per week; field work required. Enrollment limited to students majoring in physical education.

**Physical Education 332. Physical Education for the Elementary School.** Three credits. Continuation of Physical Education 331 with emphasis on grades four through six. Three hours per week; field work required. Prerequisite: Physical Education 331.

**Physical Education 360. Practicum in Physical Education.** Two credits. Practical experiences in teaching individuals and small groups in sports clinics and in elementary and secondary physical education classes. Must be taken prior to student teaching. One hour lecture, two hours laboratory per week. Prerequisite: First semester: Physical Education 201 and 213. Second semester: Physical Education 202 and 214. Or consent of instructor.

**Physical Education 370. Kinesiology.** Three credits. Study of body movement and principles which affect movement. Prerequisite: Biology 281; Physical Education 271.

**Physical Education 372. Physiology of Exercise.** Two credits. 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. Prerequisite: Biology 281; Physical Education 271.

**Physical Education 374. Adapted Physical Education.** Two credits. Teaching materials of the preventive and corrective phases of physical education as applied to individual development needs of students at all school levels. Prerequisite: Biology 281; Physical Education 370.

**Physical Education 380. Tests and Measurements in Physical Education.** Three credits. Analysis and construction of tests, interpretation of data and measurements in physical education.

**Physical Education 391. Organization and Administration of Physical Education and Athletics.** Two credits. The school program in Physical Education and Athletics; problems of the administration of gymnasias, playgrounds, pools, locker rooms, interscholastic athletics and intramurals; management of the business affairs of each type of program.

**Physical Education 395. Seminar in Physical Education, Health, and Recreation.** One credit. Current developments in physical education, health, and recreation. Prerequisite: Senior standing for students majoring in Physical Education.

**Physical Education 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 three credits.

**Physical Education 399. Special Work.** Upper class students 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.



## PHYSICS

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Francis Schmitz, chairman; Monica Bainter, Allen Blocher, Jagdish Chander, Gregory Kulas, Ronald Lokken, David McMillan, Kameshwar Razdan, Allen Taylor.

**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, 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 1974-75, in 1976-77, in 1978-79, and in 1980-81: Physics 303, 315, 423, 412.

The following courses will be offered in the **second semester only** in 1975-76, in 1977-78, and in 1979-80: Physics 305, 308, 324, 380.

**Physics 100. Conceptual Physics.** Three credits. The fundamental concepts of physics as related to man and his physical environment. Two hours lecture, two hours laboratory per week. This

course may be used in partial fulfillment of Part B of the Natural Science requirement of the general degree requirements.

**Physics 101. General Physics.** Five credits. Fundamental principles of physics with emphasis on applications; designed for students in the Elementary Education curriculum and in general education. Not to be counted toward a major or minor in Physics. Two hours lecture, one hour quiz, four hours laboratory per week.

**\*Physics 103. General Physics.** Five credits. Mechanics, heat, and sound. Three hours lecture, three hours laboratory, one hour quiz per week. Prerequisite: One year of high school algebra and one year of high school geometry, or equivalent.

**\*Physics 104. General Physics.** Five credits. Light, electricity and magnetism, and topics in modern physics. Three hours lecture, three hours laboratory, one hour quiz per week. Prerequisite: Physics 103, or equivalent, or consent of instructor.

**\*Physics 110. General Physics.** Three credits. Mechanics. Prerequisite: Mathematics 110 or 111, or concurrent registration, or consent of instructor.

**\*Physics 211. General Physics.** Four credits. Heat, sound, and electrostatics. Two hours lecture, one hour quiz, three hours laboratory per week. Prerequisite: Physics 110 or consent of instructor.

**Physics 212. General Physics.** Four credits. Electricity, magnetism, optics, and modern physics. Two hours lecture, one hour quiz, three hours laboratory per week. Prerequisite: Physics 110 and 211, or consent of instructor.

**Physics 220. Statics.** Three credits. Principles of mechanics, force systems, equilibrium, structures, distributed forces, moments of inertia of area, friction. For students in the pre-engineering curriculum. Prerequisite: Physics 110; Mathematics 211; or consent of instructor.

**Physics 221. Dynamics.** Three credits. Kinematics, force-mass-acceleration relationships, work and energy, impulse and momentum, moments of inertia of mass. For students in the pre-engineering curriculum. Prerequisite: Physics 220; Mathematics 212; or consent of instructor.

**Physics 301. Electronics.** Four credits. Theory, application and practice of vacuum tube and solid state devices; circuits and systems using these devices. Two hours lecture, four hours laboratory per week. Purchase of laboratory manual is required. Prerequisite: Physics 104, or 212, or consent of instructor.

**Physics 303. Advanced Optics.** Four credits. Principles of physical and geometrical optics. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 212; Mathematics 212.

**Physics 305. Advanced Mechanics.** Three credits. Vectors, rectilinear and curvilinear motions, including simple harmonic and damped vibrations; rotation of rigid bodies. Prerequisite: Physics 212; Mathematics 212.

**Physics 307. Electricity and Magnetism I.** Four credits. Direct and alternating current circuits; transients; introduction to theory of electrostatics. Three hours

\*If a student receives credit for 103 and 104, he cannot receive credit for 110 and 211.

lecture, two hours laboratory per week. Prerequisite: Physics 212; Mathematics 212; concurrent registration in Physics 301 is recommended.

**Physics 308. Electricity and Magnetism II.** Four credits. Continuation of theory of electrostatics; electromagnetics; magnetic properties of materials; Maxwell's equations. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 307.

**Physics 315. Thermodynamics.** Three credits. Principal concepts of thermodynamics and elementary kinetic theory. Prerequisite: Physics 212; Mathematics 212.

The former **Physics 320, 321, and 322** have been replaced by **323 and 324**.

**Physics 323. Electricity, Magnetism, and Optics.** Four credits. A review of elementary concepts and an introduction to more advanced principles of electricity, magnetism, and optics. Not to be counted toward a physics major or Plan 1 of the physics minor. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 104; Mathematics 107 or eligibility for Mathematics 110.

**Physics 324. Modern Topics in Physics.** Four credits. A study of atomic and nuclear processes; introduction to relativity, elementary particles, and concepts of solid-state physics. Not to be counted toward a physics major or Plan 1 of the physics minor. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 104; Mathematics 107 or eligibility for Mathematics 110.

**Physics 333. Physical Approach to Environmental Science.** Three credits. A study of the environment emphasizing

physical principles; energy and the environment, impact of technology, mechanics of the environment; application to environmental problems. Prerequisite: Completion of the general degree requirement in natural science; Mathematics 104 or equivalent, or consent of instructor.

**Physics 380. Selected Topics.** Three credits. 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. Prerequisite: Physics 212.

**Physics 388. Research Participation.** One to four credits (re-enrollment permitted to a maximum of six credits). Investigations of current problems in physics, requiring three to twelve hours per week in the laboratory. Prerequisite: Recommendation by a staff member and approval of the research supervisor.

**Physics 411. Atomic Structure I.** Four credits. Atomic theory of matter: atomic spectra, Bohr atom, Schrodinger equation, Pauli exclusion principle; quantum theory of the periodic table. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 212; Mathematics 212.

**Physics 412. Atomic Structure II.** Four credits. Experimental and theoretical nuclear physics; radioactivity; nuclear reactions and scattering; fundamental particles. Three hours lecture, two hours laboratory per week. Prerequisite: Physics 411.

**Physics 499. Special Work.** Upper class

students majoring or minoring in Physics may, by agreement with the chairman of the Physics 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.

**Physics 701. Physical Science.** Three or four credits. 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.

**Physics 796. Independent Study.** One to four credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization. Regularly scheduled conferences with the staff instructor. Prerequisite: The student must be mature enough to be able to do independent study; the course must supplement his current graduate work.

## **POLISH**

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Courses in Polish are taught by members of the Department of Foreign Languages and Comparative Literature. Students who have demonstrated proficiency in Polish may be placed in the appropriate advanced course by the department.

**Polish 101. First Year Polish.** Four credits. For students with no previous training in the language.

**Polish 102. First Year Polish.** Four credits. Continuation of Polish 101. Prerequisite: Polish 101 or equivalent.

**Polish 211. Second Year Polish.** Four credits. Prerequisite: Polish 102 or equivalent.

**Polish 212. Second Year Polish.** Four credits. Continuation of Polish 211. Prerequisite: Polish 211 or equivalent.

**Polish 293. Specialized Studies in Polish.** One to three credits. Individual study under the direction of consenting faculty member. Prerequisite: Consent of the chairman of the department.

## **POLITICAL SCIENCE**

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Mark Cates, chairman; James Canfield, Richard Christofferson, Robert Freeman, Dale Holt, Albert Kudsi-Zadeh, Edward Miller, John Morser, John Oster, Bhola Singh, Nancy Snider, S. Joseph Woodka.

**A. A major in Political Science** consists of at least 34 credits including:

1. Political Science 101 and 102.
2. At least one advanced course from four of the following six fields:
  - a. American Government: Political Science 301, 310, 313, 316, 320, 411, 412, 414, 416, 420.

- b. Comparative Government: Political Science 361, 366, 370, 371, 372, 375, 376, 464.
- c. International Relations: Political Science 380, 382, 484, 488.
- d. Political Theory: Political Science 391, 392, 395, 396, 490, 494, 495, 497.
- e. Public Administration: Political Science 350, 351, 354, 454, 455.
- f. State and Local Government: Political Science 341, 342, 441, 442.

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. A minimum 2.00 grade point ratio 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 chairman of the department 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, and at least one advanced course in three of the six fields listed under the major.

**Political Science 101. Introduction to American Politics.** Three credits. 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.

**Political Science 102. American Policy Making.** Three credits. Introduction to analysis of governmental policy making; emphasis on the roles of institutions in the policy process and its effect upon policy outcomes.

**Political Science 106. Introduction to the Politics of Developing Areas.** Three credits. An introduction to developing areas with special reference to the social institutions, traditional heritage, governments and politics of selected developing countries.

**Political Science 241. Local Government in Wisconsin.** Two or three credits.

**Two credits:** Structure and function, political and administrative processes of cities, counties, school and special districts, towns and villages in Wisconsin, with comparisons with similar entities in other states; emphasis on city planning, problems of conservation and law enforcement. Not open to students who have completed more than two credits of Political Science 242. Prerequisite: Sophomore standing.

**Three credits:** In addition to the above, introduction to the political patterns of the State, and the political and administrative processes of Wisconsin, especially as related to state-local relations. Not open to students with credit in Political Science 242. Prerequisite: Sophomore standing.

**Political Science 242. Survey of State and Local Government.** Two or three credits.

**Two credits:** Structure, functions, and political processes of state governments; emphasis on the administrative and budgetary process; introduction to

intergovernmental cooperation; emphasis on Wisconsin. Not open to students who have completed more than two credits of Political Science 241. Prerequisite: Sophomore standing.

**Three credits:** In addition to the above, an introduction to the structure and problems of cities, counties, special districts, towns and villages; emphasis on Wisconsin. Not open to students with credit in Political Science 241. Prerequisite: Sophomore standing.

**Political Science 250. Law and Social Control.** Three credits. A general introduction to the nature of law and legal processes as instruments of social control; study of applications of law in conflict resolution. Prerequisite: Sophomore standing.

**Political Science 270. Introduction to Modern Politics.** Three credits. An analysis of major conceptions of politics and the state; a theoretical and comparative study of the philosophical bases of governmental systems, emphasizing such notions as constitutionalism, consent, obligation, and majority and minority rule. Prerequisite: Sophomore standing.

**Political Science 280. Introduction to International Relations.** Three credits. A survey of the general principles of international relations and organizations. Prerequisite: Sophomore standing.

**Political Science 301. Politics and the Environment.** Three credits. Analysis of the "new politics of ecology"; includes an examination of the eco-political movement, the role of the scientific community, and the response of the national government.

**Political Science 310. The American Presidency.** Three credits. 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.

**Political Science 313. The Judicial Process.** Three credits. The nature and role of law and of the Judiciary in American democracy; basic American judicial concepts; judicial organization, selection, tenure, and procedure.

**Political Science 316. Political Parties and Elections.** Three credits. A description and critical examination of political parties and voting behavior in the United States.

**Political Science 320. The Legislative Process.** Three credits. An analysis of the forces and procedures that determine the formation of law and public policy in the United States.

**Political Science 341. Urban Government.** Three credits. Analysis of urban government in the United States; special attention to governmental structure, powers, and political patterns; problems unique to urban government; emphasis on Wisconsin. Prerequisite: A minimum of three credits in Political Science 241 and/or 242, or consent of instructor.

**Political Science 342. Local Rural Government.** Three credits. Critical examination of rural governmental structure and problems; powers and limitations; functions of counties, villages, towns and special purpose districts; emphasis on Wisconsin. Prerequisite: A minimum of three credits in Political Science 241 and/or 242, or consent of instructor.

**Political Science 350. Introduction to Public Administration.** Three credits. Theory and practice of public administration in the United States.

**Political Science 351. Public Administration—Structure and Process.** Three credits. Structure, work methods, and organization in governmental agencies; emphasis on line and staff agencies; administration of regulatory commissions, national and state, with emphasis on Wisconsin.

**Political Science 354. Public Personnel Administration.** Three credits. Problems and practices of selection, training, and organization of personnel administration; emphasis on Wisconsin.

**Political Science 356. The Budgetary Process.** Three credits. Determination and execution of public agency budgets; emphasis on preparation, authorization, and political considerations of the government agency budget; emphasis on Wisconsin.

**Political Science 361. Major Governments of Western Europe.** Three credits. Comparative study of the governments and politics of the United Kingdom, France, and the Federal Republic of Germany.

**Political Science 366. Governments and Politics of the Middle East.** Three credits. A comparative study of the political institutions, ideas, and modernization processes in the Arab world, Iran, Israel, and Turkey.

**Political Science 367/567. Political Trends in the Middle East.** Three credits. Major political and ideological trends in the Middle East since 1800 with special reference to the impact of Western ideas and concepts: Islamic fundamentalism and reformism, constitutionalism, modern nationalism, socialism, and secularism.

**Political Science 370. Governments and Politics of South Asia.** Three credits. A

comparative study of the political systems of India, Pakistan, and Bangladesh.

**Political Science 371. Government and Politics of China.** Three credits. Study of governmental institutions and political processes in the People's Republic of China, with special emphasis on the role of the Communist Party.

**Political Science 372. Government and Politics of Southeast Asia.** Three credits. A comparative study of the political systems of some major Southeast Asian countries including Indonesia, Malaysia, and Vietnam. Not open to students who received credit in Political Science 370 prior to September, 1970, or Political Science 371 prior to September, 1971.

**Political Science 375. Governments and Politics of Latin America.** Three credits. Study of the political and governmental institutions of selected Latin American countries; emphasis on aspects and characteristics contributing to uniqueness of these institutions; analysis of party systems and political behavior of the area.

**Political Science 376. Governments and Politics of Latin America.** Three credits. Continuation of Political Science 375.

**Political Science 380. International Politics.** Three credits. Political relations among modern states; forces which motivate foreign policy; the role of power; conflict between free and totalitarian systems.

**Political Science 382. International Organization.** Three credits. A survey of the proposals and experiments in international organizations; the League of Nations and the United Nations.

**Political Science 391. American Political Thought to 1865.** Three credits.

**Political Science 392. American Political Thought Since 1865.** Three credits.

**Political Science 395. Western Political Thought.** Three credits. 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.

**Political Science 396. Western Political Thought.** Three credits. 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.

**Political Science 411. American Constitutional Law.** Three credits. 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.

**Political Science 412. American Constitutional Law.** Three credits. Same as Political Science 411, covering civil liberties and civil rights; due process of law; equal protection of the laws.

**Political Science 414/614. National Politics—Issues and Answers.** Two or three credits. An intensive analysis of selected national political issues; their origin, development, proposed solutions, and political impact.

**Political Science 416. Minority Group Politics.** Three credits. A study of the

political behavior and impact of ethnic, religious, racial and ideological minority groups in the United States.

**Political Science 420. Interest Groups in Politics.** Three credits. The nature and influence of pressure groups in American politics; a critical analysis of their effect upon the democratic way of life.

**Political Science 441. Government and Politics of Metropolitan Areas.** Three credits. Special attention to the political and governmental problems resulting from the development of the metropolis; analysis of recent trends in the development of metropolitan governmental units. Prerequisite: A minimum of three credits in Political Science 241 and/or 242, or consent of instructor.

**Political Science 442. Intergovernmental Relations.** Three credits. Detailed consideration of the 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. Prerequisite: A minimum of three credits in Political Science 241 and/or 242, or consent of instructor.

**Political Science 454. Problems of Local Government Administration.** Three credits. Theory and practice of local government administration; contrasts and comparisons with state and national public administration; emphasis on Wisconsin. Prerequisite: Political Science 242.

**Political Science 455. Problems of Local Government Administration.** Three credits. Research in local government administration. The student will spend

the bulk of his time working with a local governmental agency, under the supervision of the instructor. On the basis of this experience, the student will be expected to complete a research paper on a topic previously agreed on with the instructor. Prerequisite: Political Science 242 and 454.

**Political Science 464. Government and Politics of the Soviet Union.** Three credits. 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.

**Political Science 484. The Foreign Policy of the Soviet Union.** Three credits. An analysis of the Russian national and Marxist bases of the foreign policy of the Soviet Union.

**Political Science 488. American Policy in Asia.** Three credits. A review of American involvement in the Far East and Southeast Asia since World War II; emphasis on relationship between American popular attitudes toward Asia and American policy decisions.

**Political Science 490. Selected Problems in Political Studies.** Three credits. 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 of the Department; may be repeated with consent of the Chairman of the Department. Enrollment limited to 12 students.

**Political Science 491/691. Militant Non-violence.** Three credits. An advanced

study of Ghandi's ideal community (sarvodaya), theory of social conflict, and moral equivalents of war.

**Political Science 494. Communism in Asia: Strategy and Tactics.** Three credits. A study of the adaptation and application of communist ideology and practice in Asian areas, with specific reference to China, North Korea, North Vietnam, India, and Indonesia.

**Political Science 495. Western Political Thought.** Three credits. Critical analysis of political thinkers of the contemporary Western world, such as Russell, Lippmann, Niebuhr, Maritain, Camus, Fromm, Sartre, Marcuse, Moore, Bay, Strauss, and Mills, as well as ideas of currently influential political figures.

**Political Science 497. Scope and Methods of Political Science.** Three credits. Examination of political science as a discipline through consideration of the materials, approaches, methods, and modes of presentation used in contemporary research.

**Political Science 499. Special Work.** 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.

**Political Science 747. Government and Politics of the Soviet Union.** Three credits. Russian national and Marxist influences on the development of the Soviet State, the 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.

## PSYCHOLOGY

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Lloyd Beck, chairman; John Cleve, David Coker, Ronald Conrard, Aletha Crowder, Coralie Dietrich, Dennis Elsenrath, Marcus Fang, Carla Foote, Albert Harris, Hamid Hekmat, Wolfgang Horn, James Johnston, Daniel Kortenkamp, Frederick Leafgren, L. Wayne Lerand, Frederick Littmann, Ralph Lubitz, Beverly Mancl, Robert Mosier, Thomas Naiman, James Nichols, Clifton Peterson, Walter Pohl, Thomas Rowe, Joan Taylor, Dennis Tierney.

**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.

**B. 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.

**Psychology 100. Personal Effectiveness, Study Skills, and Adjustment to College.** Three credits. A theoretical and applied assessment and development of learning skills, motivation, and adjustment to college. Two hours lecture, one hour laboratory per week.

**Psychology 200. General Psychology.** Three credits. An introductory survey course in the study of experience and behavior. Prerequisite: Sophomore standing.

**Psychology 240. Psychology of Women.** Three credits. Research and theory concerned with women's personality, roles, and capacity; emphasis on socialization and sex role development. Prerequisite: Psychology 200.

**Psychology 250. Psychology of Adjustment.** Three credits. Nature of adjustment and the conditions related to mental health in normal persons. Prerequisite: Psychology 200.

**Psychology 260. Psychology of Child-**

**hood.** Three credits. Studies in child behavior and development and their implications for child-adult relationships; experiences in child study methods. Prerequisite: Psychology 200.

**Psychology 270. Industrial Psychology.** Three credits. Theoretical and practical psychological bases of employee morale, job analysis, selecting and training of workers, working conditions, production, supervision, merit rating, and occupational adjustment. Prerequisite: Psychology 200.

**Psychology 300/500. Statistics for Psychologists.** Four credits. 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 hours lecture, two hours laboratory per week. Prerequisite: Psychology 200.

**Psychology 301. Theories of Personality.**

Three credits. Theories of psychology exploring the major contemporary approaches to the study of behavior; clinical and experimental contributions to the understanding of the personality and its structure. Prerequisite: Psychology 200.

**Psychology 310/510. Cognitive Processes.** Three credits. The role of hypothesis formation in memory, verbal learning, concept formation and attainment, problem solving, and language with special emphasis on human learning. Prerequisite: Psychology 200; Psychology 370/570 or 375/575 is required for graduate students and is recommended for all students.

**Psychology 315. The Psychology of Adolescence.** Three credits. Behavior of adolescents; emphasis on the physiological and cultural determinants of personality and consideration of the problem of adjustment encountered by youth in society. Prerequisite: Psychology 200.

**Psychology 320. Social Psychology.** Three credits. 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. Prerequisite: Psychology 200.

**Psychology 325. Neuropsychology.** Three credits. Neurological basis of behavior; emphasis on the principles of central nervous system activity that underlie perception, motivation, learning, and cognition. Readings include experimental studies of animals and man, and consider functions of the sensory systems as well as deep central and cortical structures. Prerequisite: Psychology 200.

**Psychology 330. Perception.** Three

credits. Survey of fundamental concepts of perception, with special emphasis on vision; experimental findings, theoretical interpretations, and demonstration of the ways in which man perceives his environment. Prerequisite: Psychology 200.

**Psychology 340. Comparative Psychology.** Three credits. A review of 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. Prerequisite: Psychology 200.

**Psychology 350/550. Theory of Psychological Testing.** Three credits. Psychological testing with a consideration of the various characteristics of psychological tests; study of the most widely used intelligence, aptitude, interest, and personality tests. Prerequisite: Two courses in Psychology.

**Psychology 351. Abnormal Psychology.** Three credits. Study of behavior disorders, including the psychoses, neuroses, character disorders, and mental deficiencies. Prerequisite: Psychology 250, or consent of the instructor.

**Psychology 360/560. Behavior Problems in Children: Prevention and Modification.** Three credits. The nature and origin of behavior problems in children, and an examination of strategies for their prevention and modification. Prerequisite: Psychology 260 or consent of instructor.

**Psychology 370/570. Applied Theories of Learning.** Three credits. Systematic approach to learning including major theories of learning, principles of conditioning, task variables in learning, perceptual learning, behavior modification,

and the current applications of learning theory. Prerequisite: Psychology 200.

**Psychology 375/575. Learning.** Three credits. A survey of simple and complex learning, including conditioning, sensory-motor learning, language learning, problem-solving, with emphasis on contemporary theories. Prerequisite: Psychology 200.

**Psychology 389. Introduction to Experimental Psychology.** Two credits. Procedures and methods for collecting and evaluating psychological data. One hour lecture, two hours laboratory per week. Prerequisite: Psychology 300, or consent of instructor.

**Psychology 399. Special Work.** Upper class students majoring or minoring in Psychology may, by agreement with the chairman of the Psychology 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.

**Psychology 400. Experimental Psychology.** Four credits. Theory of measuring human behavior; research techniques and methodology; experimental approaches to sensation, perception and learning. Three hours lecture, three hours laboratory per week. Prerequisite: Psychology 389, or consent of instructor.

**Psychology 401/601. Introduction to Counseling and Psychotherapy.** Three credits. Major approaches to counseling and psychotherapy; theory, research, evaluation, and demonstration. Prerequisite: Psychology 250, or consent of instructor.

**Psychology 451. Motivation and Emotion.** Three credits. The nature and development of emotion, attitude, motive,

and the role of these processes in thinking and behavior. Prerequisite: Psychology 200.

**Psychology 452. Contemporary Viewpoints.** Three credits. A systematic view of psychology through an examination of the major systems including structuralism, behaviorism, gestalt, and psychoanalysis; current trends in theory. Prerequisite: Psychology 400, and 375 or 451, or consent of the instructor.

**Psychology 460/660. Developmental Psychology Seminar.** Three credits. Research experiences in physiological, perceptual, cognitive, emotional, and social development; emphasis on human behavior in the developmental periods from infancy to adulthood. Prerequisite: Psychology 260, or consent of instructor.

**Psychology 480/680. Behavior Modification.** Three credits. Survey of theories, researches, and clinical application of a broad spectrum of behavioral principles to the treatment, amelioration, and prevention of behavior disorders; emphasis on such topics as systematic and semantic desensitization, implosive and operant inter-personal therapies, as well as



on other current and emerging innovations in behavior therapy. Prerequisite: Psychology 200.

**Psychology 490. Seminar: Fields of Psychology.** Two or three credits. 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. Psychology 200 and consent of instructor.

**Psychology 796. Special Work.** Graduate students may, by prior agreement with the instructor, the chairman of the department of Psychology, 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** \_\_\_\_\_

The interdepartmental minor in Public Administration is administered by the Political Science department. It is designed for the student who is interested in graduate study in the field of Public Administration; or in combination with governmental experience and/or further training, for those who are interested in a career in governmental service.

**A minor in Public Administration** consists of 30 credits including:

1. Political Science 101 and 102, or 242 and 454.
2. Political Science 350 or 351.
3. Political Science 354 or 356.
4. Political Science 341 or 342 or 441 or 442.
5. Economics 311.
6. Sociology 260 or 300.
7. Remaining credits to be chosen from the following, in consultation with the coordinator: Biology 280; Business 380; Economics 315, 328, 345; Forestry 427; Geography 373; Mathematics 110; Natural Resources 371, 372, 474; Sociology 270, 311, 366.

## **PULP AND PAPER** \_\_\_\_\_

See **Paper Science**.

## **RELIGIOUS STUDIES** \_\_\_\_\_

Robert Cassidy, Director.

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. Religious Studies 300 and 301, and three additional credits in Religious Studies.
- 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. Religious Studies 300 and 301, and six additional credits in Religious Studies.
- b. At least ten additional credits 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 316; Philosophy 105, 207, 320, 335; Sociology 431.

**Religious Studies 100. Religions of the World—Eastern.** Three credits. A survey of the ideas and practices of the major Eastern religions, such as Hinduism, Buddhism, Confucianism, Taoism.

**Religious Studies 300. History of Western Religious Thought.** Three credits. An examination of the development of Western religious thought through the 19th century.

**Religious Studies 101. Religions of the World—Western.** Three credits. A survey of the ideas and practices of the major Western religions, such as Zoroastrianism, Judaism, Christianity, Islam.

**Religious Studies 301. Contemporary Religious Thought.** Three credits. An investigation into current trends in religious thought such as Liberalism, "death of God theology," Christian existentialism.

**Religious Studies 103. God and Man in the Old Testament.** Three credits. An introduction to the origin, content, and enduring significance of the major religious themes and moral values developed in Biblical Israel.

**Religious Studies 310. Religion and Moral Problems.** Three credits. Principles of religious ethics and their application to specific moral problems, such as birth control, abortion, war, civil disobedience, and violence.

**Religious Studies 104. The New Testament and Early Christianity.** Three credits. An introduction to the origin, content, and enduring significance of the major religious themes and moral values developed in Early Christianity.

**Religious Studies 315. Religion and Literature.** Three credits. 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 con-

temporary writers, such as Conrad, Camus, Golding, and Hesse.

**Religious Studies 399. Independent Study.** One to three credits. 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 Philosophy. 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 taught by members of the Department of Foreign Languages and Comparative Literature, which also administers the minor in Russian.

Freshmen and sophomores who have demonstrated proficiency in Russian may be placed in the appropriate 300 or 400 level course by the department.

**A minor in Russian** consists of 21 credits beyond the first year level, with the following courses suggested: Russian 313, 314, 320, 331 or 332, and a course in Russian literature.



**Russian 101. First Year Russian.** Four credits. For students with no previous training in the language.

**Russian 102. First Year Russian.** Four credits. Continuation of Russian 101. Prerequisite: Russian 101, or one year of high school Russian with a grade of C or better; or equivalent.

**Russian 105. Reading Proficiency in Russian.** Four credits. Readings in technical prose, with a view to developing accuracy and facility in translating. This course does not count toward the minor nor toward the foreign language requirement for a degree.

**Russian 106. Reading Proficiency in Russian.** Four credits. Continuation of Russian 105 (restriction applies). Prerequisite: Russian 105.

**Russian 211. Second Year Russian.** Four credits. Intensive grammar review, practice in reading and speaking Russian. Prerequisite: Russian 102, or two years of high school Russian with a grade of C or better; or equivalent.

**Russian 212. Second Year Russian.** Four credits. Intensive grammar review. Prerequisite: Russian 211, or three years of high school Russian with a grade of C or better; or equivalent.

**Russian 313. Intermediate Russian Conversation.** Two or three credits. Prerequisite: Russian 212, or four years of high school Russian with a grade of C or better; or equivalent.

**Russian 314. Intermediate Russian Composition.** Two or three credits. Prerequisite: Russian 313 or equivalent.

**Russian 320. Phonetics and Diction.**

Two credits. Prerequisite: Russian 212, or four years of high school Russian with a grade of C or better; or equivalent.

**Russian 331. Russian Culture and Civilization.** Three credits. Special focus on one or more aspects of Russian culture. The particular era and emphasis will vary each time the course is offered; it may be repeated for credit under different emphases. Prerequisite: Russian 212 or equivalent.

The former **Russian 332** has been combined with **Russian 331**.

**Russian 343. Pre-Revolution Russian Literature in Translation.** Three credits. This course does not apply to the Russian major or minor.

**Russian 344. Post-Revolution Russian Literature in Translation.** Three credits. This course does not apply to the Russian major or minor.

**Russian 493. Specialized Studies in Russian Literature.** One to three credits. 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 authors. A subtitle indicating the focus will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: One 300 level Russian course and consent of instructor.

**Russian 499. Independent Research in Russian.** One to three credits. Individual study under the direction of consenting faculty member; may be taken only by upper level minors, with the consent of the chairman of the department.

## RUSSIAN AND EAST CENTRAL EUROPEAN STUDIES

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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** 130 (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** 464 (Government and Politics of the Soviet Union); 484 (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.

**Russian and East Central European Studies 297. Soviet Seminar.** Three credits. Comprehensive study of the Soviet Union and East Central Europe. Open only to students with at least sophomore standing who are going to participate in the trip to Eastern Europe within the framework of the Soviet Seminar. Prerequisite: Sophomore standing.

**Russian and East Central European Studies 397. Soviet Seminar.** Three credits. Same as **RECES 297**, except offered at the junior-senior level.

**Russian and East Central European Studies 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**

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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 (cultural), consisting of Geography 110, plus three credits in cultural 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 (cultural), 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, cultural 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 cultural 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**

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David Stafford, chairman; Richard Ackley, E. Sherwood Bishop, Eugene Clark, Loren Close, Elfriede Coppinger, Robert Coppinger, George Dixon, Ephraim Fischhoff, Virginia Fish, Roger Fisher, Ralph Goebel, Thomas Johnson, Elizabeth Keena, Joan Lauer, Arnold Maahs, John Moore, Arthur Piper, Gerald Rous, Gordon Shipman, Gail Skelton, Elaine Wrone.

- A. A major in Sociology and Anthropology** consists of 34 credits, 18 of which will be in courses numbered 300 or above. Anthropology 111 or 112, and Sociology 101, 250, 310, 351 (or an acceptable substitute course in statistics), and 446 are required. Any other courses in Sociology or Anthropology and/or Latin American Studies 423 and Economics 328 may be counted toward the major.
- B. A minor in Sociology and Anthropology** consists of 18 credits, nine of which will be in courses numbered 300 or above. Sociology 101 and 446 are required. Any other courses in Sociology and/or Anthropology and/or Latin American Studies 423 and Economics 328 may be counted toward the minor. The minor for **teacher certification** requires at least 22 credits.
- C.** Students with interest in preparing for specialized graduate studies, professional schools, or careers should request assignment to advisers concerned with relevant sequence or course concentrations.

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 section of the catalog.

### **Sociology**

**Sociology 101. Introduction to Sociology.** Three credits. Sociology as a special field of social science, social relations, and social systems; the organization of societies and other human groupings; fundamentals of sociological in-

vestigation, dealing with the underlying premises, concepts, logic, and methods of sociology.

**Sociology 152. Social Problems.** Three credits. The field of social problems; theories explaining social and personal disorganization and deviation; selected contemporary problems analyzed and related to their social contexts. Prerequisite: Sociology 101.

**Sociology 224. Sociology of Childhood and Adolescence.** Two or three credits. Social influences on child and adolescent behavior; societal reaction to problems of childhood and adolescence; child welfare practices. Prerequisite: Sociology 101.

**Sociology 230. Criminology.** Two or three credits. Analysis of crime as an institution, with reference to the behavior of those who define, engage in, or become the victims of criminal behavior. Prerequisite: Sociology 101.

**Sociology 240. Marriage and the Family.** Two or three credits. Institutional variations of marriage and family; the contributions of behavioral sciences to understanding the processes of courtship and marriage interaction. Prerequisite: Sociology 101 and sophomore standing.

**Sociology 250. Methods of Sociological Inquiry.** Two or three credits. The scientific method and its application to society; techniques of social investigation. Prerequisite: Sociology 101.

**Sociology 260. Population Problems.** Three credits. Demography, population theory, trends, and analysis; United States and world population. Prerequisite: Economics 200 or Sociology 101.

**Sociology 270. Minority Groups.** Two

or three credits. A sociological study of the role of minorities in society, their influence, impact, and relationship to the larger society. Prerequisite: Sociology 101.

**Sociology 300. The American Community.** Two or three credits. Analysis of community organization and the social processes influencing community behavior and change. Prerequisite: Sociology 101.

**Sociology 302. Political Sociology.** Three credits. Empirical and theoretical analysis of the social bases, distribution, and management of political power in industrial societies. Prerequisite: Sociology 101, or consent of instructor.

**Sociology 305. Minority Relations.** One credit. 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. Prerequisite: Junior standing, or consent of the department chairman.

**Sociology 310. Social Psychology.** Three credits. 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. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 311. Collective Behavior.** Two or three credits. The sociology of organized and unorganized social actions; the mob, crowd, mass behavior, and social movements; the dynamics of mass persuasion. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 312. Propaganda and Public**

**Opinion.** Three credits. Theories and facts regarding propaganda and public opinion, mass communication and censorship, and a study of measurement and control of public opinion. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 315. Group Dynamics.** Three credits. Analysis of small groups including leadership and group interaction; research techniques. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 322. Culture and Personality.** Three credits. 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. Not open to those presenting Anthropology 312. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 332. Juvenile Delinquency.** Three credits. 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. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 333. Corrections.** Two or three credits. Analysis of the institutionalized responses to criminal behavior through which society attempts to control and treat offenders. Prerequisite: Sociology 230 or 332.

**Sociology 340. Field Work and/or Community Research.** Two to four credits. 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. Prerequisite: Sociology 250, or consent of instructor.

**Sociology 343. The Family: Cultural Perspectives.** Two or three credits. The family as a social institution, its place in different cultures and social strata, the impact of industrialization and urbanization. Not open to those presenting Anthropology 343. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 351. Social Statistics.** Four credits. Types of social statistics, sources of data, frequency distributions, averages, dispersions, probability, chi-square, correlation; application in sociological and anthropological research. Three hours lecture, two hours laboratory per week. Prerequisite: Sociology 101 and 250.

**Sociology 356. Urban Sociology.** Three credits. 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. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 357. Sociology of Planning.** Three credits. 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. Prerequisite: Sociology 101, or consent of instructor.

**Sociology 358. Regional Sociology.** Two or three credits. 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 subcultural analyses. Prerequisite: Sociology 101, or consent of instructor.

**Sociology 360. Introduction to the Field of Social Welfare.** Three credits. The development of social welfare; contemporary public and private programs and appropriate settings; philosophy and principles of social work. Prerequisite: Nine credits in Social Science or consent of instructor.

**Sociology 361. Basic Methods of Social Work.** Three credits. 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. Prerequisite: Sociology 360.

**Sociology 366. Sociology of Aging.** Two or three credits. 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. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 370. Socio-cultural Change in Emergent Countries.** Three credits. Study of the problems and processes of development in emerging countries. Not open to those presenting Anthropology 370. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 375. Social Structure and Change in East Asia.** Two or three credits. Background analysis, demographic characteristics, sub-cultures, status characteristics, and institutions; comparative study of recent change and development in China, Japan, and Korea. Prerequisite: Sociology 101 or consent of instructor.

**Sociology 402/602. Sociology in Education.** Two or three credits. Cultural change and education; a study of social forces which influence the direction

of knowledge and education. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 421/621. Social Stratification.** Three credits. Caste, estate, and class systems and their relation to occupations and subcultures. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 431/631. Sociology of Religion.** Three credits. 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. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 445/645. Development of Social Thought.** Three credits. Origin of social thought and its development to the nineteenth century. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 446/646. Development of Sociological Thought.** Three credits. Sociological thought from Comte to the present. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 452/652. Laboratory in Social Research.** Two or three credits. The conduct of advanced sociological inquiry, individual research or group projects approved by the instructor. Prerequisite: Sociology 250 and 351; or consent of the department chairman.

**Sociology 456/656. Social Organization.** Three credits. Study of theory and research literature on structures and processes of large scale formal organi-

zations; includes analysis of bureaucratic and informal social systems in Western society. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 467/667. Social Gerontology.** Three credits. Critical issues in social gerontology; emphasis on industrialized societies; analysis of techniques for implementing programs and policies relating to the older population. Prerequisite: nine credits in the Social Sciences, including Sociology 366; or consent of instructor.

**Sociology 468/668. Problems in Family Living.** Three credits. Examination of contemporary problems relating to the family field. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 490/690. Seminar: Fields of Sociology.** Two or three credits. Discussion of 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. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 497-499. Special Work.** One to three credits in each of the courses listed below. Upper class students majoring or minoring in Sociology and Anthropology 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. 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.

**Sociology 497.** Sociological Analysis and Research; **498.** Social Work and Social Administration; **499.** Sociology of Knowledge.

**Sociology 702. Intergroup Relations.** Three credits. Advanced study of conflict and cooperation in human groups, with emphasis on contemporary problems of cultural minorities. Prerequisite: Nine credits in the Social Sciences or consent of instructor.

**Sociology 748. Theories of Society.** Three credits. Studies of major theoretical contributions to understanding social organization and the social system. Prerequisite: Nine credits in the Social Sciences and consent of instructor.

**Sociology 796. Independent Study.** One to three credits. Planned study designed to enrich and supplement the student's preparation in his area of specialization; regularly scheduled conferences with a staff supervisor. Prerequisite: Nine credits in the Social Sciences and consent of the chairman of the department.

## **Anthropology**

**Anthropology 111. Prehistoric Man.** Three credits. Human paleontology and evolution, prehistoric development of man and culture, subspecification of

Homo Sapiens, introduction of archaeological methodology.

**Anthropology 112. Man, Culture, and**

**Society.** Three credits. Anthropological principles, theories of culture and personality, theories of culture, analysis of ethnographic studies.

**Anthropology 280. Culture and Language.** Three credits. Basic anthropological linguistics, ethnolinguistics, language and thought, comparative and historical approaches. Prerequisite: Sophomore standing.

**Anthropology 290. Introduction to Prehistoric Archaeology.** Three credits. A systematic introduction to the history, theory and method of archaeology which will investigate the goals of archaeology and the interpretation and analysis of prehistoric cultural artifacts. Prerequisite: Anthropology 111 or 112 or consent of instructor.

**Anthropology 310. Ways of Mankind.** Three credits. Brief review of 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 Anthropology 310 and in 111 or 112.

**Anthropology 312. Culture and Personality.** Three credits. 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. Not open to those presenting Sociology 322.

**Anthropology 330. Anthropology of Politics.** Three credits. Comparative approaches to aspects of power, social coordination, conflict and dispute settlement at various levels of cultural complexity. Prerequisite: Sociology 101; or Anthropology 112; or consent of instructor.

**Anthropology 334-339. Area and Re-**

**gional Studies in Ethnology.** Two or three credits in each of the following courses. Ethnological survey of various societies in each region; emphasis on the cultural organization of societies and the significance of social change. Prerequisite: Sociology 101, or Anthropology 112 or 310, or consent of instructor.

**Anthropology 334.** Peoples of Europe; **335.** of Central and South America; **336.** of Africa; **337.** of Asia; **338.** of the Pacific; **339.** Indians of North America.

**Anthropology 340-S. Field and Laboratory Techniques in Archaeology.** Four to eight credits. Techniques, methods, and procedures of field and laboratory archaeology discussed and practiced in actual working conditions on archaeological excavation. Offered in summer only. Prerequisite: Consent of instructor.

**Anthropology 343. The Family: Cultural Perspectives.** Two or three credits. The family as a social institution, its place in different cultures and social strata, the impact of industrialization and urbanization. Not open to those presenting Sociology 343.

**Anthropology 350. Cultural Ecology.** Three credits. Adaptive interactions between cultures and their material and social environments. Prerequisite: Sociology 101; or Anthropology 112; or consent of instructor.

**Anthropology 370. Socio-Cultural Change in Emergent Countries.** Three credits. Study of the problems and processes of development in emerging countries.

**Anthropology 371. Native North American Culture Change.** Three credits. Twentieth century socio-cultural con-

tinuities and changes among selected Native North American Societies.

**Anthropology 430. Primitive Religion.**

Three credits. An anthropological study of the relationship between religion and other institutions in preliterate and peasant societies, and the impact of religion on the individual. Prerequisite: Sociology 101 or Anthropology 112 or consent of instructor.

**Anthropology 440. Economic Anthropology.**

Three credits. An examination and comparison of economic organizations and problems in primitive and peasant

societies. Prerequisite: Sociology 101 or Anthropology 112, or consent of instructor.

**Anthropology 499. Special Work.**

One to three credits. Upper class students majoring or minoring in Sociology and Anthropology may, by agreement with the chairman of the department of Sociology and Anthropology, 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.

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## SOIL SCIENCE

Courses in Soils are taught by members of the College of Natural Resources, which also administers the major in Soil Science, under the general degree requirements of the College of Natural Resources.

**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, and one additional plant science course or one upper level geology course; Chemistry 105 and 106 (or 115 and 116), 220, 240; Geology 104; Mathematics 105 or 107, and 110 or 224; Physics 103, 104.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

**B. A minor in Soil Science** consists of 22 credits selected from the following, with at least 15 credits of Soils courses: Soils 260, 263, 360, 361, 362, 364, 365, 461, 465, 493; Forestry 322, 325; Geography 103, 352, 377; Geology 104, 300, 370; Natural Resources 373.

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.

In addition to the general requirements of the College of Natural Resources, the following should be noted:

1. Courses in Soils 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 major in Soils 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.

**Soils 260. Introduction to Soil Resources.** Four credits. Origin and development of soil with emphasis on physical, chemical, and biological properties and their relationship to soil fertility. Three hours lecture, two hours laboratory per week. Prerequisite: Chemistry 105 or 115, or concurrent registration. Purchase of a laboratory manual is required.

**Soils 263. Soil Profile Description Writing.** One credit. The preparation of morphological descriptions of soil profiles. Prerequisite: Soils 260 and consent of instructor.

**Soils 360. Techniques of Soil and Water Conservation.** Two credits. See Summer Camp Program under Natural Resources.

**Soils 361/561. Forest Soils.** Three credits. Properties of soils in relation to silviculture and forest nursery management. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor.

**Soils 362/562. Soil Genesis and Morphology.** Three credits. Geologic origin, characteristics, and taxonomic grouping of soils, together with emphasis on survey methods and mapping procedures. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor.

**Soils 364/564. Soil Analysis.** Three credits. Methods of determining physical and chemical properties of soils. One hour lecture, four hours laboratory per week. Prerequisite: Chemistry 116 or 106; Summer Camp or consent of instructor.

**Soils 365/565. Soil Interpretations for Land Use Planning.** Two credits. Use of soil surveys in making interpretations for land use allocations and in evaluating soil susceptibility to erosion and other physical disturbances; field methods of determining engineering classifications of soil. One hour lecture, three hours laboratory per week. Prerequisite: Soils 260, or consent of instructor.

**Soils 461/661. Soil Management.** Three credits. Principles and practices of soil conservation and soil fertility. Two hours lecture, two hours laboratory per week. Prerequisite: Summer Camp or consent of instructor.

**Soils 465/665. Soil Physics.** Three credits. Physical properties of soils and methods of determination, with emphasis on influences on plant growth. Two hours lecture, two hours laboratory per week. Prerequisite: Soils 260; Mathematics 107; Physics 103; Summer Camp or consent of instructor.

**Soils 493/693. Soils Field Seminar.** One credit. Spring vacation tour. See Field Seminar Program under Natural Resources.

**Soils 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. Prerequisite: Summer Camp or consent of instructor.

**Soils 760. Advanced Forest Soils.** Three

credits. Advanced topics in the relationships between soil properties and silviculture, forest hydrology and nursery management. Prerequisites: Soils 361/561 or consent of instructor.

**Soils 762. Advanced Soil Genesis, Mineralogy and Classification.** Three credits. Processes and theories of soil formation; principles and systems of soil classification. Prerequisite: Soils 362/562 or consent of instructor.

## **SPANISH**

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Courses in Spanish are taught by members of the Department of Foreign Languages and Comparative Literature, which also administers the major and minor in Spanish.

Freshmen and sophomores who have demonstrated proficiency in Spanish may be placed in the appropriate 300- or 400-level courses by the department.

**A. A major in Spanish** consists of 31 credits beyond the first year level. Students seeking **teacher certification** should take the following: Spanish 313, 314, 317, 320 or 420, 331 or 332, and nine to twelve credits of Spanish literature.

**B. A minor in Spanish** consists of 21 credits beyond the first year level, with the following courses suggested: Spanish 313, 314, 320, and 331 or 332; and three credits of Spanish literature.

**Spanish 101. First Year Spanish.** Four credits. For students with no previous training in the language, or by placement examination.

**Spanish 314. Intermediate Spanish Composition.** Two or three credits. Prerequisite: Spanish 212, or by placement examination.

**Spanish 102. First Year Spanish.** Four credits. Continuation of Spanish 101. Prerequisite: Spanish 101, or by placement examination.

**Spanish 317. Advanced Conversation and Composition.** Two or three credits. Prerequisite: Spanish 313, 314.

**Spanish 211. Second Year Spanish.** Four credits. Intensive grammar review, practice in reading and speaking Spanish. Prerequisite: Spanish 102, or by placement examination.

**Spanish 320. Phonetics and Diction.** Two credits. Prerequisite: Spanish 212, or by placement examination.

**Spanish 212. Second Year Spanish.** Four credits. Intensive grammar review. Prerequisite: Spanish 211, or by placement examination.

**Spanish 331. A Cultural History of Spain.** Three credits. Spanish culture from pre-historic times to the present. Prerequisite: Spanish 212, or by placement examination.

**Spanish 313. Intermediate Spanish Conversation.** Two or three credits. Prerequisite: Spanish 212, or by placement examination.

**Spanish 332. Latin American Civilization.** Three credits. Latin American culture from pre-Columbian times to the present. Prerequisite: Spanish 212, or by placement examination.

**Spanish 341.** (Formerly 441) **Survey of Spanish Literature.** Three credits. Spanish literature from the earliest works to the Renaissance. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 342.** (Formerly 442) **Survey of Spanish Literature.** Three credits. Spanish literature from the Renaissance to the present. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 343.** (Formerly Comparative Literature 327). **Spanish Literature in Translation.** Three credits. Selected readings from the Renaissance and neo-classic literature. This course does not apply to the Spanish major or minor.

**Spanish 344.** (Formerly Comparative Literature 328). **Spanish Literature in Translation.** Three credits. Selected readings from the nineteenth and twentieth centuries. This course does not apply to the Spanish major or minor.

**Spanish 353** (Formerly 453) **Survey of Spanish American Literature.** Two or three credits. Chroniclers of the Indies, major writers of the colonial period, nineteenth century writers and their search for national identity. Prerequisite: Spanish 332 or consent of instructor.

The former **Spanish 360** is now **460.**

The former **Spanish 370** is now **470.**

The former **Spanish 371** is now **471.**

The former **Spanish 420** is now **Foreign Language 301.**

**Spanish 449. Poetry and Drama of the Golden Age.** Two or three credits. Verse of the major Golden Age poets. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 450. Prose of the Golden Age.** Two or three credits. Development of the Spanish novel in the sixteenth and seventeenth centuries. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 451. Cervantes.** Two or three credits. Study of Don Quijote and other works in the life and times of Miguel de Cervantes. Prerequisite: Spanish 331 or consent of instructor.

The former **Spanish 453** is now **353.**

**Spanish 460.** (Formerly 360) **Nineteenth Century Spanish Literature.** Two or three credits. Special focus on one or more of the following: drama, prose, or poetry. A subtitle indicating the focus will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 470.** (Formerly 370) **Contemporary Spanish Literature.** Two or three credits. Special focus on one or more of the following: drama, prose, or poetry. A subtitle indicating the focus will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: Spanish 331 or consent of instructor.

**Spanish 471.** (Formerly 371) **Contemporary Spanish American Literature.** Two or three credits. Special focus on one or more of the following: drama, prose, or poetry. A subtitle indicating the focus will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite: Spanish 332 or consent of instructor.

**Spanish 493. Specialized Studies in Spanish Literature.** One to three credits. 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. A subtitle indicating the focus will be added each time the course is offered. With a different focus, the course may be repeated for credit. Prerequisite:

One 300-level Spanish course and consent of instructor.

**Spanish 499. Independent Research in Spanish.** One to three credits. Individual study under the direction of consenting faculty member. May be taken only by upper level majors and minors, with the consent of the chairman of the department.

## **SPECIAL LEARNING DISABILITIES** \_\_\_\_\_

### **A minor in Special Learning Disabilities:**

A student enrolled in the curriculum for the Bachelor of Science degree in Elementary Education may be certified in **Special Learning Disabilities** by completion, within the program, of the following courses: Education 326, 351, 353, 363, and 364; Communicative Disorders 266 and 365; Psychology 310 and 360.

In addition, five credits of Student Teaching (Education 398) must be taken under the supervision of a teacher licensed in Special Learning Disabilities.

The following courses are recommended electives: Education 352 and 365; Communicative Disorders 208; Home Economics 261 and 467; Psychology 450.

## **SPECIAL STUDIES** \_\_\_\_\_

**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.

**Special Studies 310. Outdoor Education Workshop.** Six credits. 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**

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See **Communicative Disorders**.

## **THEATRE ARTS**

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Seldon Faulkner, chairman; Robert Baruch, Frieda Bridgeman, Clarke Crandell, Alice Faust, D. Harolyn Gaudette, Susan Hunt, Anthony Schmitt, Terry Temaner.

The department of Theatre Arts administers a major and minors in **Drama**, a major in **Communication and 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**

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Courses in Water are taught by members of the College of Natural Resources, which also administers the major in Water Resources, under the general degree requirements of the College of Natural 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; Wildlife 140, 441, 442.
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 6, and 364 or 465; Water 180, 382, 480, 481; Wildlife 441, 442.
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 103, 104.
3. Summer field courses: six credits in the disciplines of aquatic biology, geography, geology, 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 Dean of the College of Natural Resources.

In addition to the general requirements of the College of Natural Resources, the following should be noted:

1. It is 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 major in Water Resources 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.

**Water 180. Introduction to Water Resources.** Three credits. Surface and subsurface water resources, their economic and social importance, control, and conservation.

**Water 382/582. Water Quality Management.** Three credits. Fundamental concepts in water quality management and special emphasis on selected water quality control systems. Prerequisite: Biology 333, Soils 260; or consent of instructor.

**Water 389/589. Hydrology.** Three credits. Physical basis of surface and sub-surface water occurrence and flow; measurement, analysis, and prediction of hydrologic phenomena. Two hours lecture, two hours laboratory per week. Prerequisite: Water 180; and basic statistics course or consent of instructor.

**Water 480/680. Water Analysis.** Three credits. Physical, chemical, and biological examination of unpolluted and polluted water. One hour lecture, four hours laboratory per week. Prerequisite: Biology 333; Chemistry 106 or 116; or consent of instructor.

**Water 481/681. Pollution Ecology.** Four credits. 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 hours

lecture, four hours laboratory per week. Prerequisite: Biology 333, Wildlife 441; or consent of instructor.

**Water 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.

**Water 780. Advanced Water Analysis.** Three credits. 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. Prerequisite: Water 480/680 or equivalent, and consent of instructor.

**Water 781. Recent Advances in Pollution Ecology.** Three credits. 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. Prerequisite: Consent of instructor.

**Water 786. Indicator Organisms in Pollution Biology—Plant.** Three credits. 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. Prerequisite: Wildlife 441/641 and Water 481/681, and consent of instructor.

**Water 787. Indicator Organisms in Pollution Biology—Animal.** Three credits. 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. Prerequisite: Wildlife 441/641 and Water 481/681, and consent of instructor.

**Water 788. Water and Waste-water**

**Treatment.** Three credits. 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. Water 480/680, and 481/681, and consent of instructor.

**Water 789. Advanced Hydrology.** Three credits. Modeling and systems theory in analysis of water resources management alternatives; application of hydrologic analysis to ecological problems. Two hours lecture, two hours laboratory per week. Prerequisite: Water 389 or 589 or consent of instructor.

## **WILDLIFE**

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Courses in Wildlife are taught by members of the College of Natural Resources, which also administers the major Wildlife, under the general degree requirements of the College of Natural Resources.

**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; Wildlife 140, 441, 444.
2. Forty-six to 50 credits in collateral courses: Biology 130, 160, 205, 374; Chemistry 105 and 106, or 115 and 116, 220; Geology 104; Mathematics 105 or 107 or eligibility for 110; Mathematics 225; 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 11 credits selected from Biology 210, 277, 281, 342, 355, 362, 370, 374, 378, 385; Chemistry 105 and 106, or 115 and 116, 220; Geology 104; Mathematics 105 or 107 or eligibility for 110; Mathematics 225.
3. Six credits of Summer Camp courses: Forestry 320, Soils 360, Wildlife 340.

In addition to the general requirements of the College of Natural Resources, 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 major in Wildlife 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.

**Wildlife 041. Wildlife Forum.** No credit. Same as Wildlife 141, except for no credit.

**Wildlife 140. Introduction to Wildlife Resources.** Three credits. Wildlife resources of the United States; the importance of wildlife to our past and present economic and cultural life; selected problems in wildlife conservation. Prerequisite: Biology 160 or concurrent registration.

**Wildlife 141. Wildlife Forum.** Two credits. 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.

**Wildlife 340. Techniques in Fish and Wildlife Management.** Two credits. See Summer Camp Program under Natural Resources.

**Wildlife 441/641. Limnology.** Three credits. Physical, chemical, and biological phenomena of freshwater communities. Prerequisite: Biology 205.

**Wildlife 442/642. Limnological Methods.** One credit. Laboratory and field methods used in freshwater investigations. Three hours laboratory per week. Prerequisite: Registration in Wildlife 441 or consent of instructor.

**Wildlife 444/644. Fisheries Management.** Three credits. Principles of management of inland waters for fish production. Prerequisite: Biology 374; Wildlife 441; Summer Camp; or consent of instructor.

**Wildlife 445/645. Fisheries Methods.** One credit. Methods used in field collection and laboratory analysis. Laboratory three hours per week. Prerequisites: Wildlife 141 and Biology 127, Summer Camp, or consent of instructor.

**Wildlife 446/646. Fish Production.** Three credits. Principles, problems, and techniques of fish production under artificial conditions. Two hours lecture; two hours laboratory per week. Prerequisite: Wildlife 141, 127; Summer Camp or consent of instructor.

**Wildlife 447/647. Functional Ichthyology.** Three credits. 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. Prerequisite: Biology 374; Chemistry 106, or equivalent.

**Wildlife 450/650. Game Management Techniques.** Three credits. Techniques of managing game population; field mapping, food habitat studies, game censuses, and control measures; special

emphasis on techniques of game management as it applies to Wisconsin game populations. Two hours lecture, two hours laboratory per week. Prerequisite: Biology 342, Summer Camp, or consent of instructor.

**Wildlife 451/651. Game Management.**

Three credits. 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 hours lecture, two hours laboratory per week. Prerequisite: Biology 205, Summer Camp, or consent of instructor.

**Wildlife 452/652. Regulation of Animal Populations.**

Two credits. Modern control techniques used in regulation of animal populations; special emphasis on pesticides and implications of their use. Prerequisite: Open only to Biology or Natural Resources majors or minors having senior standing; or consent of instructor.

**Wildlife 453/653. Wildlife Population Dynamics.**

Three credits. The ecologic basis and characteristics of wild animal population growth, interaction, and evolution as it applies to management. Prerequisite: Biology 160 or Wildlife 140; Biology 205; Mathematics 225; Summer Camp; or consent of instructor.

**Wildlife 454/654. Management for Non-Consumptive Uses.**

Two credits. Life histories, behavior, and habitat requirements of wild animals as they relate to management for use other than harvest. Prerequisite: Wildlife 340, or consent of instructor.

**Wildlife 455/655. Diseases of Wildlife.**

Three credits. Infectious, parasitic, and chemical diseases of wildlife, with em-

phasis on their occurrence, significance, and role as ecologic factors. Prerequisite: Biology 205 or Wildlife 140; and consent of instructor.

**Wildlife 493/693. Wildlife Field Seminar.**

One or two credits. 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. Prerequisite: Consent of instructor. (See also Field Seminar Program under the Natural Resources heading.)

**Wildlife 499. Special Work.**

Upper class students majoring in Wildlife 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.

**Wildlife 740. Advanced Studies in Fish Management.**

Three credits. Survey of the literature concerned with the ecology and management of fish populations. Prerequisite: Wildlife 441/641 and 444/644, or consent of instructor.

**Wildlife 742. Wildlife Population Statistics.**

Three credits. A study of the collection and analysis of data from wild populations including the development of ecological models. Two hours lecture, two hours laboratory per week. Prerequisite: Mathematics 107 or equivalent; Mathematics 225 or equivalent; Wildlife 444 or 451 or equivalent; and consent of instructor.

**Wildlife 752. Advanced Studies in Game Management.**

Three credits. Survey of the literature concerned with the ecology and management of terrestrial animals. Prerequisite: Wildlife 451/651 or consent of instructor.

# Faculty and Staff

\*Indicates part time appointment.

TIA indicates Teacher Improvement Assignment.

Date indicates beginning year of continuous service at the University of Wisconsin-Stevens Point.

This listing is as of the 1973-74 school year.

**Jack P. Abell**, Instructor in Music, 1973 ■ B.M., Northwestern University; M.M., University of Southern California.

**Margery V. Aber**, Assistant Professor of Music, 1967 ■ B.M., Oberlin College; M.A., Columbia University.

**Richard C. Ackley**, Assistant Professor of Sociology and Anthropology, 1967 ■ B.S., Western Michigan University; M.A., University of Michigan.

**Howard C. Adams, Jr.**, Associate Professor of Foreign Languages and Comparative Literature, 1966 ■ A.B., Kansas State Teachers College; M.A., University of Kansas.

**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 Y. Allen**, Instructor in Communication, 1969 ■ B.A., University of Evansville; M.A., Ohio University. (On leave 1973-74)

**Rene C. Allmont**, 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.

**Hiram Anderson, Jr.\***, Lecturer in Economics and Business, 1960 ■ Ph.B., J.D., University of Wisconsin-Madison.

**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**, Assistant 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.

**John D. Bailiff**, Associate Professor of Philosophy, 1966 ■ A.B., Stanford University; M.A., Ph.D., Pennsylvania State University.

**Monica E. Bainter**, Professor of Physics, 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; Campus Planning; 1962 ■ B.S., University of Wisconsin-Stout; M.S.T., University of Wisconsin-Stevens Point.

**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.

**Robert Baruch**, Associate Professor of Theatre Arts, 1967 ■ B.A., North Texas State University; M.A., University of Colorado; Ph.D., University of Minnesota.

**Roger F. Bauer**, Associate Professor of Education; Assistant to the Dean of the College of Professional Studies; 1969 ■ B.A., Lakeland College; M.S., Ph.D., University of Wisconsin-Madison. (Resigned January 31, 1974)

**A. Marguerite Baumgartner\***, Lecturer in Natural Resources (Extended Services), 1968 ■ B.A., University of Rochester; Ph.D., Cornell University.

**Frederick M. Baumgartner**, Professor of Wildlife, College of Natural Resources; 1965 ■ B.A., Butler University; M.A., University of Kansas; Ph.D., Cornell 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.A., 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.**, Assistant Chancellor for Business Affairs, 1963 ■ B.S., Virginia Military Institute.

**Donald A. Benz**, Professor of Education, 1966 ■ B.E., University of Wisconsin–Stevens Point; M.A., Ph.D., George Peabody College.

**John M. Bernd**, Professor of Education, 1964 ■ B.S., University of Wisconsin–La Crosse; Ph.M., Ph.D., University of Wisconsin–Madison.

**Verlene Bernd\***, Instructor in English, 1964 ■ B.S., University of Wisconsin–Eau Claire; M.S.L.S., University of Wisconsin–Madison.

**Mary Lou Biddlestone**, Instructor in Health, Physical Education, Recreation, and Athletics; 1963 ■ B.S., Slippery Rock State College; M.S., University of Minnesota.

**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.

**Philip R. Bjork**, Assistant Professor of Geology, 1968 ■ B.S., Ph.D., University of Michigan; M.S., South Dakota School of Mines and Technology.

**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, 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 A. Bloom\***, Lecturer in English, 1973 ■ B.A., M.A., Ohio University.

**Thomas K. Bloom**, Assistant Professor of English, 1968 ■ A.B., M.A., Ph.D., Ohio University.

**Edwin R. Bonnie**, Residence Hall Director, 1973 ■ B.S., University of Wisconsin–Stevens Point; M.A., University of Wisconsin–Madison.

**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.

**Richard J. Boutelle**, Assistant Professor in Learning Resources Center; Assistant Director of Instructional Media Services; 1968 ■ B.S., Florence State University; M.Ed., University of Massachusetts; Ph.D., Michigan State University.

**Robert O. Bowen**, Associate Professor and Assistant Dean of the School of Health, Physical Education, Recreation, and Athletics; 1966 ■ B.S., M.S., University of Wisconsin-Madison; H.S.D., Indiana University.

**James A. Bowles**, Associate Professor of Soil Science, College of Natural Resources; 1967 ■ B.S., Colorado State University; Ph.D., University of Wyoming.

**Robert P. Boyce**, Instructor in Art, 1973 ■ B.A., Berea College; M.A., Indiana University.

**Lawrence R. Brandt**, Assistant Professor of Geography, 1967 ■ B.S., Southwest Missouri State College; M.A., University of Arkansas.

**Patricia Bray\***, Faculty Assistant in English, 1973 ■ B.A., College of Mount Saint Vincent.

**Richard T. Bray**, Associate Professor of English, 1970 ■ B.S., Fordham University; M.A., St. John's University; Ph.D., University of Wisconsin-Madison.

**Frieda E. Bridgeman**, Associate Professor of Theatre Arts, 1965 ■ B.S., Southeast Missouri State College; M.S., Ph.D., University of Wisconsin-Madison.

**Eugene N. Brodhagen**, Associate Professor of Health, Physical Education, Recreation, and Athletics; 1956 ■ B.S., M.S., University of Wisconsin-Madison.

**Kenneth J. Brown**, Assistant Professor of Mathematics, 1966 ■ B.S., University of Chicago; M.S., University of Missouri.

**Lawrence K. Brown**, Instructor in Art, 1970 ■ B.A., Washington State University; M.F.A., University of Arizona.

**Fred M. Buehler**, Instructor in Learning Resources Center, 1968 ■ B.A., University of Minnesota-Duluth; M.S., University of Wisconsin-Madison.

**Mary Jo Buggs**, Assistant Professor of English, 1966 ■ B.S., M.S.T., University of Wisconsin-Stevens Point. (On leave 1973-74)

**Roger A. Bullis**, Instructor in Communication, 1971 ■ B.A., M.A., University of Wisconsin-Madison.

**Linda G. Burch**, Captain, Women's Army Corps; Assistant Professor of Military Science; 1972 ■ B.S., Kent State University; M.S., University of Southern California.

**Venita Burling**, Faculty Assistant in Education, 1973 ■ B.S., University of Wisconsin-Stevens Point.

**Lee A. Burress, Jr.**, Professor of English, 1958 ■ A.B., University of Wichita; B.D., Garrett Theological Seminary; Ph.D., Boston University. (On leave 1973-74)

**Robert W. Busch**, University Center Program Director, 1967 ■ B.S., Concordia Teachers College, River Forest, Illinois; M.S., University of Wisconsin–Milwaukee.

**William J. Cable**, Associate Professor of Mathematics, 1962 ■ B.S., University of Wisconsin–Stevens Point; M.S., University of Wisconsin–Madison; M.B.S., University of Colorado.

**J. Baird Callicott**, Assistant Professor of Philosophy, 1969 ■ B.A., Southwestern at Memphis; M.A., Ph.D., Syracuse University.

**James L. Canfield**, Assistant Professor of Political Science, 1969 ■ A.B., Albion College; M.A., Ph.D., University of Michigan.

**Ann D. Carlson\***, Assistant Professor of Education (Business Education), 1970 ■ B.S., University of Wisconsin–Whitewater; M.A., University of Northern Iowa.

**Karen A. Carlson**, Instructor in Communicative Disorders, 1971 ■ B.S., Syracuse University; M.A., University of Minnesota. (Resigned December 17, 1973)

**Stanley L. Carlson**, Assistant Professor of Mathematics, 1965 ■ B.S., University of Wisconsin–River Falls; M.A., University of Northern Iowa; Ed.D., University of Northern Colorado.

**Robert C. Cassidy**, Assistant Professor of Philosophy, 1971 ■ B.A., Williams College; M.A., Ph.D., Princeton University.

**Mark Cates**, Professor of Political Science, 1963 ■ A.B., M.A., Ph.D., Indiana University.

**James L. Chaffin\***, Faculty Assistant in Health, Physical Education, Recreation, and Athletics; 1972 ■ B.S., University of Wisconsin–Stevens Point.

**Jagdish Chander**, Professor of Physics, 1966 ■ B.Sc., D.A.V. College Jullundur (Pb.), Panjab University; M.Sc., Birla Science College Pilani (Rajputana University); Ph.D., Friedrich Alexander University, Erlangen-Nuernberg.

**Jyotsna Chander\***, Instructor in Mathematics, 1969 ■ B.A., H.M.V. College, Jullundur City; M.A., D.A.V. College (Panjab University), Jullundur City.

**T. K. Chang**, Professor of Geography, 1956 ■ B.A., Lignan University; M.A., Yenching University; Ph.D., University of Nebraska.

**Theresa Chao\***, Instructor in Learning Resources Center, 1971 ■ B.A., National Chengchi University; M.L.S., University of Oklahoma.

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**Kenyard E. Smith**, Associate Professor of Music, 1966 ■ B.A., Hastings College; M.A., University of Northern Colorado; Ph.D., University of Iowa.

**Leon R. Smith, Jr.**, Professor of Music, 1970 ■ B.M., M.M., University of Texas; Ph.D., Indiana University.

**Mary Elizabeth Smith**, Professor of English, 1950 ■ B.A., Yankton College; M.A., University of Minnesota; Ph.D., University of Iowa.

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**S. Joseph Woodka**, Professor of Political Science; Dean of the College of Letters and Science; 1966 ■ B.S., Ball State University; M.A., Ph.D., University of Michigan.

**Barbara L. Wright\***, Health Education Coordinator, University Health Service; 1973 ■ B.S., (Nursing), University of Iowa.

**David A. Wright**, Instructor in Health, Physical Education, Recreation, and Athletics; 1968 ■ B.S., University of Cincinnati; M.A., University of Iowa; Ed.D., University of Northern Colorado.

**David R. Wrone**, Associate Professor of History, 1964 ■ B.S., A.M., Ph.D., University of Illinois.

**E. Alley Wrone\***, Lecturer in Sociology and Anthropology, 1973 ■ B.A., Dickinson College.

**Alan D. Young**, Assistant Professor of English, 1969 ■ B.A., University of Kansas; M.A., University of Colorado.

**John P. Zawadsky**, Professor of Philosophy, 1966 ■ B.A., Rutgers University; M.A., Ph.D., Harvard University.

**Samuel J. Zeoli**, Instructor in Foreign Languages and Comparative Literature, 1970 ■ B.A., LaSalle College; M.A., University of Minnesota. (TIA 1973-74)

**W. William Zimdars**, Instructor in Education; Assistant Director of Admissions; 1968 ■ B.E., University of Wisconsin-Whitewater; M.E., University of Wisconsin-Superior.

## **Emeritus Faculty**

Dates in parentheses indicate years of service.

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Mildred Davis (1928-1970)

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Vivian A. Kellogg (1953-1970)

Marjorie E. Kerst (1948-1970)

Syble E. Mason (1930-1969)

Raymond M. Rightsell (1920-1959)

May M. Roach (1914-1956)  
(Died April 11, 1974)

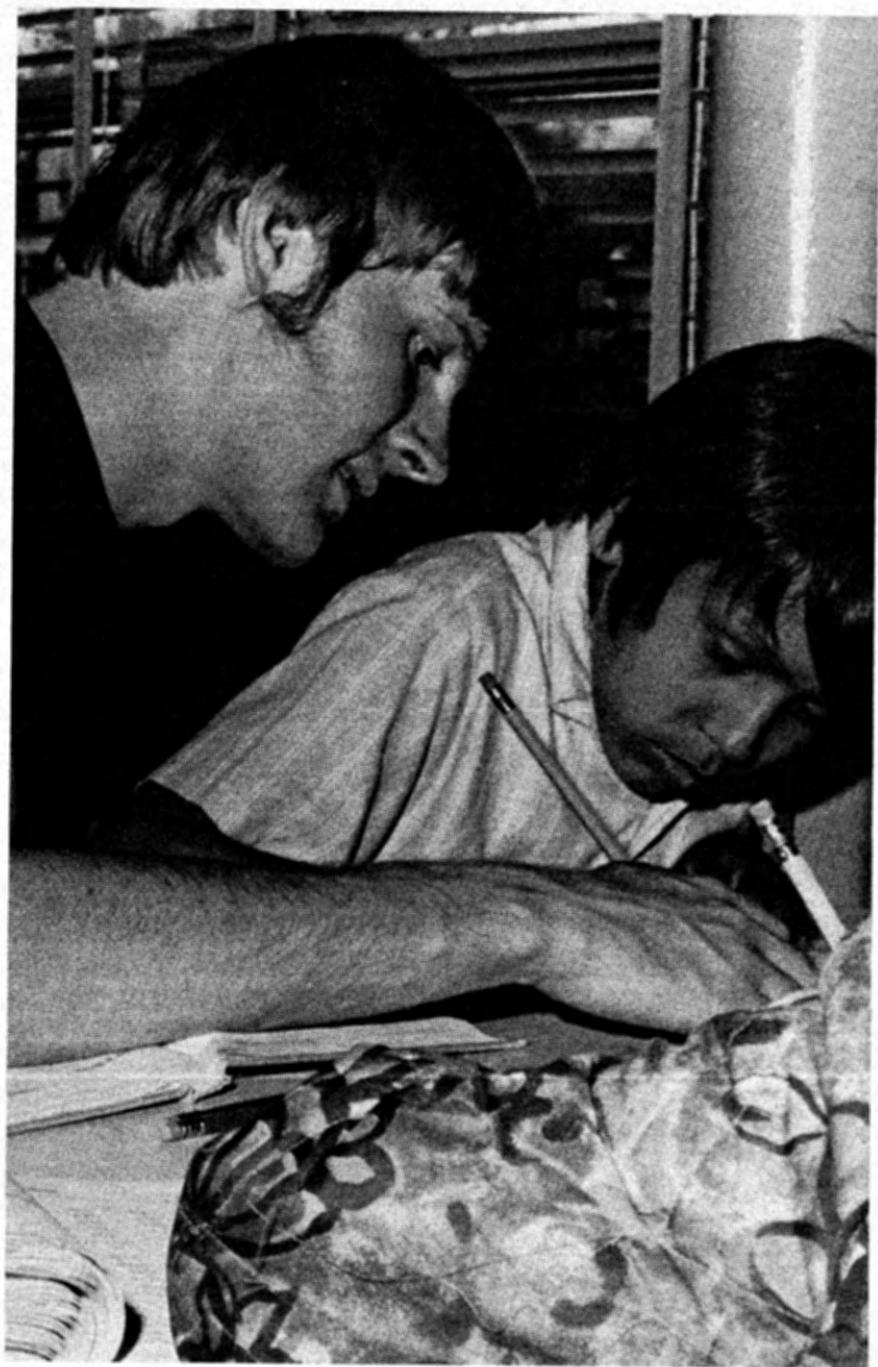
Mary S. Samter (1943-1973)

Gordon D. Shipman (1966-1971)

Gladys VanArsdale (1934-1958)

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### **In the College of Professional Studies:**

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**School of Education**—Thomas E. McCaig, acting Assistant Dean.

**School of Health, Physical Education, Recreation, and Athletics**—Robert O. Bowen, Assistant Dean.

**School of Home Economics**—Agnes A. Jones, Assistant Dean.

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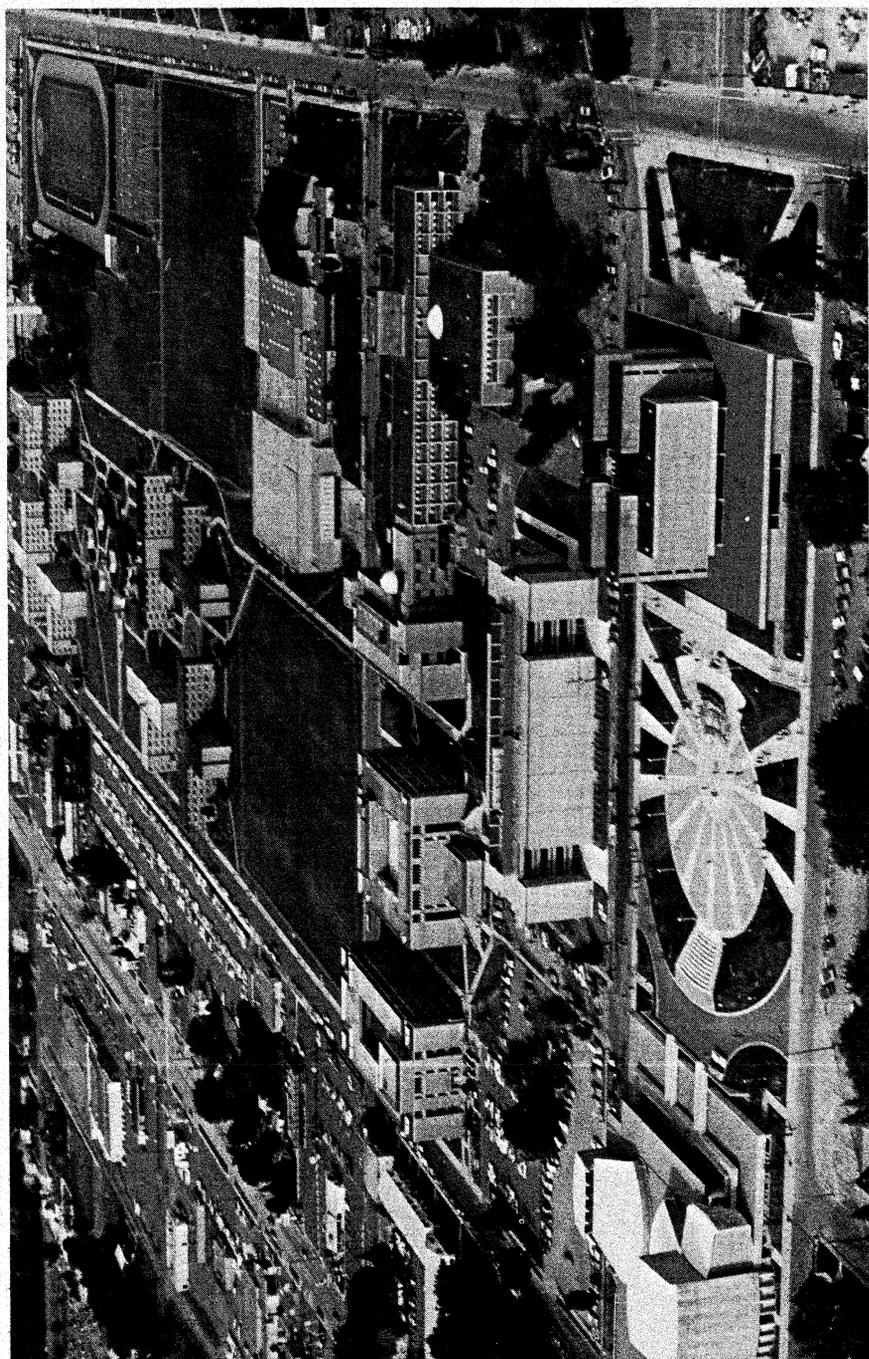
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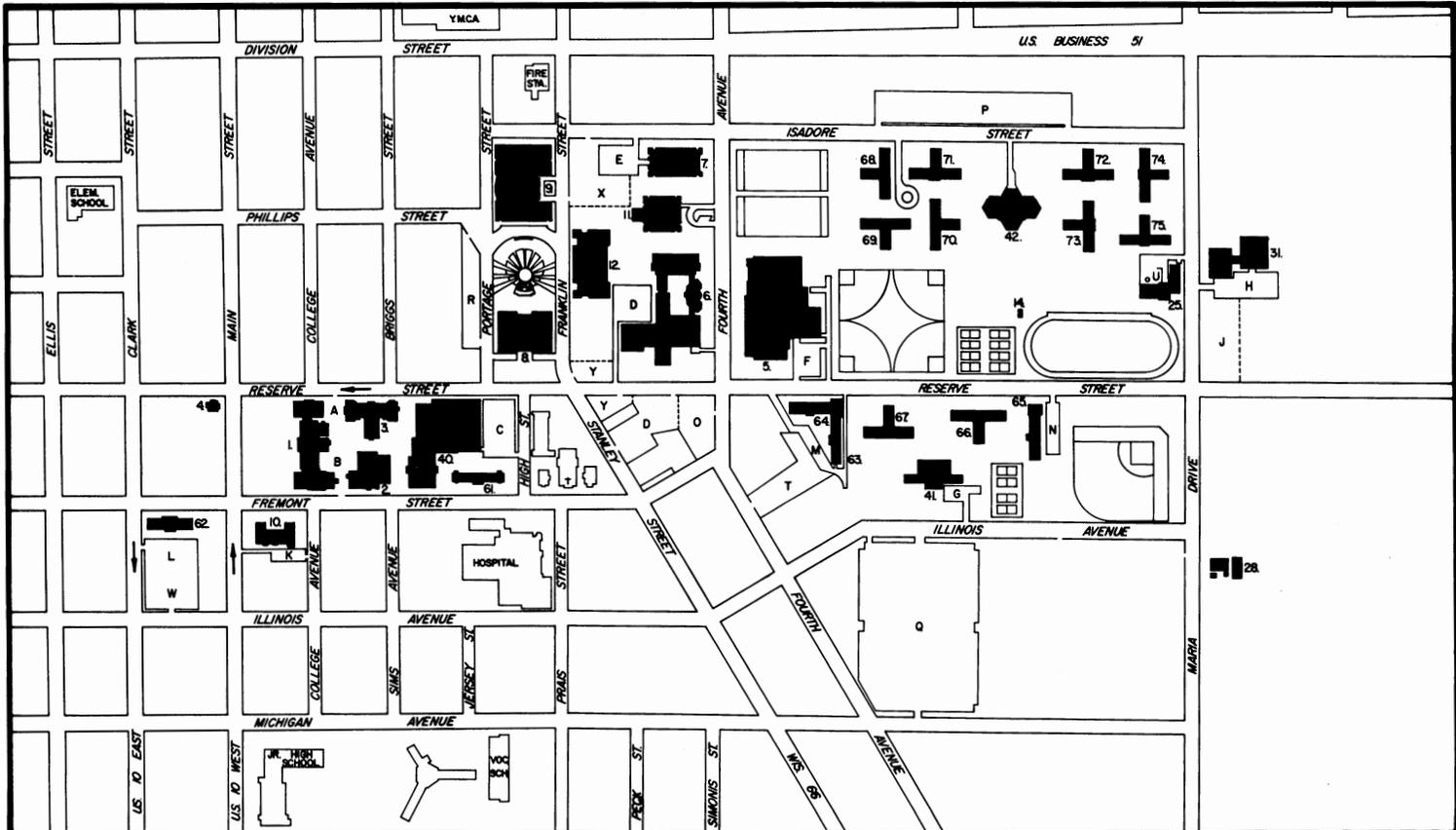
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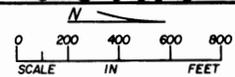
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