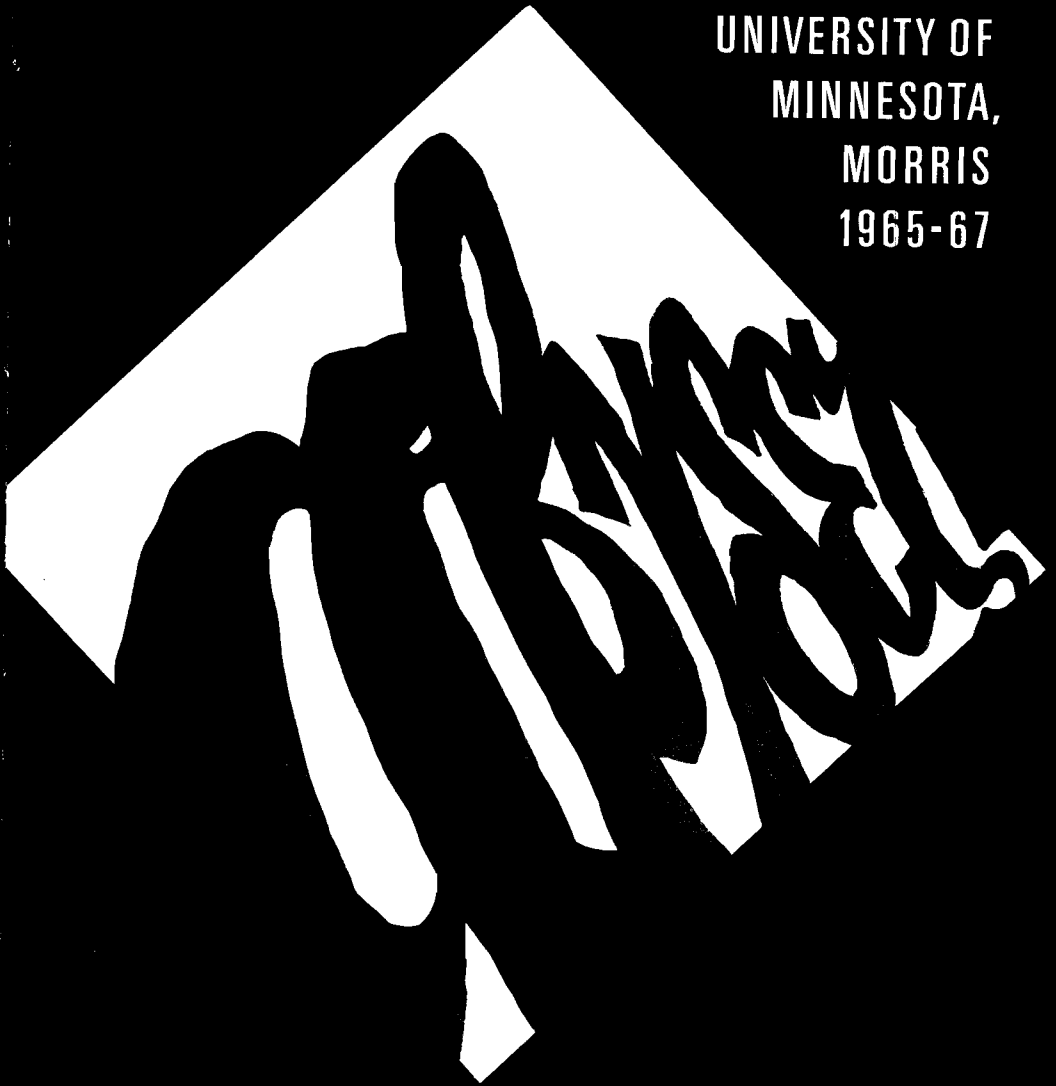


UNIVERSITY OF MINNESOTA BULLETIN

UNIVERSITY OF
MINNESOTA,
MORRIS
1965-67



How To Use This Bulletin

This bulletin is the official source of information about the University of Minnesota, Morris. The general plan of the bulletin is outlined below.

I. General Information	2
Admission Requirements	3
Registration	5
Cost Information	6
Financial Aids	7
College Regulations	12
Advisement and Counseling	17
Living Accommodations	18
Student Activities	19
Special Educational Opportunities	22
II. Academic Information	24
Objectives of the Curriculum	24
Requirements for Bachelor of Arts Degree	25
Preprofessional Programs	28
III. Courses of Instruction	36
Humanities	36
Social Sciences	50
Science and Mathematics	61
Education	69

UNIVERSITY OF MINNESOTA

Board of Regents

The Honorable Charles W. Mayo, M.D., Rochester, First Vice President and Chairman; The Honorable Marjorie J. Howard (Mrs. C. Edward), Excelsior, Second Vice President; The Honorable Daniel C. Gaaney, Owatonna; The Honorable Bjarne E. Grottum, Jackson; The Honorable Albert V. Hartl, Fergus Falls; The Honorable Robert E. Hess, White Bear Lake; The Honorable Fred J. Hughes, St. Cloud; The Honorable Lester A. Malkerson, Minneapolis; The Honorable William K. Montague, Duluth; The Honorable George W. Rauenhorst, Olivia; The Honorable Otto A. Silha, Minneapolis; The Honorable Herman F. Skyberg, Fisher.

General Administrative Officers

O. Meredith Wilson, President, 202 Morrill Hall, Minneapolis Campus
William G. Shepherd, Vice President, Academic Administration, 213 Morrill Hall, Minneapolis Campus
Laurence R. Lunden, Vice President, Business Administration, 301 Morrill Hall, Minneapolis Campus
Stanley J. Wenberg, Vice President for Educational Relationships and Development, 232 Morrill Hall, Minneapolis Campus

UNIVERSITY OF MINNESOTA, MORRIS

Administration

Rodney A. Briggs, Dean
Robinson S. Abbott, Chairman, Division of Science and Mathematics
John J. Wine, Director of Counseling
Karl Bornhoft, Business Manager
Charles R. Bruning, Chairman, Division of Education
H. G. Croom, Director of Student Services
Theodore J. Freed, Director of Housing
S. G. Granger, Assistant Dean
Donald W. Gray, Librarian
Charles C. Hanna, Director of Admissions
Dennis L. Hegle, Financial Aids Officer
John Q. Imholte, Chairman, Division of Social Sciences
B. D. Rolloff, Athletic Director
W. D. Spring, Chairman, Division of Humanities

UNIVERSITY OF MINNESOTA BULLETIN

Published semimonthly January 1 to December 15 inclusive. Second-class postage paid at Minneapolis, Minnesota. Send change of address notices and other communications to Office of Admissions and Records, University of Minnesota, Minneapolis, Minnesota 55455.

The contents of this bulletin and of other University bulletins, publications, or announcements are subject to change.

University of Minnesota, Morris

I. General Information

Established in 1851 by an act of the Minnesota Territorial legislature, the University of Minnesota is an autonomous body governed by a Board of Regents elected by the legislature, which enacts laws governing the institution, controls expenditures, and acts upon all staff changes. As one of the University's three 4-year undergraduate liberal arts colleges the University of Minnesota, Morris is an autonomous college with an academic program directed by its faculty within the framework of policies and philosophy established for the total University by the Board of Regents. Administrative responsibility for the collegiate program rests with the dean who reports directly to the president of the University.

While the University of Minnesota, Morris became a college of the University of Minnesota by action of the Board of Regents on October 31, 1959 the history of the University's involvement in west central Minnesota actually began in 1910 when a major portion of lands for the Morris Campus was acquired by the state of Minnesota from the Federal government. The current program represents only a phase of the University's successive attempts to meet the educational needs of western Minnesota. The collegiate program currently available on the campus follows the earliest educational program, a Federal Indian school, and a 50-year period during which the West Central School and Experiment Station operated a program in secondary education directed to meet the needs of rural youth. In the fall of 1960 the secondary education program was phased out and the University of Minnesota, Morris began accepting its first freshmen to the 4-year collegiate liberal arts program. Classes were phased in year by year until in the fall of 1963 the college became a full 4-year institution. The collegiate program has developed within the liberal arts concept of a broad academic curriculum dedicated to providing the student with a sound background in the humanities, the social sciences, the natural sciences, and teacher education. In addition, the program offers basic preparation for most of the professions, for students intending to enter business, teaching, the creative arts, or any of several other specialized occupational areas.

As a 4-year liberal arts college of the University of Minnesota, UMM shares the major purposes of the University as a whole—instruction, research, and service—and provides a program in the liberal disciplines fundamental to each of these purposes. Students enrolled at the University of Minnesota, Morris participate in this program in one of three ways:

1. A 4-year curriculum in liberal education leading to the bachelor of arts degree.
2. A 4-year curriculum which combines liberal education with teacher preparation and leads to the bachelor of arts degree and certification as an elementary or secondary school teacher.
3. A 1-, 2-, 3-, or 4-year curriculum in liberal education meeting the pre-professional liberal arts requirements of the professional schools of the University of Minnesota or of other institutions.

A liberal education is one which encourages and assists men and women to be well informed, broad in their interests, free from intellectual or cultural pro-

vincialism and intolerance, persistent and skillful in the pursuit of knowledge and the development of understanding, and humane and reflective in their judgments and behavior. It is the process through which we strive simultaneously to develop our own potential and to reach some understanding of our common humanity and our common culture, so that we may share our common responsibilities, rights, privileges, and pleasures.

ADMISSION REQUIREMENTS

A person seeking admission to the University of Minnesota, Morris should check the admission requirements detailed on the pages that follow. They apply to students seeking admission on the basis of a high school diploma, by special examination, or through transfer from another college.

Students desiring an application form may obtain it from their high school principal or by writing to the Admissions Office, University of Minnesota, Morris, Morris, Minnesota.

Effective fall quarter 1966 and thereafter, each application submitted must be accompanied by a nonrefundable application fee of \$10 payable by check or money order to the University of Minnesota, Morris (cash not accepted).

Freshman Admission

Minnesota high school graduates with a college aptitude rating (CAR) of 50 or more will be considered for admission to the University of Minnesota, Morris. Within this requirement applicants in the lower part of the applicant profile will be individually reviewed by the Board of Admissions, using a multiple set of criteria which includes a weighted prediction of college grade point average, based on the American College Test. The CAR, the High School Rank, relevant test information, the distribution of high school courses, and the recommendations of high school officers will also be considered. Students within this group with the best potential for successfully completing a collegiate program will be admitted.

Freshman applicants are required to take the American College Test (ACT).

Admission with Advanced Standing

If a student has finished a year or more of work at an accredited college or university he may, if admitted, enter with "advanced standing"—that is, with credit for appropriate courses satisfactorily completed. Well-qualified students who would be aided by a statement of provisional admission in advance of their termination at another college are invited to submit an indication of work done and programmed, along with a request for such consideration.

Applicants who have attempted any college study, satisfactory or unsatisfactory, must submit official transcripts covering all work taken, *from every school attended*. They should make application and have all transcripts and a record of honorable dismissal on file with the University of Minnesota, Morris Admissions Office *well in advance of the quarter of entrance*.

Grades earned in other colleges will carry the appropriate grade points, provided the courses are accepted by the University of Minnesota, Morris. Failures in acceptable courses from other colleges will be transferred along with credits of passing grade.

Applicants who have had less than a year of college work must meet all requirements for entrance from high school and file their college records as well.

Admission of Nonresidents of Minnesota

The University of Minnesota, Morris will receive the applications for admission of non-Minnesotans who have above-average promise, superior high school or college records, and special interest in this University. However, this implies no commitment to such applicants. Freshman applicants are also required to take the tests of the American College Testing program. College Entrance Examination Board test scores are requested when available. Since individual consideration by the faculty concerned is usually involved, any nonresident should apply promptly, i.e., *well in advance of the quarter of entrance*. See also section on Cost Information.

Nonresident tuition fees will be charged students whose permanent homes are outside Minnesota, or who have not lived in permanent homes in Minnesota for at least a calendar year prior to first registration at the University of Minnesota, Morris. "Permanent" means family home, or home established for a purpose other than attendance at college.

Initial classification of a student as a nonresident, however, does not prevent his reclassification at any time he meets residence requirements.

If there is a question about residence classification, it is the student's responsibility to apply to the director of student services for consideration of his status.

Admission as an Adult Special Student

Men and women who want individual courses or groups of courses to meet special personal needs may be considered for admission as "adult special" students. Usually these students are 24 years of age or older, of mature experience, or have Bachelors' degrees. Persons so applying are not candidates for degrees, though they may later seek candidacy after conferring with the appropriate department head. Restrictions on admission of nonresident undergraduate students apply to admission of adult special students.

Admission by Examination

A person 19 years of age or older, whether a graduate of a Minnesota high school or not, may apply for admission by examination. In most instances these tests are of the "objective" type and measure general aptitude for college work rather than knowledge of specific subject matter areas. Inquiries about procedures to follow should be directed to the Admissions Office.

Some persons under 19 years of age who have not graduated from high school may be admitted under a plan approved by the University, the Minnesota Council of School Executives, and the Minnesota High School Principals' Association. Such persons must be sufficiently mature to promise ready adjustment to university life and work and they must present outstanding high school records. Formal application, including letters of recommendation from the school principal and parents, is made to the Admissions Office. Personal interviews and comprehensive testing are also required.

All applications should be filed *well in advance of the quarter of entrance*.

Transfer from One College to Another

A University of Minnesota student who wishes to change from one college, school, or campus to another must meet the requirements of the second. Application for transfer should be made at the Records Office on the campus where the student is currently or was last registered. Students should apply to the appropriate office as far in advance as possible of the actual date of transfer.

REGISTRATION

Registration Procedures

Students will obtain complete registration instructions from the Records Office. Students new to the University of Minnesota, Morris must take:

1. Academic achievement and guidance tests during Orientation Week. Students with advanced standing may have completed some of these requirements during the application process and only the remaining items must be completed during Orientation Week. Results of these tests are used by the student and his adviser in program planning.
2. A health examination is given by appointment, with the appointment being made during Orientation Week.

New students entering in the fall who have not attended a college previously will come to the University of Minnesota, Morris for 4 days of orientation and completion of registration. These dates are during the week preceding the beginning of fall quarter. New students with advanced standing will be required to attend the portion of Orientation Week pertinent to their needs. These students will be notified as to when they are expected to be in attendance.

Applications from new students in the University and students transferring from outside the University should be received before August 15, December 1, or March 1 preceding the quarter attendance is desired. Students planning to transfer to colleges within the University should do so before September 1, December 1, or March 1.

Students attending the University of Minnesota, Morris are requested to pre-register during spring quarter for fall quarter classes. Students having previously attended the University of Minnesota, Morris should indicate by letter their desire to return prior to the dates listed in the preceding paragraph.

Students who are granted permission to enroll after the official registration day of each quarter, listed in the college calendar, must pay a late registration fee. Payment of fees is considered a part of registration, and registration is not complete until fees are paid. Registration must be completed by the end of the second week of each quarter.

A student will receive credit only in those courses for which he is properly registered. Accurate registration and fulfillment of credit and course requirements are the student's responsibility. A student's record is available for his review in the Records Office.

Change in Registration

Careful, accurate planning is essential to academic progress and will eliminate many problems. If it becomes necessary to change a course after completing registration, the student must obtain a cancel-add form from the Records Office and then must obtain the signature of his adviser and his instructors. Courses may not be added after the second week of the quarter. A course dropped after the sixth week is recorded as canceled (W) or failed (F) in accordance with status in class. The current *Class Schedule* contains the latest information on courses, hours, and room assignments.

Canceling Out of College

If a student wishes to cancel out of college during a quarter he should report to the Counseling Office. If a student plans not to return the following quarter, it would be well to discuss this with his adviser and to generally clarify his relationship with the University. The student will probably want to discuss his academic

standing and possibilities of return or transfer, grades awarded, wisdom of the decision to cancel, financial need, job placement, or other considerations.

Credit Loads

A full-time student must carry at least 12 credits of work each quarter, but no more than 18, including extension and all other courses. To register for fewer than 12 or more than 18 credits requires approval from the adviser and from the secretary of the Scholastic Committee.

COST INFORMATION

All University fees are subject to change by the Board of Regents.

The approximate cost of attendance for a Minnesota resident living on campus is \$1,225 per year. This includes tuition, board, room, fees, books, and supplies. Additional student costs would be personal expenses, such as recreation, clothes, travel, etc.

Following is an example of a student's total cost for 1 quarter if he lives on campus with a 7-day board and room contract.

	<i>Resident</i>	<i>Nonresident</i>
Board and Room	\$ 240.00	\$ 240.00
Tuition	98.00	280.00
Incidental Fee	27.00	27.00
Student Health Insurance	6.15	6.15
Textbooks	35.00	35.00
Cost per quarter	\$ 406.15	\$ 588.15

The following sections on fees designate the fixed costs.

Fees

(per quarter)

<i>Tuition, full-time student, 12 credits or more</i>	
Resident	\$ 98.00
Nonresident	280.00
<i>Credit hour fee, less than 12 credits</i>	
Resident	8.25
Nonresident	23.50
<i>Incidental fee</i>	27.00
<i>Student Health Insurance</i>	
Single contract	6.15
Family contract	31.50

Special Fees

Advanced Standing Examination Fee—\$5

Special Examination Fee—\$5

Privilege Fee—Students registering or paying fees later than the date designated by the University will be required to pay late-registration fee. During the academic year, the fee for late payment is \$3 through the first week of classes, \$5 during the second week, and \$10 thereafter.

Course Fees—Students enrolled in chemistry courses are required to make a deposit of \$10 for a chemistry breakage card.

Physical Education—A towel and equipment fee with a maximum of \$2 per quarter will be charged for certain physical education courses and participation in campus organized intramural activities.

Remedial Mathematics Course Fee—A special fee of \$21 per quarter (in lieu of tuition) will be charged for the following mathematics courses:

- Math P, Preparatory Mathematics
- Math A, Intermediate Algebra
- Math T, Trigonometry
- Math G, Solid Geometry

Incidental Fee

The incidental fee for all students who are taking 6 credits or more is \$27 per quarter. Students taking less than 6 credits may have the option of paying the incidental fee and sharing the privileges of the fee which includes health service, convocations, student activities, and athletic events.

Cost of Student Health Insurance

Blue Cross-Blue Shield (per quarter)	\$6.15 Single Coverage
Blue Cross-Blue Shield (per quarter)	\$31.50 Family Coverage

Refunds

If a student cancels registration before 6 weeks of any quarter have passed, the student is entitled to a refund of tuition, incidental, and course fees based on the following provisions. Students who have not attended any class may obtain full refund provided they apply before the end of the first week. Where a student has attended classes and the student officially cancels within the first week, 90 per cent refund; within the second, 80 per cent; third, 70; fourth, 60; fifth, 50; sixth, 40. After the sixth week, there is no refund. The Records Office will certify the dropping date which will determine the amount of refund. The student should bring his receipted fee statement to the Business Office when seeking a refund.

Payment of Fees

Students must pay all fees before the first day of classes in order to avoid a late payment penalty. Class attendance will not be allowed beyond the second week of the quarter without payment of fees. See *Special Fees* section for late payment charge.

FINANCIAL AIDS

This program is designed to give financial assistance to needy and worthy students and to give help and advice with budgeting and financial problems. It is based upon the premise that successful college students should not be compelled to interrupt college training for financial reasons.

All scholarships, loans, and on-campus part-time jobs awarded are based on the financial need of the individual.

All-University Scholarship Funds

Recipients of all-University scholarship funds may use the funds on any of the four campuses of the University. Freshmen must make application by December

15 of the year preceding the fall quarter they wish to begin college. To be eligible, a freshman must:

1. Be graduated in the upper one-fourth of the class from an accredited Minnesota High School.
2. Meet the criteria for admission to the University of Minnesota.
3. Be a resident of Minnesota and a citizen of the United States.

Application forms may be obtained from the high school principal or by writing to the Financial Aids Officer, University of Minnesota, Morris, Morris, Minnesota.

UMM Scholarship and Grant-in-Aid Funds

There are a number of separate scholarship and grant-in-aid funds available at the University of Minnesota, Morris. One of these is the UMM General Scholarship Fund. The General Scholarship Fund is supported by donors whose contributions are not designated to special funds. The annual "Dollars for Scholars" scholarship campaign initiated by the West Central Educational Development Association has attracted the greatest number of contributors to this fund. Awards from this source are distributed to needy and worthy student applicants on the Morris Campus without regard to selection criteria such as a student's class designation, his home address, or his educational objectives.

Many contributors through annual commitments of \$300 or more, or through the development of an endowment fund from a single contribution of \$2,500 or more, have established special scholarship funds. These funds are administered by the University of Minnesota, Morris in conformity with the provisions established by the donor. Provisions indicated by a number of donors designate basic selection criteria which must be met by recipients. Student applicants should indicate their eligibility for any particular fund when they make application for scholarship assistance.

Freshmen who have applied for all-University scholarship funds need not re-apply to be eligible for consideration for University of Minnesota, Morris scholarships. A single application will suffice for consideration for both funds.

Freshmen must make application by December 15 of the year preceding the fall quarter they wish to begin college in order to be eligible. The same eligibility for these funds is required as for all-University scholarship funds.

Applications from students with advanced standing for University of Minnesota, Morris scholarship funds must be submitted no later than the third week of fall quarter. Forms may be obtained by writing the Financial Aids Officer, University of Minnesota, Morris.

Current contributors who have established special scholarships or grants-in-aid are as follows (students should pay close attention to the selection criteria established by the donor):

AFL-CIO INDIAN SCHOLARSHIP AND GRANT-IN-AID FUND

Sponsor: Minnesota AFL-CIO Federation of Labor, St. Paul, Minnesota.

Awarded to worthy and needy Indian students at the University of Minnesota, Morris who qualify for tuition exemption at UMM, emphasis being placed on need and academic achievement.

AGRALITE COOPERATIVE SCHOLARSHIPS

Sponsor: The Agralite Electric Cooperative, Benson, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

ALICE WEICKERT MEMORIAL SCHOLARSHIP

Sponsor: Dr. Harold N. Weickert, Wheaton, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship, emphasis being placed upon need and academic achievement.

BUD'S RED OWL SCHOLARSHIP

Sponsor: Bud's Red Owl, Mr. Warren Johnson, Ortonville, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who originate from within a 20-mile radius of Ortonville.

C. H. FREEMAN SCHOLARSHIP

Sponsor: Morris State Bank, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

CITIZENS BANK OF MORRIS SCHOLARSHIP

Sponsor: Citizens Bank, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are residents of Stevens County; exceptions to be granted by sponsor.

ERICKSON-HELLEKSON-VYE SCHOLARSHIP

Sponsor: Erickson-Hellekson-Vye Corporation, Wheaton, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who originate within the service area of the sponsor.

FARMERS UNION ABC SCHOLARSHIP

Sponsor: Individual local and county membership of West Central Minnesota Farmers Union.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship; emphasis will be placed upon need and academic achievement.

FIRST FEDERAL SAVINGS AND LOAN ASSOCIATION SCHOLARSHIP

Sponsor: The First Federal Savings and Loan Association, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who live within a 50-mile radius of Morris, Minnesota.

GOLDEN CREAM DAIRY SCHOLARSHIP

Sponsor: Golden Cream Dairy, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who reside within a 70-mile radius of Morris, Minnesota.

HANCOCK CONCRETE PRODUCTS SCHOLARSHIP

Sponsor: Hancock Concrete Products Company, Inc., Hancock, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who reside within a 100-mile radius of Hancock, Minnesota.

HANCOCK STATE BANK SCHOLARSHIP

Sponsor: Hancock State Bank, Hancock, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship; emphasis to be placed upon need and academic achievement. Recipients are to originate within the Hancock trade territory, and the president of the Hancock State Bank reserves the privilege of approving the recipients before scholarships are awarded.

HENRY'S CANDY COMPANY SCHOLARSHIP

Sponsor: Henry's Candy Company, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

JOHNSON DRUG SCHOLARSHIP

Sponsor: Johnson Drug, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are enrolled in a prepharmacy curriculum.

KCMT-TV SCHOLARSHIP

Sponsor: KCMT Television, Alexandria, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

KIWANIS CLUB SCHOLARSHIP

Sponsor: Kiwanis Club, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

L. G. MORLEY, SR., SCHOLARSHIP

Sponsor: Super Valu Store, and Home Builders Company, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

LIONS CLUB SCHOLARSHIP

Sponsor: Lions Club, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship with emphasis primarily upon need and academic achievement.

MEDICAL STAFF OF THE STEVENS COUNTY MEMORIAL HOSPITAL SCHOLARSHIP

Sponsor: The Medical Doctors of the Stevens County Memorial Hospital, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are enrolled in premedicine or allied fields.

NORTHROP KING AND COMPANY SCHOLARSHIP

Sponsor: Northrup King and Company, Minneapolis, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship.

NORTHWESTERN BELL TELEPHONE COMPANY OF MORRIS SCHOLARSHIP

Sponsor: Northwestern Bell Telephone Company, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship; emphasis will be placed upon need and academic achievement and preference will be given applicants from the Morris area.

OTTER TAIL POWER COMPANY SCHOLARSHIP

Sponsor: Otter Tail Power Company, Fergus Falls, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who originate from any post office address within the area serviced by the sponsor.

PRODUCTION CREDIT ASSOCIATION SCHOLARSHIP

Sponsor: Production Credit Association, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who originate from Stevens, Grant, Big Stone, or Traverse Counties.

RUNESTONE ELECTRIC ASSOCIATION SCHOLARSHIP

Sponsor: Runestone Electric Association, Alexandria, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who have graduated from a high school located in the area serviced by the sponsor.

STAHLER AND GIBERSON SCHOLARSHIP

Sponsor: Stahler and Giberson, Attorneys-at-Law, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are residents of Stevens County.

TRAVERSE ELECTRIC COOPERATIVE, INC. SCHOLARSHIP

Sponsor: Traverse Electric Cooperative, Wheaton, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who originate within the area serviced by the sponsor.

TYLER MANUFACTURING COMPANY SCHOLARSHIP

Sponsor: Tyler Manufacturing Company, Benson, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are enrolled in agricultural chemistry, agricultural engineering, or agricultural science.

UNIVERSITY OF MINNESOTA MEMORIAL FUND SCHOLARSHIP

Sponsor: The University of Minnesota Memorial Fund Committee.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship; emphasis will be placed upon academic achievement, and preference will be given to applicants who are sons and/or daughters of deceased staff members of the University of Minnesota.

WILLIE'S RED OWL SCHOLARSHIP

Sponsor: Willie's Red Owl, Morris, Minnesota.

Awarded to students at the University of Minnesota, Morris demonstrating need, character, leadership, and scholarship and who are residents of Stevens County; exceptions to be granted by sponsor.

Loans

The University of Minnesota, Morris participates in the National Defense Student Loan program; a Farmers Union ABC Loan Fund and the 7th District, Minnesota Federation of Women's Clubs Loan Fund have also been established. Generally speaking, loans from these funds are distributed to freshman students over the winter and spring quarters only. Good scholarship and a clear-cut need for financial assistance must be demonstrated on the application form. Information and loan forms may be obtained by writing to the Financial Aids Officer, University of Minnesota, Morris. Students are asked to withhold loan applications until after they have been accepted for admission.

The University of Minnesota, Morris is also a participating member of the United Student Aid Funds, Inc., with funds coming from participating banks. Applicants must have completed at least 1 year of college to be eligible for loan assistance from the United Student Aid Funds, Inc. Students applying for assistance from this program must first obtain an application from the college; assisted by the college student aid officer, he completes the application and the college certifies the student's standing and approves the application; the student then applies to the loan officer of his bank.

In addition, a special emergency loan fund is available for University of Minnesota, Morris students needing small, short-term loan assistance. Contact the Financial Aids Officer for more detailed information regarding all loan possibilities.

Part-Time Employment

Students are encouraged to start their college careers with outside support or savings, in order to get a good start in classwork; however, part-time jobs are available, both on and off campus. If it is necessary for a student to work part time, application should be made to the Financial Aids Officer, University of Minnesota, Morris. Students are asked to withhold application for part-time work until after they have been accepted for admission to the college.

The University of Minnesota, Morris participates in the College Work-Study Program included within the Federal Economic Opportunity Act of August 20, 1964. The Work-Study Program provides for the use of Federal funds to employ, on a part-time basis, students with extreme financial need who are from low-income families. Newly enrolled students should inquire at their respective high school counselor's or principal's office relative to eligibility requirements. For additional information write the Financial Aids Officer, University of Minnesota, Morris.

COLLEGE REGULATIONS

Class Attendance

Every student is responsible for attending classes regularly. All departments hold students responsible for work of the course, but differ somewhat in treatment of absences. The student must therefore learn the policy of his particular instructor and, if he has legitimate excuse for absence such as illness, arrange for making up work missed.

Credits

Amount of work is expressed in quarter credits. Each credit demands, on the average, 3 hours a week of a student's time; that is, 1 hour recitation with 2 hours of preparation, or 3 hours of laboratory work. A normal course load is 15 credits.

Grades

The policy of the University of Minnesota as to grades is as follows:

1. There are four permanent grades, A (highest), B, C, and D (lowest), which shall be acceptable for the completion of a single course.

2. A permanent grade of F (failure) is given when the student does not successfully complete the work of a course.

3. A temporary grade of I (incomplete) may be assigned when there is not sufficient information immediately available to permit the assignment of a permanent grade. This would be the case if the student has not done all the work of the course or if the instructor does not know why a student, officially registered for his course, has not appeared or has terminated. If the instructor is able to ascertain that the student has no adequate excuse or if the student attended beyond the sixth week and was failing, F is the appropriate grade.

A grade of I which is not turned into a permanent grade or into a W (official cancellation) by the end of the sixth week of the next regular quarter of attendance shall become an F. Permission to complete the work must be obtained from the instructor. He may set a make-up deadline of less than 6 weeks.

4. A symbol W indicates official cancellation from a course without grade. This shall be assigned in all cases of official cancellation during the first 6 weeks of classes, irrespective of the student's standing. After 6 weeks, W shall be posted only if the

student is not failing at the time of official cancellation. W is a registration symbol, not a grade, and shall be posted by the supervisor of records on the basis of the student's registration status.

5. A student who cancels officially, or otherwise leaves a class, after the sixth week of classes and is failing at the time shall receive an F.

6. A symbol X may be reported in continuation courses in which a student is permitted to continue but in which a grade cannot usually be determined until the sequence is completed. The instructor shall submit a grade for each X when the student has completed the entire sequence.

7. A symbol T (transferred) indicates credits transferred from another institution, or from one college to another within the University, when a reevaluation is required. It shall be posted as a preceding supplement to the original grade.

8. A registration symbol V (visitor) indicates registration as an auditor or visitor.

Grade Points

Quality of work is indicated by grade points. Grade points are assigned to the several permanent grades to assist in determining a C average, required for graduation. Grades carry the following grade points:

Each credit of A	4 grade points
Each credit of B	3 grade points
Each credit of C	2 grade points
Each credit of D	1 grade point

The symbols I, W, X, and V, being registration symbols, do not carry grade point value.

Grade Point Average

Grade point average—the scholastic average—is the sum of grade points divided by the sum of credits passed and failed. In general, all credits must enter into the grade point average. If a course is repeated, both grades enter into the computation of the grade point average. A grade point average of 2.00 (C average) is the minimum standard required for work leading to the Bachelor's degree.

Classification of Students

A student with less than 40 credits is classified as a freshman. A student with 40 to 83 credits is a sophomore. Junior standing requires a minimum of 84 credits. A student with 135 or more credits is a senior.

Examinations for Credit

Credit for achieved knowledge comparable with specific content of University courses may be obtained by special examination. A student desiring credit and believing he has knowledge equal to that of other students successfully completing a course, should request from the Records Office the application form to take a special examination.

Examinations for credit shall be without fee if taken during the student's first quarter in residence or the first quarter after an absence of a year or more. Otherwise a fee of \$5 shall be charged. In either case, the credit by examination shall not count as residence credit.

A student must do at least C quality work on the examination to earn credit. A notation shall be placed on the official record showing the course and credits earned. The Scholastic Committee shall determine eligibility to receive credit and grade before the examination is scheduled and before the special fee is paid. If a grade is assigned, it shall count on the grade point average. If a student should fail to do at least C quality work on the examination, no notation shall be made on the record.

To get a special examination for credit scheduled, a student will take the application form to the department concerned for approval. The application will be forwarded to the Scholastic Committee and the chairman of this committee will contact the instructor concerned. The instructor will notify the student of the scheduled hour for the examination and the student will pay the \$5, if required, at the Business Office before taking the examination. The instructor will report the results on the Special Examination Form to the Records Office for recording on the official record.

Examinations to Show Proficiency

If a student believes he has not been properly placed in a sequence of courses, he may apply to the appropriate division for a proficiency examination. He may also make such application if he believes he possesses sufficient competency to be exempted from prerequisite courses.

Examinations for proficiency require no fee and yield no credit or grade. They may be taken at any time. If the student's work is of passing quality, a notation shall be made on his official record, indicating that the requirement has been satisfied by proficiency examination.

Final Examinations

The examination week is part of the regular school year and must be taken into account by the student in planning for any other activities or work outside of school hours. The final examination schedule for each quarter at the University of Minnesota, Morris is distributed to all instructors and divisions and to the student newspaper and is posted conveniently in all college buildings. Students are expected to know the times for their own final examinations and attend the examinations as scheduled. Only a conflict between examination times or a schedule of three or more examinations in 1 day will entitle a student to seek adjustment of his examination program. Under these circumstances he should contact the Office of the Dean.

Probation

The Scholastic Committee concerns itself with academic probation. The rules covering academic probation are as follows:

1. *First Probation*—A student will be placed on first probation immediately following the first quarter in which his cumulative grade point average drops below 2.00 (C average).
2. *Final Probation*—A student will be placed on final probation immediately following the second consecutive quarter in which his grade point average remains below 2.00 (C average). Any student on final probation will have his grades reviewed by the Scholastic Committee each quarter. At that time a decision will be made as to whether he will be allowed to continue on final probation, temporarily excluded, or dropped from the University. It should be pointed out that being placed on final probation does not in itself imply that a student will be dropped the following quarter. Many students are con-

tinued on final probation for a number of quarters, until such time as the cumulative grade point average exceeds 2.00 (C average).

3. Transfer students who are admitted with a cumulative grade point average of less than a C average may be placed immediately on final probation at admission.
4. *Suspension*—Students who are not making satisfactory progress toward graduation may be suspended or dropped from the University by the Scholastic Committee. Normally, suspension will occur only after a student has been placed on final probation.

Students may be placed on nonacademic probation by the Student Behavior Committee or by the dean of the college. Rehabilitation of the student is the first consideration for such action. Consideration is also given to the welfare of other students and the institution.

Exclusion from College

1. *Dropped for Low Scholarship*—A student on probation who fails to meet the terms of his probation may be dropped.

2. *Discontinued*—If a student is pursuing an appropriate course but is handicapped by conditions he cannot control, such as ill health, necessary outside work, etc., he may be required to discontinue his registration until these conditions have improved. When discontinuance takes place at any time other than the end of the quarter, the courses for which he is registered may be recorded as canceled without grade.

3. *Suspended*—Sometimes a student's scholastic difficulty indicates that he should not continue for the time being even though the record does not require drop action. In such case, his later return must be approved by the Scholastic Committee.

4. *Dropped for Improper Behavior*—In addition to being dropped for low scholarship, a student may also be dropped for behavior inappropriate to his responsibilities as a citizen of a college community.

Readmission to College

A student excluded from UMM under provisions of 1, 2, or 3 above is allowed to return only with the permission of the Scholastic Committee. A student excluded from UMM for improper behavior is allowed to return only with permission of the Student Behavior Committee.

A student classified as discontinued must present evidence that the conditions which hinder his work have been remedied.

A student may be advised to remain out of college for 1 full year if deemed in his best interests; however, a student who has been dropped or suspended from college during fall or winter quarters may petition for readmission at the beginning of the following academic year.

A student excluded from UMM who plans to apply later for readmission and anticipates taking General Extension courses or work at another college in the interim should seek advice in the Counseling Office concerning the work to be taken. Approval and evaluation of such courses will be considered prior to his readmission.

A student who returns under the provision of the preceding paragraphs will normally be placed on scholastic or nonacademic probation. He may be dropped at any time his work or behavior is unsatisfactory.

Audited Courses

The privilege of admission to class as an auditor is usually granted only to students of junior or senior status and to adult special students. The same registration procedure is followed and the same fee charged as for courses bearing credit.

Auditors normally do not take the class examinations, and no grade is recorded. The registration symbol "V" is recorded. Courses which have been audited may not be taken later for credit.

Courses Without Credit

Under certain circumstances a student may register for a course without credit with the permission of the Scholastic Committee. This enables the individual to participate in class activities to an extent agreed upon in advance with the instructor. The usual arrangement when permission is granted is for full participation with a final grade recorded on the permanent record, but the credits and grade points do not count in computing grade point averages in the University. The procedure is particularly useful for returning students when they wish to repeat a course for review.

Repeating a Course

A student may, without special permission, repeat a course in which he has failed and both the old and new grades will then stand on the record. The student need not repeat the failed course unless it is a prerequisite to other courses he wishes to take or is required for graduation. A student may not, without permission of the Scholastic Committee, repeat a course for which he has already received credit.

Honor Case Commission

A student-directed "honor system" is active on the Morris Campus which concerns itself with any and all forms of academic dishonesty, such as cheating and plagiarism. An Honor Case Commission constitutes the reviewing authority. Violations are reported to the commission by students or faculty and each case is individually studied and judged.

The Scholastic Committee

The Scholastic Committee is a committee of the faculty charged with the development, interpretation, and enforcement of academic regulations. It may authorize exceptions within the basic spirit of the regulation when the usual policy would work to the educational disadvantage of a particular student. To be considered for exemption from a regulation, the student must turn in a written petition to the secretary of the Scholastic Committee. The student should allow several days for the committee to process the request.

Committee on Student Behavior

The Committee on Student Behavior is charged with the responsibility of dealing with student behavior problems that do not come under the jurisdiction of the Honor Case Commission.

Committee actions are aimed at rehabilitating the student and protecting the standards of the University of Minnesota, Morris. The committee has authority to place students on disciplinary probation, to recommend suspension from college, or to take other action which seems justified under the circumstances.

Petition for Exemption from a University Regulation

Through the college regulations the faculty expresses its judgment concerning the best procedures for most students. These regulations are, in most cases, general statements giving the student an opportunity for certain choices. Occasionally a student may find that even with the choices open to him the regulations appear to work to his educational disadvantage. In this event he may petition the Scholastic Committee for an exemption.

Petition forms are issued in duplicate, and when completed should be returned to the secretary of the Scholastic Committee. They should contain a clear statement of the reason for the petition. Each petition must have the signature of the student's faculty adviser.

A copy of the decision will be sent to the student and to his adviser.

ADVISEMENT AND COUNSELING

The student advisement program is aimed at helping a student achieve maximum benefit from his college experience. Essential elements of the student advisement program are the orientation program, the aptitude testing program, and educational and vocational planning with the faculty adviser and the counseling office.

Summer Preregistration—All students having gained admission and not having attended college previously are required to participate in a 1-day program planning and registration session. Discussions of program planning, course selection, student life, the planning of a first-year class schedule, and an individual interview with a counselor are included in the day's activities. Fall quarter students will be assigned a date to attend this 1-day session by the Counseling Office.

A special summer orientation day is held for those students who are transferring from other colleges. This date normally occurs just prior to the beginning of the fall quarter. Transfer students will be notified by mail of this orientation date.

Orientation Week—An orientation program is conducted for all new students during the week which precedes the beginning of fall quarter classes. All students who have not previously attended the University of Minnesota, Morris are required to attend. (Transfer students are required to attend only the sessions concerned with registration.)

Orientation week is designed to familiarize new students with the policies, facilities, and curriculum of the University of Minnesota, Morris.

Faculty Adviser—Upon admission to the University of Minnesota, Morris a student is assigned a faculty adviser. A prime responsibility of the faculty adviser is to assist the student each quarter with the selection of appropriate courses. He is also the initial contact for any problem the student might have. The faculty adviser co-ordinates very closely with the counseling staff to insure accurate educational planning for the student.

Counseling—One of the important services on campus is the professional counseling available to students. By utilizing aptitude and interest test data and closely co-ordinating with the faculty, the counselor is able to assist the student in solving problems relating to educational, personal, and vocational development.

Summer orientation, orientation week, faculty advisers, small classes with personal attention from professors, and individual counseling combine to offer the student the maximum in individual assistance. The primary aim of the University of Minnesota, Morris is to assist each individual to function to his maximum potential educationally, personally, socially, and vocationally.

LIBRARY

The Morris Campus Library has a rapidly growing collection of resource books, magazines, newspapers, and periodicals. As part of the University of Minnesota, the Morris Campus Library has access to resources totaling more than 2,000,000 volumes. The nearby Morris Public Library is also a convenient resource for many necessary books.

The library occupies space on both floors in Edson Hall. The main floor (north wing) serves as a reading room with periodicals and reference books on open shelves. Library offices and staff work room are on the main floor (south wing). The basement (both north and south wings) is the library stack area. Books, periodicals, and government documents are shelved in these basement stack areas.

The library collections are built around the curricular offerings and are broad enough to encourage individual study and recreational reading. A competent professional staff is available to help interpret the collection and give reference and bibliographical assistance.

HEALTH SERVICE

The University Health Service has a nurse on duty from 8 a.m. to 5 p.m., Monday through Friday of each week when classes are in session.

Consultation service is available for any student. There is no limit to the number of visits a student may make. Services include physical examination, immunization, care of illness, and laboratory tests.

Emergencies and illnesses requiring doctor's care should be reported to the Health Service. In case of emergencies during off hours, students should go directly to a hospital emergency room. Students are required to have adequate hospitalization insurance. A low-cost group plan, through Blue Cross, is available to students through the University.

Excused absences due to illness must be secured from the Health Service.

BOOKSTORE

The University Bookstore, stocked with all required textbooks and necessary school supplies, is located on campus in the Humanities Building. The University Bookstore is a nonprofit, self-supporting unit and operates on a self-service basis.

LIVING ACCOMMODATIONS

Students whose homes are away from Morris, if not commuting, will reside in University of Minnesota, Morris residence halls or in University-approved private homes in Morris.

On-Campus Housing

Five residence halls are available. All admitted students will receive a room reservation form following receipt of their acceptance letter. Requests for board and room rates and information should be addressed to the Director of Housing, University of Minnesota, Morris.

Contracts for on-campus housing are required and are made for the entire academic year; a \$25 deposit must accompany the completed contract. This deposit will be deducted from the first month's board and room account. A reservation is official only when the signed contract and the \$25 are received. A refund of the \$25 deposit will be made upon cancellation, provided notification is given to the business manager 2 weeks before the beginning of fall quarter.

Each residence hall has at least one large lounge and TV area; most halls are equipped with recreation facilities and study rooms. Meals for resident students are

available in the dining room of the food services building. Lunches and short orders are available to students throughout the day and evening at the snack bar. A student laundry with coin-operated machines is centrally located for all residence halls.

Housing for Women—Two women's residence halls are available on campus. All rooms are furnished with beds, chairs, closets, dressers, desks, and mirrors. Bed sheets and necessary blankets are also supplied. Students must furnish towels, personal necessities, bedspreads, lamps, and extra blankets if desired.

Housing for Men—Three residence halls are available for men. All rooms will be furnished the same as those for women.

Off-Campus Housing

Facilities are available for men and women who desire to live off campus. All unmarried students under 21 years of age living off campus, must dwell in University-approved housing. Listings of off-campus housing are available in the office of the director of housing.

If a student selects a residence not previously approved by the University, this approval must be obtained before occupancy. Prices range from \$17 to \$35 per month per person.

Students selecting approved facilities in private homes should satisfy themselves that the room is acceptable for the entire school year. Housing regulations provide that the student must give 1 month's notice or secure a suitable replacement if he wishes to relocate. Room payment to householders is due in advance. Women students living in private rooms, rooming houses, or apartments are expected to follow regulations established for the University women's residence halls.

STUDENT ACTIVITIES

Recognizing the importance of human relationships in the all-around growth of an individual, the University encourages activities which stimulate individual expression and development. It is important that students realize that instruction on the one hand and human association on the other combine to help them attain full growth.

On the University of Minnesota, Morris Campus there are organizations which cover a wide range of interests, provide the major means through which students give expression to their talent and interests, develop skills of various kinds, and perfect their knowledge of the processes and principles by which democracy works. Students are urged to participate in these organizations, both for their personal value and for the unique contribution which each student can make to the campus community.

Social Calendar

Several major events, college- or Student Union Board-sponsored, will be held each year. These include a reception at the dean's residence during orientation week, a formal dance each quarter, and Sno Week during the winter quarter. Other scheduled events will include movies, soc hops, all-campus ski trips to some of Minnesota's finest ski resorts, skating parties, coffee hours, and group-sponsored receptions. A complete homecoming celebration during the fall quarter, a student variety show during the winter quarter, and an all-campus spring activities event during spring quarter will round out the social calendar. Campus recognition of outstanding students for leadership and scholarship is given annually during the spring awards convocation.

Student Organizations

Approved organizations that are presently functioning at the University of Minnesota, Morris to serve the needs of students are:

Alpha Rho Psi—Men's fraternity with the purpose of furthering social life on the University of Minnesota, Morris Campus.

Casino dell'Arte—A group that serves the campus by presenting exhibitions of art works, initiating creative projects in visual media, and supplying posters for student activities.

Circle K Club—A service club dedicated to the improvement of campus life and service to the students and the institution.

Council of Religious Organizations—The Council of Religious Organizations serves religious organizations in co-ordinating religious activity on campus. An active program of events throughout the academic year has been the result of the combined efforts of religious organizations. Wednesday evenings have been set aside on the social calendar for meetings and religious activities during each week. The five religious foundations are: Gamma Delta (Lutheran-Missouri Synod), Lutheran Collegiates (Lutheran-Wisconsin Synod), Lutheran Student Association (Lutheran-T.A.L.C.), Newman Club (Roman Catholic), and United Protestant Campus Fellowship (Federated, Congregational, and Methodist).

Gamma Omicron Beta—A sorority for women in pre-home economics. The objectives provide for the development of professional and cultural standards for women in this field of study.

International Relations Club—A club interested in promoting world understanding and international education. It provides a meeting ground for American and foreign students.

Lettermen's Club—An organization whose purpose is to promote the intramural and intercollegiate athletic program at UMM. Its members are varsity letter winners who promote sportsmanship and academic achievement in its members.

Literature Club—A seminar group for all students and faculty with an interest in the literary arts of the novel, poetry, and drama.

Math Club—A club organized to encourage interest in mathematics beyond the classroom, by treating topics not otherwise covered to generally broaden the mathematical horizon of the advanced student, and bring him closer to the frontiers of modern mathematics.

Men's Residence Halls—An organization composed of men living on campus; functions as a residence government.

Morris Campus Student Association—The Student Government of the University of Minnesota, Morris is an organization designed to insure unity between the student body and faculty in order to co-ordinate student affairs, to promote the best interests of the students on campus, and to encourage student leadership.

The Student Government is composed of an executive body of elected officers and a General Assembly broadly representing the different organizations. The student body elects or appoints all representatives to the Student Government. Membership is open to any full-time student who maintains satisfactory grades.

- Morris Meinings Drama Club*—A group dedicated to actively influencing the dramatic productions on campus and to giving drama and theater experience to its members.
- Music Educators' National Conference*—A group of preprofessional music students who are interested in raising the cultural music level of their own members as well as that of the college community.
- Phi Mu Delta*—A men's fraternity with the purposes of helping to orient new students to the campus and to further social life.
- Physical Education Major and Minor Club*—Organized to maintain high standards of scholarship and professional preparation and assist in the development of a sound philosophy of health, physical education, and recreation.
- Student Minnesota Educational Association*—Organized to develop among college students preparing to be teachers an understanding of the teaching profession through participation in the work of local, state, and national education associations.
- Student Union Board*—An elected student organization representing the total campus and established to provide a well-rounded activities program for the entire college community. At present it is structured within the Student Government organization and serves as a standing committee, with many autonomous responsibilities.
- UMM Ski Club*—Organized to provide an opportunity for students and faculty of UMM to experience the thrill of one of the major winter sports in mid-western America and to further the socialization of the students and the faculty.
- UMM Social Work Club*—A group formed to create a setting wherein students interested in the field of social welfare can discuss, explore, and broaden their knowledge of social work.
- Vanguard*—The student newspaper, published under the direction of a student editor elected each spring by the operating staff. All students expressing an interest in working on the paper are invited to become members of the staff at the beginning of each year. The *Vanguard* is published for the purpose of keeping the campus informed and to provide as much practical journalism experience as possible to its staff.
- Venture*—The student annual, dedicated to keeping a record of campus life in bound volume form for each academic year. The *Venture* is published by an editor and staff, and one faculty member who is selected as an adviser.
- Women's Recreational Association*—A group organized to stimulate interest and participation in worthy physical recreation activities, to originate a spirit of good sportsmanship and friendship, and to provide differentiated leadership opportunities.
- Women's Residence Halls*—An organization composed of women living on campus; functions as a residence government.
- Young Democratic Farmer-Labor Club*—Organized to stimulate in college students an active interest in government and to foster and perpetuate the ideals of the Democratic Party.
- Young Republican Club*—Organized to develop all student Republicans on campus into an intelligent, co-operative and aggressive group, to encourage participation in the activities of the Republican Party, and to support campus student politics.

Athletic and Intramural Programs

The gymnasium contains a large basketball floor, a swimming pool, and adequate dressing and shower facilities. Two football fields are provided, and other game areas are available. Golf facilities, tennis courts, and a baseball park are available.

Recreational Sports Program for Men and Women—All athletic facilities are made available during leisure hours to students for recreational purposes.

Intramural Program for Men and Women—This program is open to all students who wish to participate. It aims to provide students with ample opportunities to further develop skills in physical education activities. The men's program includes competition in flag football, basketball, bowling, badminton, swimming, golf, tennis, and softball. The women's program will provide varied activities in dance, synchronized swimming and aquatics, team sports, and individual and dual sports.

Intercollegiate Athletic Program—The University of Minnesota, Morris provides independent competition in football, basketball, tennis, bowling, wrestling, and golf at present. Future development of this program to provide competition in cross-country, swimming, ice hockey, and track and field is expected.

SPECIAL EDUCATIONAL OPPORTUNITIES

Convocations

Significant convocations will be held periodically during the year. Lectures, concerts, and dramatic performances are given by students, faculty, outstanding artists, and authorities well known in their special fields, providing entertainment and an opportunity to extend knowledge gained in the classroom and to broaden interests.

University Artists Course

The University Artists Course brings to the Morris Campus a series of the world's outstanding entertainers. Each year a variety of talent including ballet, folksingers, University musicians and dramatic performers help to broaden cultural knowledge and interest.

Art Exhibits

The Morris Campus enjoys the privilege of several art exhibits each year. These are open to the public during regular hours. The works of nationally recognized artists, as well as student exhibitors, are available to the students and general public.

Film Series

A series of films is made available to students and area people. This series of films is composed of important American and foreign films. The films are selected from the finest of contemporary and previously filmed pictures. Tickets may be ordered from the Business Office at the University of Minnesota, Morris where further information may be obtained relative to the film series.

Recognition and Awards

A Dean's list of honor students is published at the end of each quarter. These students have achieved a 3.00 (B) grade point average or above for the past quarter.

Special convocations are held during the academic year for the purpose of recognizing students excelling in scholarship, leadership, citizenship, and athletics.

Dean's Award

Presented annually to an outstanding student on the basis of academic excellence and contribution to campus life. The Student Government nominates three students from a list of academically eligible candidates. These in turn are endorsed by the Awards Committee. The dean of the University of Minnesota, Morris makes the final selection from this group.

Honor List Award

Presented annually to students who have maintained grade point averages of 3.00 (B) or higher for 3 consecutive quarters.

Edna Murphy Morrison Award

Presented annually by the Morris Branch of the American Association of University Women to an outstanding woman undergraduate on the basis of scholastic excellence, creativity, unusual skills, intellectual enthusiasm, and curiosity.

Scholar of the College Award

An award granted in recognition of the highest academic achievement. Presented to sophomores, juniors or seniors who have earned a cumulative grade point average of at least 3.85 while in attendance at the University of Minnesota, Morris.

Allen W. Edson Award

Presented annually in recognition of total contributions to campus life. The selection is made jointly by the students and faculty.

Freshman Honors Award

Presented annually to students who have earned 30 quarter credits with a grade point average of 3.50 or higher while in attendance at the University of Minnesota, Morris.

Wall Street Journal Award

This award is presented to a student who has earned a 3.00 in an economics major and has maintained a 2.75 over-all grade point average. General contribution made to the college community is also considered in the presenting of this award.

Evening Classes and Summer School

Special offerings are available in both evening classes and summer school. Bulletins and further information about these offerings can be obtained by writing the Office of Admissions.

Developmental Reading

The Counseling Office has available for all students a program in developmental reading. It is geared to the needs of the proficient as well as the deficient reader. Participation involves membership in a small group consisting of about ten students. The program is voluntary in nature and allows each group member to proceed at his own speed.

II. Academic Information

The academic program of the University of Minnesota, Morris is designed to provide for its students a program in liberal education leading to the bachelor of arts degree. Students normally participate in this program in one of three ways:

1. A 4-year curriculum leading to the bachelor of arts degree.
2. A 4-year curriculum which combines liberal education and teacher preparation and leads to the bachelor of arts degree and certification as an elementary or secondary teacher.
3. A 1-, 2-, 3-, or 4-year curriculum in liberal education meeting the preprofessional liberal arts requirements of the professional schools of the University of Minnesota or of other institutions.

No two liberal arts students move toward their goals by the same route, yet all participate in the college's program of liberal education. The objectives of the curriculum are listed below; the requirements for the bachelor of arts degree from the University of Minnesota, Morris are designed to fulfill these objectives. The requirements for the bachelor of arts degree as well as information concerning the college's teacher education program and preprofessional offerings are described in the section of the bulletin which follows.

Objectives of the UMM Curriculum in Liberal Education—The University of Minnesota, Morris curriculum has been designed to assist students toward the development of certain competencies:

1. The ability to read perceptively—to understand and evaluate the ideas of others—and in turn to be able to communicate what one thinks and feels with clarity, coherence, and force. Almost every course at UMM, in addition to providing information, attempts to develop in the student the ability to think critically and constructively—i.e., to collect and weigh facts and interpretations, to analyze problems and situations, to approach their solutions with intellectual integrity and wide understanding, and to manage the language, both spoken and written, in communicating what he has learned.
2. The ability to read and speak a foreign language; the pursuit of a knowledge of a foreign language as a discipline in itself, as a tool with uses in other disciplines and with application in the world of men at large, and as a means by which the student may gain some intellectual and cultural perspective upon himself and the point in space and time at which he exists.
3. An understanding of the materials, methods, and purposes of scientists, historians, mathematicians, artists, critics, philosophers, and social scientists. To this end we have required our students to distribute at least half of their total work among the traditional categories of liberal studies—the natural sciences and mathematics; the social sciences; and the humanities—and, in recognition of the wide range of experience within these categories, we have required them to distribute this work among the subcategories of each.

The purpose of such a distribution requirement is to assure that all graduates hold in common some significant knowledge about man, nature, and society, some understanding of how the method of inquiry appropriate to each of the liberal disciplines is used to augment the body of knowledge in that discipline, and some awareness of how developments in each discipline affect man and the world in which he lives.

Hence, though the paths to the baccalaureate do indeed vary, each path has received sufficient direction to assist the student toward becoming an informed and responsible member of the human community with insights, perspectives, and values that should mark an educated man, regardless of his field of specialization.

4. Relative expertness in a single area of study, a major. The idea of a liberal education should include not only the concept of breadth across the provinces of knowledge, but also the concept of breadth and profundity within a single coherent discipline. Properly organized study in depth is needed to prevent a course of study from becoming a patchwork of disconnected pieces. It can generate increased motivation and ability for further learning, insight into the manner in which a given field of knowledge develops interaction with other fields, and a point of reference from which to seek understanding of the whole of man's intellectual enterprise.

To achieve the ends which a commitment to study in depth envisions, the student must experience a genuine engagement with the discipline. He must become actively involved in the process of searching for truth through the methods of inquiry appropriate to that discipline. He must give evidence that he can think critically, constructively, and expertly by mastering, through his own efforts, a portion of the body of knowledge in that discipline and by communicating it effectively.

THE FOUR-YEAR CURRICULUM LEADING TO THE BACHELOR OF ARTS DEGREE

General Information

Planning the Student's Program—As each student is responsible for completing each course he undertakes, so is he also responsible for planning the program which will best satisfy his educational and vocational goals. Nevertheless the student is expected to work closely with his faculty adviser in planning a well-organized and balanced academic program. The counseling staff and the faculty in general are also available for program planning aid.

In planning his program for a given quarter, the student should use this bulletin in conjunction with the University of Minnesota, *Morris Class Schedule*. The *Class Schedule*, issued each quarter, lists all the courses offered in that quarter and the hours at which each class meets.

Courses and Credits—For graduation, a minimum of 180 credits is required, to include at least the general education requirements and a major (see below). The number of courses varies since courses may be assigned anywhere from 1-5 credits each.

The college year is divided into 3 quarters of approximately 12 weeks each. Except in special cases, full-time students carry 12-18 credits each quarter; an average course load is 15 credits (i.e., usually three to five courses) a quarter.

For ease in description, courses are numbered. Generally, courses numbered 1-49 are introductory to a given subject matter area; courses numbered 50-99 offer more advanced study in the subject matter area. Some courses have prerequisite courses or advanced standing as entrance requirements; others do not have such prerequisites. Students must exercise great care, therefore, in planning their programs, to complete courses in the proper sequence.

Approval of Program—Within the first 6 weeks of the quarter in which the student will complete 84 credits, he is required to submit, for approval, a proposed

program of courses fulfilling the requirements for the B.A. degree. This tentative degree program must be completed with the aid of a faculty adviser in the student's major. The completed program should be turned in to the chairman of the division into which the student's major field falls. When approved by the adviser and the chairman of the division concerned, the program becomes an agreement between the student and the college. Revisions in this program must be approved by the student's adviser and the division chairman concerned.

Advanced Standing—Students entering the University of Minnesota, Morris with advanced standing from some other institution must complete the same graduation requirements expected of other students.

Credits in Residence—All students must earn a minimum of 45 credits in the college and spend at least 2 quarters (30 credits) of the senior year in residence.

General Education Requirements

The student should plan carefully with his adviser a program in general education. Ordinarily, in his first 2 years the student should complete between 60 and 90 of the 120 credits stipulated in the general education requirements. At least 20 of the 120 credits in the GER must be in general education courses numbered 50 or above, *outside the student's major field*.

A. Freshman English (15 credits)

Ordinarily the student will take either Engl A-B-C or Engl 1-2-3 in his freshman year. On the basis of his performance in Engl A or 1, a student may be exempted from further work in Freshman English and allowed to substitute one 5-credit sophomore literature course (either Engl 21, 22, 23, or 40).

B. Foreign Languages (0-15 credits)

Ordinarily the student should complete his foreign language requirement during his first 2 years of residence.

1. Students with no modern language training in high school must take 15 credits in *one* language (i.e., courses numbered 1-2-3 in either French, Spanish, or German).
2. Students with training in one or more languages who wish to pursue a different language at UMM must take 15 credits in that language (i.e., courses numbered 1-2-3 in either French, Spanish, or German).
3. Students with training in one or more languages who wish to continue in one of those languages at UMM must take 0-15 credits normally according to the schedule below. (Placement will be validated by an examination administered prior to registration. A student who performs on this examination above or below the expected level of proficiency will be required to alter the schedule below to fit his needs. In all cases he will be expected to finish Fren 3, Span 3, or Ger 3, or the equivalent):

a. 3 years in high school	exempt
b. 2 years in high school	Fren 3, Ger 3, or Span 3
c. 1 year in high school	Fren 2-3, Ger 2-3, or Span 2-3

C. Social Sciences (20 credits)

Students must fulfill either option 1 or option 2 below. In either case credits must total 20.

Option 1—*a.* History (at least 9 credits)

b. The analysis of human behavior and institutions** (at least 9 credits)

Option 2—*a.* History (at least 5 credits)

b. Sociology, anthropology, psychology (at least 5 credits)

c. Political science, economics and business,†† geography (at least 5 credits)

** Courses in anthropology, economics and business (excluding EB 32, 33, 82, 84, 85), geography, political science, psychology, and sociology.

†† Excluding EB 32, 33, 82, 84, 85.

D. The Natural Sciences (20 credits)

Students must take at least 5 credits each in two of the three areas listed below. At least 10 credits of this requirement must come from courses that include laboratory.

1. Biological sciences ††
2. Physical sciences §§
3. Mathematics

E. Humanities (20 credits)

Students must fulfill option 1 or option 2 below. In either case credits must total 20.

- Option 1—
- a. Literature ¶¶ (at least 9 credits)
 - b. The arts △△ (at least 9 credits)
- Option 2—
- a. Literature (at least 5 credits)
 - b. The arts (at least 5 credits)
 - c. Philosophy *** (at least 5 credits)

F. Thirty additional credits in general education courses outside the student's major field and preferably outside the division of the major. Students pursuing certification as secondary school teachers may apply 10 of the credits from the secondary education sequence toward this requirement.

The Major

Majors presently offered by the University of Minnesota, Morris include art, biology, chemistry, economics and business, elementary education, English, French, history, mathematics, music, philosophy, physical education, physics, political science, psychology, sociology, Spanish, and speech and theatre arts. Specific requirements for these majors are listed in Section III. The pursuit of a given major, however, usually involves more than the fulfillment of minimum requirements. Once he has determined his major, the student should seek the counsel of a faculty member in that discipline so that he can construct a well-organized and balanced program.

Many students enter college with no clear choice of a major in mind. Indeed, the very purpose of a heavy concentration of general education requirements in the first 2 years is to acquaint the student with the various provinces of knowledge from which he may select a major which fits his interests and abilities. Students should take every opportunity to discuss their choice of a major with faculty members, their adviser, and the counseling staff.

Teacher Education

The requirements for teacher education are listed in Section III. Students who intend to seek certification as elementary school teachers must, of course, select elementary education as their major. It is important, however, that they identify themselves to the Division of Education as soon as possible since elementary teacher preparation will affect not only the major but their total program.

Students who intend to seek certification as secondary school teachers must select as a major a field which is taught in secondary schools, very often must select also a minor field which is taught in secondary schools, and must take a sequence of courses in secondary education. Such students should identify themselves to the Division of Education as soon as possible and certainly no later than their fourth quarter in residence if they expect to complete degree and certification requirements within 4 years.

†† Biology.

§§ Chemistry, geology, physical science, physics.

¶¶ English and American literature courses; modern language literature courses, and humanities.

△△ Art, music (excluding Mus 11-27, and not to include more than 6 credits in Mus 42-46).

*** Excluding Phil 2.

A Summary of Graduation Requirements

I. General Education Requirements—120 credits

At least 20 of these credits must be in general education courses numbered 50 or above, *outside the student's major field.*

- A. Freshman English (15 credits)
- B. Foreign language (0-15 credits)
- C. Science and mathematics (20 credits)
- D. Social sciences (20 credits)
- E. Humanities (20 credits)
- F. Thirty additional credits in general education courses outside the student's major field and preferably outside the division of the major. Students pursuing certification as secondary school teachers may apply 10 of the credits from the secondary education sequence toward this requirement.

II. Major

Students must complete a major in one of the academic areas offered at the University of Minnesota, Morris. Specific requirements for the major are contained in Section III under each of the academic disciplines.

III. Minor

A minor is *not* required for graduation. If the student elects to pursue a minor, courses from the general education requirements may be used for this purpose. Requirements for minors are listed in Section III under each of the academic disciplines.

IV. Minimum Required Credits—180

A student can fulfill the course requirements for graduation—the general education requirements and any major offered—within the 180-credit minimum. *No more than 12 credits in Mus 42-46 may be used in the 180-credit minimum for graduation.* His decision to pursue a particular educational program—e.g., a double major, certain majors combined with certain minors, and/or certification as a secondary school teacher—may necessitate his taking credits beyond the 180-credit minimum.

V. Quality of Work

Students must earn a C average in all work completed at the University, a C average in all college work, and a C average in the major.

VI. Residence

A student must earn 45 credits in the college and spend at least 2 quarters (30 credits) of the senior year in residence.

PREPROFESSIONAL PROGRAMS

For students who have decided to enter a professional school either within the University of Minnesota or at some other institution, the course offerings on the Morris Campus make possible preprofessional training in over 25 areas. The required preprofessional liberal arts training in some of these professional specialties is quite flexible, in others it is quite rigid, with little possibility of substituting other courses for those suggested without loss of time. In all cases students should obtain the bulletin of the professional school to which they eventually plan to transfer, study the requirements for admission to that school, and plan to complete as many required courses as possible while enrolled at the University of Minnesota, Morris.

The preprofessional sequences outlined below are those prescribed by the professional schools within the University of Minnesota. If a student proposes to alter one of the following preprofessional programs, he should first consult the bulletin of the professional school and then his faculty adviser, thus avoiding needless loss of time. Credits are shown in parentheses.

Pre-Agricultural Business Administration

This sequence provides 2 years of study fulfilling the basic requirements in agricultural business administration as outlined by the College of Agriculture, Forestry, and Home Economics.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Psy 1-2—General Psychology (9)
 Social science electives (6)

Sophomore Year

Biol 54—General Bacteriology (5)
 Chem 4-5—General Inorganic Chemistry (10)
 EB 1-2—Principles of Economics (8)
 EB 31-32-33—Principles of Accounting (10)
 Spch 5—Fundamentals of Speech (5)
 Humanities electives (3)
 General electives (6)

Pre-Agricultural Education

This sequence provides 1 year of study fulfilling the basic requirements in agricultural education as outlined by the College of Agriculture, Forestry, and Home Economics. Most students in this sequence should plan to transfer to the St. Paul Campus at the end of the first year in order to avoid loss of time.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Chem 4-5—General Inorganic Chemistry (10)
 Hlth 5—Personal and Community Health (2)
 Spch 5—Fundamentals of Speech (5)
 Social science electives (6)

Pre-Agricultural Science

This sequence provides 2 years of study fulfilling the basic requirements in agricultural science as outlined by the College of Agriculture, Forestry, and Home Economics. Modifications of this program may be made for students planning to enter specialized fields of agriculture. These include agricultural biochemistry, agricultural economics, agronomy and plant genetics, animal husbandry, dairy husbandry, horticultural science, mechanized agriculture, plant pathology and physiology, poultry science, and soil science.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Social science electives (3)

Sophomore Year

Biol 1-2—General Biology (10)
 Chem 51—Introductory Physical Chemistry (4)
 Chem 52—Structure of Organic and Inorganic Molecules I (4)
 Chem 71—Organic Mechanisms (5)
 EB 1-2—Principles of Economics (8)
 Spch 5—Fundamentals of Speech (5)
 Humanities electives (3)
 Social science electives (5-6)
 General electives (5-6)

Pre-Dairy Industries

This sequence provides 2 years of study fulfilling the basic requirements in dairy industries as outlined by the College of Agriculture, Forestry, and Home Economics.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Social science electives (3)

Sophomore Year

Biol 1-2—General Biology (10)
 Chem 51—Introductory Physical Chemistry (4)
 Chem 52—Structure of Organic and Inorganic Molecules I (4)
 Chem 71—Organic Mechanisms (5)
 EB 1-2—Principles of Economics (8)
 Spch 5—Fundamentals of Speech (5)
 Humanities electives (3)
 Social science electives (5-6)
 General electives (5-6)

Pre-Fishery and Wildlife Management

This sequence provides 2 years of study fulfilling the basic requirements in fish and wildlife management as outlined by the College of Agriculture, Forestry, and Home Economics.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Pol 5—American Government and Politics (5)
 Spch 5—Fundamentals of Speech (5)

Sophomore Year

Biol 52—Biological Continuity (Genetics) (5)
 Biol 60—Plant Taxonomy (3)
 Biol 71—Comparative Vertebrate Anatomy (5)
 Chem 4-5—General Inorganic Chemistry (10)
 EB 1-2—Principles of Economics (8)
 Humanities electives (3)
 Social science electives (3-6)
 General electives (5-6)

Preforestry

Forest Resources Management and Forest Science

This sequence provides 2 years of study fulfilling the basic requirements in forest resources management as outlined by the College of Agriculture, Forestry, and Home Economics. Preforestry students at Morris may complete the 6-week Summer Session requirement at the Lake Itasca Forestry and Biological Station at the end of their freshman year and return to Morris for sophomore work if they choose. However, this Summer Session requirement must be completed by the junior year.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Spch 5—Fundamentals of Speech (5)

Sophomore Year

Chem 4-5—General Inorganic Chemistry (10)
 EB 1-2—Principles of Economics (8)
 Geol 1A—Earth Features and Their Meaning (with lab) (5)
 Phys 21-22—General Physics (10)
 Psy 1-2—General Psychology I (9)
 Humanities electives (3)

Forest Products Merchandising

This sequence provides 2 years of study fulfilling the basic requirements in building materials, merchandising, and construction management as outlined by the College of Agriculture, Forestry, and Home Economics.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Math 53—Introduction to Statistics (5)

Sophomore Year

Chem 4-5—General Inorganic Chemistry (10)
 EB 1-2—Principles of Economics (8)
 EB 31—Principles of Accounting (4)
 Phys 21-22—General Physics (10)
 Psy 1-2—General Psychology I (9)
 Spch 5—Fundamentals of Speech (5)
 Humanities electives (3)

Forest Products Engineering

This sequence provides 2 years of study fulfilling the basic requirements in forest products engineering as outlined by the College of Agriculture, Forestry, and Home Economics.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Hlth 5—Personal and Community Health (2)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Social science electives (3)

Sophomore Year

Biol 1-2—General Biology (10)
 EB 1-2—Principles of Economics (8)
 Math 51—Calculus III (5)
 Math 53—Introduction to Statistics (5)
 Spch 5—Fundamentals of Speech (5)
 Humanities electives (3)
 Social science electives (5-6)

Pre-Veterinary Medicine

This sequence provides 1 year of study fulfilling the basic requirements in pre-veterinary medicine as outlined by the College of Veterinary Medicine, although most students will find it to their advantage to transfer to the College of Agriculture, Forestry, and Home Economics for their second year of pre-veterinary medicine.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Social science electives (3)
 General electives (3)

Sophomore Year

Biol 1-2—General Biology (10)
 Chem 51—Introductory Physical Chemistry (4)
 Chem 52—Structure of Organic and Inorganic Molecules I (4)
 Chem 61—Analytic Chemistry I (5)
 Chem 71—Organic Mechanisms (5)
 Phys 21-22—General Physics (10)
 Spch 5—Fundamentals of Speech (5)
 Social science electives (5-6)

Pre-Home Economics

This sequence provides 1 year of study fulfilling basic requirements in general home economics, dietetics and food service management, home economics education, or home economics and business as outlined by the College of Agriculture, Forestry, and Home Economics. While generally a transfer to the St. Paul Campus at the end

of the first year is advised, in special cases a student could be accommodated for 2 years on the Morris Campus.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Chem 4-5—General Inorganic Chemistry (10)
 Psy 1-2—General Psychology (9)
 Soc 1—Man in Modern Society (3)
 Spch 5—Fundamentals of Speech (5)
 Physical education electives (3)

Pre-dentistry

This sequence provides 2 years of study fulfilling the basic requirements as outlined by the School of Dentistry.

Freshman Year

Engl 1 or A—Freshman English (5)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Math 3—College Algebra (5)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Phys 21-22—General Physics (10)
 General electives (3)

Sophomore Year

Engl 2-3 or B-C—Freshman English (10)
 Biol 1-2—General Biology (10)
 Chem 51—Introductory Physical Chemistry (4)
 Chem 52—Structure of Organic and Inorganic Molecules I (4)
 Chem 71—Organic Mechanisms (5)
 Math 51—Calculus III (5)
 Phys 23—General Physics (5)
 General electives (3-6)

Pre-Engineering

(except chemical engineering and architecture)

This sequence provides 2 years of study fulfilling the basic requirements as outlined by the Institute of Technology in the following specialties: aeronautical, agricultural, civil, electrical, geological, industrial, and mechanical engineering as well as geophysics, applied mathematics, metallurgy, and engineering and business administration.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Math 51—Calculus III (5)
 Phys 21-22—General Physics (10)
 Nontechnical electives (see IT bulletin) (11-12)

Sophomore Year

Chem 4-5—General Inorganic Chemistry (10)
 EG 25—Engineering Graphics (4)
 Math 52—Calculus IV (5)
 Math 82—Calculus V and Differential Equations (5)
 Phys 23—General Physics (5)
 Phys 50-51—Intermediate General Physics (with lab) (9)
 Mathematics electives (5)
 Nontechnical electives (see IT bulletin) (6-9)

Pre-Chemical Engineering

This sequence provides 1 year of study fulfilling the basic requirements for chemical engineering as outlined by the Institute of Technology.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Math 4—Calculus I (5)
 Math 50—Calculus II (5)
 Math 51—Calculus III (5)
 General electives (9)

Prearchitecture

The University of Minnesota offers three programs in architecture. A student planning to enter one of these programs should consult his adviser and study the curriculum listed in the current *Bulletin of the Institute of Technology*. Depending upon the program elected, a student may remain on the Morris Campus for either 1 or 2 years.

Prejournalism

This sequence provides 1 year of study fulfilling basic requirements in journalism as outlined by the School of Journalism.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Hist 11-12-13—Europe and North America in
 the Modern Era (15)
 Pol 5—American Government and Politics (5)
 General electives (10-15)

Prelaw

The University of Minnesota Law School accepts students after either 3 or 4 years of liberal arts background. Their requirements for admission are either a bachelor of arts degree or the completion of a 3-year liberal arts program involving 135 credits. This latter program must include completion of the general education requirements, completion of a major of the student's choosing (no minor is required), and 15 additional credits in courses numbered 50 or above. The only required course is one in advanced English composition (Engl 29). Students are urged to consult the *Bulletin of the Law School* for any additional information.

Premedicine

The University of Minnesota Medical School encourages all students to complete a 4-year Bachelor's degree program prior to admission to the Medical School. If a premedical student plans to spend 4 years on the Morris Campus numerous combinations of majors and minors are possible to fit student interests as long as the required courses listed below are taken in the process of obtaining the degree. (On the Morris Campus the biology major with a chemistry minor is a frequent choice.) The Medical School also accepts a limited number of students who meet their minimum admission requirements, which are a total of 135 quarter credits to include the required courses listed below. In all cases premedical students must consult the *Bulletin of the Medical School* for suggested courses and special admission procedures.

Required Courses

Engl 1-2-3 or A-B-C—Freshman English (15)	Chem 62—Analytical Chemistry II (4)
Biol 1-2—General Biology (10)	Chem 71—Organic Mechanisms (5)
Chem 4-5—General Inorganic Chemistry (10)	Math 3—College Algebra (5)
Chem 11—Semimicro Qualitative Analysis (4)	Math 4—Calculus I (5)
Chem 51—Introductory Physical Chemistry (4)	Math 50—Calculus II (5)
Chem 52—Structure of Organic and Inorganic Molecules I (4)	Math 51—Calculus III (5)
Chem 61—Analytical Chemistry I (4)	Phys 21-22-23—General Physics (15)
	General electives (27)

Pre-Medical Technology

This sequence provides 1 year of study fulfilling basic requirements in medical technology. Students in this sequence should plan to transfer to the Minneapolis Campus after 1 year to avoid loss of time.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Chem 4-5—General Inorganic Chemistry (10)
 Chem 11—Semimicro Qualitative Analysis (4)
 Math 3—College Algebra (5)
 General electives (3-6)

Prenursing

This sequence provides 1 year of study fulfilling basic requirements for pre-nursing as outlined by the School of Nursing.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Anth 2—Introduction to Anthropology: Cultural Anthropology (5)
 Biol 1-2—General Biology (10)
 Chem 4-5—General Inorganic Chemistry (10)
 Foreign language or humanities electives (8)
 Social science electives (3)

Pre-Occupational Therapy

This sequence provides 1 year of study fulfilling the basic requirements in pre-occupational therapy as outlined by the Medical School. Students are advised to transfer after 1 year to avoid loss of time.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Art 1—Introduction to Art (5)
 Biol 1-2—General Biology (10)
 Hlth 5—Personal and Community Health (2)
 Psy 1-2—General Psychology (9)
 Soc 1—Man in Modern Society (3)
 Physical education elective (1)
 General electives (3-5)

Pre-Physical Therapy

This sequence provides 1 year of study fulfilling basic requirements in physical therapy as outlined by the Medical School. Students are advised to transfer to the Minneapolis Campus after 1 year to avoid loss of time.

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
 Biol 1-2—General Biology (10)
 Chem 4-5—General Inorganic Chemistry (10)
 Hlth 5—Personal and Community Health (2)
 Psy 1-2—General Psychology (9)
 Soc 1—Man in Modern Society (3)

Prepharmacy

The College of Pharmacy will admit students who have had 1 year of collegiate training to a 4-year professional curriculum and they also admit students who have had 2 or more years of collegiate training to a 3-year professional curriculum. In either case, a minimum 5-year curriculum is necessary for the bachelor of science degree in pharmacy.

It is recommended that a student transfer to the College of Pharmacy at the end of 1 year. If a student wishes to remain on the Morris Campus for 2 years, he should consult his adviser prior to his freshman registration.

The following courses are required in a 1-year prepharmacy curriculum, making a student eligible for a 4-year professional curriculum:

Freshman Year

Engl 1-2-3 or A-B-C—Freshman English (15)
Biol 1-2—General Biology (10)
Chem 4-5—General Inorganic Chemistry (10)
Chem 11—Semimicro Qualitative Analysis (4)
General electives (5-10)

Pre-Social Work

Students desiring a professional degree in social work must attend a graduate school of social work with a curriculum leading to the Master's degree. One of the sequences available to the sociology major on the Morris Campus is especially designed to prepare students for graduate training in social work. This sequence is outlined in detail in the sociology curriculum found in Part III of this bulletin.

III. Courses of Instruction

Explanation of Symbols—The following symbol code, applicable to all University of Minnesota bulletins, is used throughout the course descriptions and will not carry any page footnotes:

- † To receive credit, all course numbers listed before dagger must be completed.
- ‡ Means "concurrent registration" in the course which it precedes.
- △ Means "consent of the department or division" involved.

Division of Humanities

ART (Art)

OBJECTIVES

The fundamental purposes of the art curriculum are to develop in the student an understanding and appreciation of the history and practice of the visual arts, to provide opportunity for the development of his creative skills, and to offer a program of study which will enable him to teach art. The courses offered in the art sequence are designed to serve the needs of students interested in general education, students planning to pursue graduate work in the discipline, and students preparing for secondary school teaching. The courses offered in the art history sequence serve the same purposes except that of secondary school teacher preparation.

REQUIREMENTS FOR A MAJOR

Art Sequence

Prerequisites—Art 1, 2, 3; 23-24-25.

Requirements—18 credits in one medium of studio work; 9 credits in one medium of studio work other than the 18-credit sequence; and Art 50-51, 52.

Art History Sequence

Prerequisites—Art 1, 2, 3; 23-24-25.

Requirements—Art 80, 81, 82; 84; 86, 87, 88; Phil 51.

REQUIREMENTS FOR A MINOR

Art Sequence

Prerequisites—Art 1; 23-24-25.

Requirements—Either 18 credits in one medium of studio work or 9 credits each in two different mediums.

Art History Sequence

Prerequisites—Art 1, 2.

Requirements—15 credits in art history.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in art, Ed 60A as well as required professional education courses. Students desiring certification in grades 1-12 must also take Ed 70A.

COURSE DESCRIPTIONS

Art History

- 1f. Principles of Art.** Lecture and discussion approach to basic methods of interpretation and analysis of the work of art. Painting, sculpture, and architecture treated in relation to the cultural and technical factors influencing their form and meaning. (5 cr)
- 2w. Ancient and Medieval Art.** A survey course in the history of art based upon selected monuments from Egyptian, Mesopotamian, Greek, Roman, and medieval art. The visual arts are treated as monuments worthy of consideration in themselves as well as expressions of the essential aspects of the cultures in which they were created. (5 cr; prereq 1; not offered 1965-66)
- 3s. Renaissance to Modern Art.** A general study of the Renaissance, baroque, and modern cultures and art. (5 cr; prereq 1; not offered 1965-66)
- 80f. Late Gothic and Early Renaissance Art.** Painting, sculpture, and architecture in Europe from 1300 to 1500. The lives and works of individual artists are treated in relation to the germinating cultural forces which led to the High Renaissance. (3 cr; prereq 1 or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1966-67)
- 81w. High Renaissance and Mannerist Art.** Painting, sculpture, and architecture of Italy and northern Europe during the 16th century. Special consideration given to the great masters of the period as well as the universal mannerist style of the late 16th century. (3 cr; prereq 1 or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1966-67)
- 82s. Baroque and Rococo Art.** Painting, sculpture, and architecture of the 17th and 18th centuries. Roman Catholic Counter Reformation art in Italy and Flanders. The "Little Dutch Masters" and Rembrandt. The development of the rococo in France, Italy, Germany, and England. (3 cr; prereq 1 or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1966-67)
- 84. Nineteenth-Century Art, 1784-1880.** Painting, sculpture, and architecture in Europe from 1784 to 1880 are discussed in terms of the major styles of neoclassicism, romanticism, realism, and impressionism. Emphasis is placed upon painting as a manifestation of these styles exemplified in the work of David, Delacroix, Courbet, and Monet. (3 cr; prereq art history major; offered when feasible)
- 86f. Twentieth-Century European Art, 1880-1914.** Discussion of postimpressionism, symbolism, art nouveau, the nabis, les fauves, and cubism as artistic movements which established the foundations for 20th-century painting, sculpture, and architecture. (3 cr; prereq 1, or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1965-66)
- 87w. Twentieth-Century European Art, 1914-1939.** Developments in abstract and non-representational art as manifested in cubism, futurism, German expressionism, suprematism, de Stijl, Dada, and the bauhaus. (3 cr; prereq 1, or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1965-66)
- 88s. Twentieth-Century European and American Art.** Surrealism and its influence upon subsequent developments in the visual arts of the 20th century. American painting from 1900 to the present with emphasis placed upon abstract expressionism and "pop art." (3 cr; prereq 1, or 9 cr in history, philosophy, literature, or humanities and Δ; not offered 1965-66)
- 90f, 91w, 92s. Directed Studies.** Primarily for art history majors or minors. Individual research and writings in various aspects of the history of art. Research is supervised by instructor. (1-3 cr per qtr)

Studio

- 23f-24w-25s. Design and Drawing.** A basic sequence for future work in the studio area of the Department of Art. Introduction to the various materials and techniques of drawing through work with still life, landscape, and the human figure. Specific prin-

- ciples of design are presented through work in painting and drawing. (3 cr per qtr; prereq 1 or ¶1 and Δ)
- 50f-51w. Advanced Drawing.** Required of students majoring in studio art. Drawing in all mediums from life and from imagination. Emphasis on mastery of human anatomy. (2 cr per qtr; prereq 25; not offered 1965-66)
- 52s. Introduction to the Graphic Arts.** The study of print techniques is presented by means of lectures, slides, and examples of work. The concept of prints as an expressive medium is introduced by studio work in relief printing of linoleum and woodcut. (3 cr; prereq 25)
- 53f-54w-55s. Intermediate Graphic Arts.** Continued work in relief printing incorporating color and multiple blocks. Intaglio process introduced. Work is done in dry point, etching, and collagraph. (3-4 cr per qtr; prereq 52)
- 56f-57w-58s. Advanced Graphic Arts.** Individual work in various print mediums. Students will explore combined techniques of relief and intaglio printing as well as develop their abilities in the basic intaglio process. (3-4 cr per qtr; prereq 55)
- 60f-61w-62s. Beginning Oil Painting.** Introduction of the student to the technical problems and processes of the medium. Continued emphasis is placed upon the various problems of design, representation, and expression. (3 cr per qtr; prereq 25)
- 63f-64w-65s. Intermediate Oil Painting.** Continued work in interpretation and technique. Handling of form in color through the subjects of still life, figure, and landscape. (3-4 cr per qtr; prereq 62)
- 66f-67w-68s. Advanced Oil Painting.** Individual work in the medium under the supervision of the instructor. (3-4 cr per qtr; prereq 65)
- 70f-71w-72s. Beginning Sculpture.** Introduction of the student to problems of form and composition in three-dimensional mediums and various approaches to sculpture as a means of expression. Fundamental uses of tools and materials of sculpture are presented through work in clay, plaster, wood, and stone. (3-4 cr per qtr; prereq 25; not offered 1966-67)
- 73f-74w-75s. Intermediate Sculpture.** Exploration of various materials of sculpture for their formal and expressive potentialities. Emphasis is placed upon student's freedom to experiment with materials and subjects in order to more fully develop his ability to envision and realize work in three dimensions. (3-4 cr per qtr; prereq 72)
- 76f-77w-78s. Advanced Sculpture.** Individual projects in sculpture under the supervision of instructor. (3-4 cr per qtr; prereq 75)

ENGLISH (Engl)

OBJECTIVES

The purposes of the English curriculum are to introduce the student to the study of the English language and literature and to develop in him the ability to read critically, to write effectively, and to understand and appreciate the major works of English and American literature. The courses offered are designed to serve the needs of students interested in general education, students planning to pursue graduate work in the discipline, and students preparing for secondary school teaching.

REQUIREMENTS FOR A MAJOR

Prerequisites—Engl 21, 22, 23.

Requirements—Engl 51, 52, 54; at least two of the following three courses: 55, 56, 57; 59; and 15 additional credits in courses numbered 50 or above (to include at least four of the following: 61, 62, 63, 64, 66, 67).

REQUIREMENTS FOR A MINOR

Prerequisites—At least one of the following: Engl 21, 22, 23, or 40.

Requirements—15 credits in courses numbered 50 or above.

REQUIREMENTS FOR TEACHER PREPARATION

Major:

Prerequisites—Engl 21, 22, 23.

Requirements—Engl 29, 51, 52; at least two of the following three courses: 55, 56, 57; 58; and 15 additional credits in courses numbered 50 or above (to include at least four of the following: 61, 62, 63, 64, 66, 67), Ed 60C, and required professional education courses.

Minor:

Prerequisites—At least two of the following: Engl 21, 22, 23.

Requirements—Engl 29, 51 or 52; at least two of the following three courses: 55, 56, 57; 58; and 6 additional credits in courses numbered 50 or above, Ed 60C, and required professional education courses.

COURSE DESCRIPTIONS

- 1f-2w-3s. Freshman English.** Composition (9 cr) and literature (6 cr). Develops skill in writing exposition; introduces literary types as the chief means of providing subject matter for writing. Novels, short stories, plays, and poems, both English and American. (5 cr per qtr; prereq assignment to class on basis of tests)
- Af-Bw-Cs. Freshman Literature and Composition.** Composition (6 cr) and literature (9 cr). Similar to Engl 1-2-3 except for greater emphasis upon literature. (5 cr per qtr; prereq assignment to class on basis of tests)
- 21f, 22w, 23s. Introduction to Literature.** Chronological study of English literature with its historical background. Introduction to types of literature and literary ideas. (5 cr per qtr; prereq 3 or C)
- 21f. The Renaissance.** Chaucer, Marlowe, Spenser, Donne, and Bacon.
- 22w. The Restoration and the Eighteenth Century.** Dryden, Pope, Swift, Addison, Steele, Johnson, Boswell, and Fielding.
- 23s. The Romantic Movement and the Victorians.** Wordsworth, Byron, Shelley, Keats, Carlyle, Tennyson, Browning, and Arnold.
- 29f. Advanced Writing and Grammar.** (5 cr; prereq 3 or C)
- 40w. Readings in Twentieth-Century Literature.** A study of modern British and American literature (principally prose fiction) selected, arranged, and discussed to enhance the student's pleasure in and understanding of imaginative literature generally. (5 cr; prereq 3 or C, or Δ; not offered 1965-66)
- 51f. Shakespeare I.** The plays from the first half of Shakespeare's career. (3 cr; prereq 3 or C)
- 52s. Shakespeare II.** The plays from the second half of Shakespeare's career. (3 cr; prereq 3 or C)
- 54w. Milton.** The major and minor poetical works and selected prose works of Milton. (3 cr; prereq 3 or C; not offered 1965-66)
- 55f. American Literature I.** American literature from its beginning to 1860; concentration upon the Puritan period, Cooper, Emerson, Thoreau, Hawthorne, and Melville. (3 cr; prereq 3 or C)
- 56w. American Literature II.** American literature from 1860 to early 1900's; concentration upon Whitman, Twain, Dickinson, Dreiser, Crane, and James. (3 cr; prereq 3 or C)
- 57f. American Literature III.** American literature from 1900's to modern time; concentrations upon Eliot, Fitzgerald, Hemingway, Faulkner, and other significant writers. (3 cr; prereq 3 or C)
- 58s. History of the Language.** An investigation of the development of the English language, historical influences upon it, changes within it, and problems inherent in it. (3 cr; prereq 3 or C)

- 59w. Chaucer.** Readings from his works, especially *The Canterbury Tales*, with attention given to 14th-century English and the cultural milieu of Chaucer's England. (3 cr; prereq 3 or C; not offered 1966-67)
- 61f. Elizabethan Literature.** The principal poetic works (nondramatic) and selected prose of the Tudor period; special emphasis upon Spenser. (3 cr; prereq 3 or C, and 5 addtl cr; not offered 1965-66)
- 62s. Early Seventeenth-Century Literature.** The principal prose and poetry of the Jacobean and Caroline periods. (3 cr; prereq 3 or C, and 5 addtl cr; not offered 1965-66)
- 63f. The Augustan Age.** A survey of the literature from 1660 through the reign of Queen Anne. (3 cr; prereq 3 or C; and 5 addtl cr; not offered 1966-67)
- 64s. The Age of Johnson.** A survey of the literature from 1714 to 1780. (3 cr; prereq 3 or C, and 5 addtl cr; not offered 1966-67)
- 66f. The Romantic Age.** The principal works of Wordsworth, Coleridge, Byron, Shelley, Keats, and others. (3 cr; prereq 3 or C, and 5 addtl cr; not offered 1965-66)
- 67s. The Victorian Age.** A survey of the poetry and selected prose, 1830-1890. (3 cr; prereq 3 or C, and 5 addtl cr; not offered 1965-66)
- 71s. Modern Poetry.** A study of poetry (English and American) in its development from the late 19th century to the present. (3 cr; prereq 3 or C; not offered 1966-67)
- 72. Modern Drama.** A study of the drama (English and American) from the late 19th century to the present. (3 cr; prereq 3 or C; offered when feasible)
- 73w. The Novel I.** A study of the development of the novel from the 18th century through the 19th century. (3 cr; prereq 3 or C; not offered 1965-66)
- 74f. The Novel II.** A study of the novel (American and English) in its development from the late 19th century to the present. (3 cr; prereq 3 or C)
- 90f, 91w, 92s. Directed Studies.** (1-3 cr per qtr)

HUMANITIES (Hum)

OBJECTIVES

The purpose of the course offerings in humanities is to introduce the student to our literary heritage. It is an interdisciplinary area of exploration of the great literature of the world.

Advanced courses in the Humanities Division supplement the introductory courses.

COURSE DESCRIPTIONS

- 1f. Humanities in the Modern World I.** Old Regime, French Revolution and Napoleonic Era, neoclassicism, and romanticism. Authors: Pope, Voltaire, Rousseau, Burke, Goethe, and Tolstoy. (5 cr)
- 2w. Humanities in the Modern World II.** Industrial revolution, liberalism and socialism, and individualism. Authors: Adam Smith, Malthus, Carlyle, Marx, Ibsen, Zola, Flaubert, Tolstoy, and Dostoevsky. (5 cr)
- 4s. Humanities in the Modern World IV.** Impact of psychoanalysis, existentialism, and communism on the modern world. (5 cr)
- 15s. Classics in Translation I.** The Epic Tradition. An intensive study of the Greek and Roman epics. Particular attention will be given to their influence on Western world literature. (5 cr; not offered 1965-66)
- 16s. Classics in Translation II.** Literary criticism of Greece and Rome; Greek drama; Roman drama. The influence of these works on later world literature will be stressed. (5 cr; not offered 1966-67)
- 17f. Medieval and Early Renaissance.** Study of such authors as Dante, Chaucer, Leonardo da Vinci, Machiavelli, Erasmus, and More. (5 cr)

- 18w. **Late Renaissance and Enlightenment.** Study of such authors as Montaigne, Cervantes, Descartes, Hobbes, Racine, and Voltaire. (5 cr)
- 51f, 52w, 54s. **Humanities in the Modern World.** Similar to Hum 1, 2, 4 except that they are confined to juniors and seniors and require additional writing. (5 cr per qtr)

MODERN LANGUAGES

French (Fren)

OBJECTIVES

The purpose of the French curriculum is to introduce the student to the study of the language, literature, and culture of France. The courses are designed for general education as well as to prepare students for graduate study and for teaching.

REQUIREMENTS FOR A MAJOR

Prerequisite—Fren 20.

Requirements—Fren 50, 51, 61, 62, 63, 80, 81; and 9 additional credits in courses numbered 50 or above.

REQUIREMENTS FOR A MINOR

Prerequisite—Fren 20.

Requirements—Fren 50, 51, 61, 62, 63.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in French, Fren 80, Ed 60D, and required professional education courses.

COURSE DESCRIPTIONS

- 1f-2w-3s. **Beginning French.** Designed to give the student control over basic grammar, reading, and writing and to teach him to handle a simple conversation in French. (5 cr per qtr)
- 20f. **Intermediate French.** Practical grammar review with composition and reading of a variety of French authors. (5 cr; prereq 3 or Δ)
- 50s. **Conversation.** Helps the student having some previous training in the language to develop his oral-aural proficiency. (3 cr; prereq 20; not offered 1966-67)
- 51w. **Culture and Civilization.** Introduces the student to the past and present culture and civilization of France. (3 cr; prereq 20)
- 61f, 62w, 63s. **Survey of French Literature.** A chronological study of French literature during the Middle Ages to 1300; from 1300 to 1850; and from 1850 to the present. (3 cr per qtr; prereq 20)
- 71f. **Classicism—The Seventeenth Century.** An investigation of the origin, formation, and content of the classical doctrine in French literature. Special attention is given to Corneille, Molière, and Racine. (3 cr; prereq 20; not offered 1966-67)
- 72w. **The Century of the Philosophes—The Eighteenth Century.** A study of the impact of the Enlightenment on French letters, centering on the events surrounding the "Encyclopédie." (3 cr; prereq 20; not offered 1965-66)
- 73s. **Romanticism—The Nineteenth Century.** A study of the genesis and development of the romantic movement in French literature from the beginning through the appearance of surrealism. (3 cr; prereq 20; not offered 1966-67)
- 74f. **Contemporary French Literature—The Twentieth Century.** Representative works from symbolism through the present day are studied. Special attention is given to the unique nature of the modern novel in France (le nouveau roman), and its impact on French letters. (3 cr; prereq 20; not offered 1965-66)

- 80s. History of the French Language.** A historical survey of the French language from the Vulgar Latin period to the present, including morphology, phonology, and syntax. (3 cr; prereq 20; not offered 1965-66)
- 81w. Explication de textes.** Designed to introduce the student to a critical approach through extensive reading and analysis of literary texts. (3 cr; prereq 20)
- 90f, 91w, 92s. Directed Studies.** Independent readings and research tailored to the needs of the individual student. (1-3 cr per qtr; prereq 20 and Δ)

German (Ger)

OBJECTIVES

The purpose of the German curriculum is to introduce the student to the study of the language, literature, and cultural backgrounds of Germany. The courses are designed for general education as well as to prepare students for further study in German.

REQUIREMENTS FOR A MINOR

Prerequisite—Ger 20.

Requirements—Ger 51, 52, and 9 additional credits in courses numbered 50 or above.

COURSE DESCRIPTIONS

- 1f-2w-3s. Beginning German.** Basic principles of grammar and syntax; reading and writing of simple German prose; correct pronunciation and rudimentary conversation. (5 cr per qtr)
- 20f. Intermediate German Grammar.** A comprehensive treatment of German grammar, syntax, and composition with emphasis on reading for comprehension and on the speaking and writing aspects of the language. (5 cr; prereq 3)
- 51w. Introduction to German Civilization and Culture.** Introduces the student to the past and present culture and civilization of Germany. (3 cr; prereq 20)
- 52s. Reading and Analysis of Literary Texts.** Short stories are read to develop reading fluency and appreciation of literary values in preparation for further reading of German literature. (3 cr; prereq 20)
- 61f-62w-63s. Survey of German Literature.** A chronological study of German literature from its beginnings to the present. (3 cr per qtr; prereq 20; not offered 1965-66)

Spanish (Span)

OBJECTIVES

The purpose of the Spanish curriculum is to introduce the student to the study of the language, literature, and cultural backgrounds of Spanish-speaking countries. The courses are designed for general education as well as to prepare students for graduate study and secondary school teaching.

REQUIREMENTS FOR A MAJOR

Prerequisite—Span 20.

Requirements—Span 50, 51, 61, 62, 63, 80, 82; and 9 additional credits in courses numbered 50 or above.

REQUIREMENTS FOR A MINOR

Prerequisite—Span 20.

Requirements—Span 50, 51; and 9 additional credits in courses numbered 50 or above.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in Spanish, Span 82, Ed 60D, and required professional education courses.

COURSE DESCRIPTIONS

- 1f-2w-3s. Beginning Spanish.** Basic principles of grammar and syntax; reading of simple Spanish prose; correct pronunciation and rudimentary conversation. (5 cr per qtr)
- 20f. Intermediate Spanish Grammar.** A thorough and more detailed review of Spanish grammar with an emphasis on the reading, writing, and speaking of idiomatic Spanish. (5 cr; prereq 3)
- 50s. Conversation.** Designed to give the student a high proficiency in the oral use of the language through topic discussions, oral reports, and situation dialogue. (3 cr; prereq 20; not offered 1966-67)
- 51w. Culture and Civilization of Spain.** A study of the past and present culture and civilization of Spain. (3 cr; prereq 20; not offered 1965-66)
- 52s. Culture and Civilization of Spanish America.** A study of the past and present culture and civilization of Spanish America. (3 cr; prereq 20; not offered 1965-66)
- 61f. Survey of the Literature of Spain.** A view of the literary genres of neoclassicism and romanticism in Spain with selected readings of representative authors of these periods. (3 cr; prereq 20)
- 62w. Survey of the Literature of Spain.** The study of realism and naturalism in the Spanish novel of the 19th century and the generation of 1898 to the present. (3 cr; prereq 20)
- 63s. Survey of the Literature of Spain.** A study of the literary movements of Spain from the Middle Ages to the Renaissance and Golden Age. (3 cr; prereq 20)
- 71f. The Middle Ages.** An intensive study of *El Cid*, narrative poetry, prose fiction, *El libro de buen amor*, the ballad and other writings of the period. (3 cr; prereq 20; not offered 1966-67)
- 72w. The Golden Age Drama.** The major dramatists of the period will be considered: Lope de Vega, Tirso de Molina, Juan Ruiz de Alarcón, and Calderón de la Barca. (3 cr; prereq 20; not offered 1966-67)
- 73s. The Generation of 1898 and After.** The principal works of Angel Ganivet, Miguel de Unamuno, Ortega y Gasset, Valle-Inclán, Azorín, Jacinto Benavente, and other authors of present-day Spain. (3 cr; prereq 20; not offered 1966-67)
- 80s. History of the Spanish Language.** A historical approach to the evolution of the Spanish language, its grammar, syntax, and vocabulary from Vulgar Latin to the present-day Spanish of Spain and the New World. (3 cr; prereq 20; not offered 1965-66)
- 81w. Pronunciation and Diction.** A study of the phonetic composition of Spanish to enable students to master oral aspects of the language. (3 cr; prereq 20; not offered 1965-66)
- 82f. Advanced Grammar and Composition.** Designed to give the student a complete knowledge and mastery of the structural patterns of the language as well as a high degree of skill in the reading and writing of difficult material. (3 cr; prereq 20; not offered 1965-66)
- 90f, 91w, 92s. Directed Studies.** (1-3 cr per qtr; prereq 20)

MUSIC (Mus)

OBJECTIVES

The purpose of the music curriculum is to combine the cultural goals of a liberal arts college with the artistic and professional requirements which are prerequisite to a successful career in music. Theoretical and practical courses are com-

bined with a general education in such a way as to provide the music major the option of choosing a required program for secondary teaching or a program in pure music. Certain general courses are open to all University students and participation in the several musical organizations is strongly encouraged. Placement in the musical organizations is based upon individual auditions.

REQUIREMENTS FOR A MAJOR

Requirements—Mus 1-2-3, 4-5-6, 30, 31, 32, 51-52-53, 76-77; 11 credits from Mus 42-46 (every major must participate in at least one music organization during each quarter while completing the degree requirements except during the quarter in which he student teaches); and applied music requirements in either vocal or instrumental music as listed below:

Vocal—9 credits in Mus 12; 3 credits in Mus 11; 3 credits in Mus 59; a junior half-recital and senior full-recital (a special project may be substituted for the recital requirements in exceptional cases with the approval of the music faculty). It is recommended that the Mus 11 requirement be satisfied in a 3-quarter sequence of 1 credit per quarter. A student must register three times in Mus 59, preferably in successive years beginning with the sophomore year, earning 1 credit for each of the three registrations.

Instrumental—9 credits in the major instrument (Mus 11-27); 3 credits in Mus 11, for non-piano majors as recommended above; 1 credit in Mus 59; Mus 65; a junior half-recital and senior full-recital (a special project may be substituted for the recital requirements in exceptional cases with the approval of the music faculty).

REQUIREMENTS FOR A MINOR

Requirements—At least 25 credits, to include Mus 1-2-3; Mus 10 or at least 2 quarters of Mus 51-52-53; and either 1 quarter of Mus 59 (1 credit) or Mus 65. It is recommended that the student also take 1 quarter of Mus 11 and 12.

REQUIREMENTS FOR TEACHER PREPARATION

Music Major—Major in music; Ed 60G and 70D; and required professional education courses.

Music Minor—Minor in music; either Ed 60G or 70D; and required professional education courses.

COURSE DESCRIPTIONS

- 1f-2w-3s. Basic Music Theory.** Review of fundamentals, study of contrapuntal and harmonic techniques of the 18th century, detailed analysis of Bach chorale harmonizations, part writing in the chorale style, intensive drill in sight singing, dictation, and keyboard. (3 cr per qtr)
- 4f-5w-6s. Advanced Music Theory.** A continuation of basic music theory with more advanced writing techniques and emphasis on analysis. (3 cr per qtr; prereq 3)
- 10s. Introduction to Music.** A general survey to develop an intelligent understanding and appreciation of music. The course is designed for students not majoring in music. (5 cr)
- 11-27f,w,s. Applied Music.**
- 11—Piano (1 cr)
 - 12A—Voice, Individual (1 cr)
 - 12B—Voice, Class (1-2 cr; for non-vocal majors only; prereq Δ)
 - 13—Violin (1 cr)
 - 14—Viola (1 cr)
 - 15—Cello (1 cr)
 - 16—Double Bass (1 cr)

- 17—Flute (1 cr)
 18—Oboe (1 cr)
 19—Clarinet (1 cr)
 20—Saxophone (1 cr)
 21—Bassoon (1 cr)
 22—Trumpet (1 cr)
 23—French Horn (1 cr)
 24—Trombone (1 cr)
 25—Tuba (1 cr)
 26—Percussion (1 cr)
 27—Organ (1 cr)
- 30f. **Instrumental Techniques—Woodwind.** A practical study designed to develop elementary playing skills and a basic teaching knowledge of the woodwind instruments. (2 cr)
- 31w. **Instrumental Techniques—Brass and Percussion.** A practical study designed to develop elementary playing skills and a basic teaching knowledge of the brass and percussion instruments. (2 cr)
- 32s. **Instrumental Techniques—Strings.** A practical study designed to develop elementary playing skills and a basic teaching knowledge of the stringed instruments. (2 cr)
- 42f,w,s. **Band.** Rehearsals and appearances cover standard band literature. Several appearances made each quarter. (1 cr; prereq Δ)
- 43f,w,s. **Mixed Chorus.** Preparation of choral works for at least one public appearance each quarter and other special events. (1 cr; prereq Δ)
- 44f,w,s. **Men's Chorus.** Preparation of choral works of distinctive nature for at least one public appearance each quarter and other special events. (1 cr; prereq Δ)
- 45f,w,s. **Orchestra.** Wide range of orchestral literature performed. Several public appearances annually. (1 cr; prereq Δ)
- 46f,w,s. **Chamber Singers.** A small mixed vocal ensemble of select voices. Sacred and secular music from the 16th century to contemporary composers prepared for concert presentation. (1 cr; prereq Δ)
- 51-52-53. **History of Music.** Musical styles and forms from all important periods with emphasis on their identification through listening practice. (3 cr per qtr; prereq 3 or Δ)
- 55f. **Counterpoint.** Strict 16th-century and Bach-style counterpoint in two and three parts; writing of canons, motets, inventions, and fugues. (4 cr; prereq 6)
- 56f-57w-58s. **Music Literature.** Familiarity with many of the great works in music is developed through a limited study of their form, style, and music content and through a repeated exposure to the works themselves. (1 cr pr qtr; prereq 10 or 2 qtrs of music history)
- 59f. **Choral Literature and Conducting.** Intimate contact with vocal materials and actual practice in conducting. (1 cr, total 3 cr)
- 65s. **Orchestration and Conducting.** Theoretical study of orchestral and band instruments and special problems of scoring and arranging for large ensembles, combined with a study of the fundamentals and special problems of instrumental conducting. (3 cr)
- 67f,w,s. **Small Instrumental Ensembles.** Performance of chamber music of great composers; sonatas, trios, quartets, quintets, etc. (1 cr; prereq Δ)
- 70f. **Contemporary Harmonic Practice.** A practical study of 20th-century devices with an emphasis on analytical study. (3 cr; prereq 6)
- 76f-77s. **Form and Analysis.** Key, harmonic, and form analyses of important contrapuntal and homophonic music. (2 cr per qtr; prereq 6)
- 82f,w,s. **Composition.** Original work guided on an individual basis. (Cr ar)

- 87s. Advanced Contrapuntal Techniques.** Eighteenth-century devices such as invertible counterpoint and fugue are studied. Emphasis on practical analysis of the works of Bach. (4 cr; prereq 55)

PHILOSOPHY (Phil)

OBJECTIVES

The purpose of the curriculum in philosophy is to provide the student with an understanding of the basic areas of philosophic thought, namely, the history of philosophy, logic, ethics, metaphysics, and epistemology.

The courses offered are designed to serve the needs of those students who wish to approach a liberal education through the disciplines of philosophy as well as those students who are professionally interested in philosophy and who plan to do graduate work in the field. Students with a professional interest in philosophy are urged to give early attention to courses in the history of philosophy and logic. Further, students majoring in philosophy are encouraged to take as many Upper Division courses in areas other than philosophy as their schedules will allow.

REQUIREMENTS FOR A MAJOR

Prerequisites—Phil 1, 2, 3.

Requirements—Phil 60, 61, 62, and an additional 18 credits in courses numbered 50 or above.

REQUIREMENTS FOR A MINOR

Prerequisites—Phil 2; and either 1 or 3.

Requirements—Phil 60, 61, 62, and an additional 3 credits of philosophy in courses numbered 50 or above.

COURSE DESCRIPTIONS

- 1f. Problems of Philosophy.** The nature and scope of philosophy. Consideration of the central problems, both historical and contemporary, in the major branches of philosophy. (5 cr; prereq soph or Δ)
- 2f.w. Logic.** An introduction to Aristotelian deduction, classical and elementary symbolic logic, and induction. (5 cr; prereq soph or Δ)
- 3s. Ethics.** An introduction to the major kinds of ethical theory. Methodology in ethics. The difference between ethical and other kinds of problems. The relationship of ethics to other areas of inquiry. (5 cr; prereq soph or Δ)
- 51s. Aesthetics.** Principal systems of aesthetics. The basic concepts and problems in aesthetics. The problem of response to art and the interpretation of the creative activity of the artist. The question of the contemplation and criticism of the work of art. (3 cr; prereq jr or Δ)
- 53w. Philosophy of Science.** A study of problems common to the natural and social sciences, such as the nature of scientific laws, explanations, theories, probabilities, and verification. The nature, scope, and limitations of scientific methods and explanations. (3 cr; prereq jr or Δ; not offered 1966-67)
- 60f. History of Ancient Philosophy.** Survey of the main developments in Western philosophic thought from Thales to Plotinus. Special attention is given to the pre-Socratics, Plato, and Aristotle. (5 cr; prereq jr or Δ)
- 61w. History of Philosophy from Augustine to Hume.** Medieval philosophy. The philosophy of the Italian and French Renaissance. Particular attention is given to the systems of continental rationalism (Descartes, Spinoza, and Leibniz) and English empirical philosophy (Locke, Berkeley, and Hume). (5 cr; prereq jr or Δ)
- 62s. History of Philosophy from Kant to the Contemporary Period.** Particular attention is given to Kant, Fichte, Hegel, Schopenhauer, Nietzsche, and J. S. Mill. Brief attention

is given to modifications which the main lines of development in the 19th century underwent in the 20th century. (5 cr; prereq jr or Δ)

- 70f. **Advanced Ethical Theory.** A study of the structure of theories of value and theories of obligation. (3 cr; prereq 3 and an additional 5 cr in philosophy; not offered 1966-67)
- 74s. **Symbolic Logic.** The classical propositional calculus. Axiomatic development of the first order predicate calculus. Consistency and completeness of the predicate calculus. Axiom sets. Theory of types. Gödel's proof. (3 cr; prereq 2; not offered 1966-67)
- 77f. **Metaphysics.** The nature of metaphysics. Selected problems in metaphysics, such as causality, universals, substance, space, and time. Recent developments in metaphysics. (3 cr; prereq 10 cr in philosophy; not offered 1965-66)
- 78s. **Theory of Knowledge.** A study of major epistemological problems. (3 cr; prereq 10 cr in philosophy; not offered 1965-66)
- 80w. **Contemporary Philosophy.** The principal developments in philosophy since 1900. (3 cr; prereq jr or Δ)
- 83w. **Philosophical Studies.** Detailed investigation of the works of a major philosopher, or an intensive investigation of a particular philosophical problem or area. Topic to be announced in advance. (3 cr; prereq 10 cr in philosophy; not offered 1965-66)
- 90f, 91w, 92s. **Directed Studies.** (1-3 cr per qtr)

SPEECH AND THEATRE ARTS (Spch)

OBJECTIVES

The purpose of the speech and theatre arts curriculum is to implement the objectives of a liberal arts education by providing sound academic training in public address and theatre arts for the terminal liberal arts student, for those wishing to continue their education in these fields, or for those preparing to teach within these disciplines in secondary schools.

Classroom work in theatre is correlated with the University's productions which provide opportunities for student participation in all areas of the theatre arts.

To meet the varied needs of students, the speech and theatre arts curriculum allows the student to choose any one of three sequences (public address, theatre arts, or general speech) in pursuing a major in speech and either of two sequences (public address or theatre arts) in pursuing a minor.

The public address sequence introduces the student to theory, practice, analysis, and evaluation of oral communication and is recommended for the terminal liberal arts major and for the student preparing for graduate work in public address.

The theatre arts sequence guides the student toward an appreciation for and an ability to produce theatre of worth and is recommended for the terminal liberal arts major and for the student preparing for graduate or professional study in theatre.

The general speech sequence provides a combination of public address and theatre arts for those students interested in both areas. This sequence is recommended as preparation for graduate study in speech or theatre arts or secondary school teaching.

REQUIREMENTS FOR A MAJOR

Students may elect to follow one of three sequences:

A. Theatre Arts

Prerequisites—Spch 5, 31, 31L, 32, 34.

Requirements—Spch 61, 62, 63 or 64, 65, 66, 67, 68, 69, 82, and 6 credits in dramatic literature.

B. Public Address

Prerequisites—Spch 5, Phil 2, Psy 1.

Requirements—Spch 51, 53, 54, 55, 56, 57, 58, 59, Engl 58.

C. General Speech

Prerequisites—Spch 5, 31, 31L, 32, 34.

Requirements—Spch 51, 53, 55, 56, 57 or 58, 59, 61, 63, 65, 81 and 3 credits in dramatic literature.

REQUIREMENTS FOR A MINOR

Prerequisites—Spch 5, 31.

Requirements—15 credits in courses numbered 50 or above.

REQUIREMENTS FOR TEACHER PREPARATION**Major**

Prerequisites—A major following A, B, or C sequence, Ed 60K, as well as required professional education courses.

Minor

A minor in speech and theatre arts following one of two sequences listed below, Ed 60K, as well as required professional education courses.

A. Theatre Arts Sequence—Spch 5, 31, 32, and 15 credits in courses numbered 50 or above to include Spch 61, 63, 65, and 81.

B. Public Address Sequence—Spch 5, 31, 32, and 15 credits in courses numbered 50 or above, to include Spch 53, 56, and 81.

(Note: Students electing either sequence may take Engl 58 as an elective to fulfill the requirements.)

COURSE DESCRIPTIONS

- 5f,w,s. Fundamentals of Speech.** An introductory theory-performance course dealing with the basic principles of oral discourse as found in a variety of speech situations: extemporaneous speaking, oral reading, and discussion. (5 cr)
- 9f,w. Debate.** Open to all students interested in debating. (1 cr per qtr [maximum 3 cr]; prereq C avg)
- 31f. Introduction to the Theatre Arts.** Introduction to the history and theories of plays, playwrights, scenic artists, and architects. (3 cr)
- 31Lf,w,s. Laboratory Section: Introduction to the Theatre.** An introduction to theatre crafts through a theatre practicum and a written analysis of that experience as it relates to the art form. (1 cr; prereq 31 or ¶31; may not be repeated)
- 32w. Fundamentals of Acting.** An intensive course in the creative approach to characterization with an emphasis on the development and use of the imagination, sensitivity, and insight needed for the creation of credible patterns of expression. (3 cr; prereq 31)
- 34w. Stagecraft.** A study of the basic forms of scenery and their function in the theatre. Theory and practice in construction, painting, rigging, and shifting stage scenery as elements of theatre arts. (3 cr; prereq 31L)
- 35w. Stage Make-up.** Theory and practice in the use of make-up as an aid to the understanding of characters from dramatic literature; theory and effect of light and color relative to stage make-up as an affective element in theatre art. (2 cr; prereq 31L; not offered 1965-66)
- 51w. Public Speaking.** The study of public speaking relative to the interacting relationships of purpose, source material, medium, audience, and occasion; directed practice

- in the preparation and delivery of extemporaneous speeches which exhibit an understanding of these relationships. (3 cr; prereq 5)
- 53f. **Argumentation and Persuasion I.** Formal argumentation involving the responsibility of the advocate; presumption; burden of proof; the argumentative proposition; issues and partitions; nature, kind, and tests of evidence; and lines of argument. (3 cr; prereq 5; not offered 1966-67)
- 54s. **Argumentation and Persuasion II.** Modern theories of persuasion, nonlogical elements of persuasion, ethical proof. (3 cr; prereq 5; not offered 1966-67)
- 55s. **Speech Writing and Platform Speaking.** Essentials of speech writing, evaluation of speech manuscripts, preparation and presentation of speeches from manuscripts. (3 cr; prereq 5; not offered 1966-67)
- 56f. **Discussion.** Study of dialectics in which analysis, evidence, organization, participation, and leadership are considered. (3 cr; prereq 5; not offered 1965-66)
- 57f. **Speech Criticism I.** A consideration of the works of Greek and Roman critics and theorists—principally Plato, Aristotle, Cicero, and Quintilian. (3 cr; prereq 5; not offered 1965-66)
- 58s. **Speech Criticism II.** The development of critical attitudes in public address through an examination of influential British and American works in the area of rhetorical theory. (3 cr; prereq 5; not offered 1965-66)
- 59s. **The Language of Discourse.** A study of language in action—the function of language, determination of meaning, value orientation, report language, and the language of propaganda. (3 cr; prereq 5; not offered 1965-66)
- 61f. **Intermediate Acting.** Concepts of analyzing and motivating the character within the boundaries of the script. The application of the creative theory to a variety of roles. (3 cr; open to sophomores in the major; prereq 32; not offered 1966-67)
- 62s. **Advanced Acting.** History and development of the actor's art. Theories of acting from representative periods in the development of the theatre: Greek and Roman, Elizabethan, neoclassic, modern. (3 cr; prereq 61; not offered 1966-67)
- 63f. **Design I.** The design of scenery as an expressive environment for the stage play. A study of various styles of historical and contemporary stage production and theatre architecture through a consideration of the writings and designs of such artists and theorists as Appia, Craig, Meyerhold, Jones, and Simonson. Problems in the coordination of design and its technical execution in the interpretation of dramatic literature for proscenium, thrust, and area staging. (3 cr; prereq 34)
- 64s. **Design II.** History and development of lighting and costuming for the stage. Lighting and costume design as creative processes. Theories and concepts of lighting and costuming as visual arts and their function in the theatre. (3 cr; prereq 34)
- 65f. **Stage Direction I.** Fundamental theories of stage direction; study and practice in stage direction and play selection: an introduction to the work of the director as an artist, teacher, and executive in educational theatre. (3 cr; prereq 31, 31L, 32, 34; not offered 1966-67)
- 66s. **Stage Direction II.** Modern theories of stage direction: problems of stage direction in the theatre of today for proscenium, thrust, and arena productions. (3 cr; prereq 31, 31L, 32, 34; not offered 1966-67)
- 67f. **Theatre History I.** Development of the dramatic arts from the beginnings to the Renaissance; plays, playwrights, and physical theatre. (3 cr; not offered 1965-66)
- 68s. **Theatre History II.** Development of the dramatic arts from the Renaissance to the 19th century. (3 cr; not offered 1965-66)
- 69s. **The Modern Theatre.** Development of the dramatic arts from the 19th century to the present: plays, playwrights, and physical theatre from Ibsen to Ionesco. (3 cr; not offered 1966-67)
- 81w. **Oral Interpretation I.** The oral tradition of literature; history and development of oral interpretation; oral interpretation of prose. (3 cr; prereq 5)

- 82s. **Oral Interpretation II.** The continuation of the oral tradition in poetry and drama; the oral interpretation of poetry and drama. (3 cr; prereq 81 or Δ ; not offered 1965-66)

Division of Social Sciences

ANTHROPOLOGY (Anth)

OBJECTIVES

The purpose of the course offerings in anthropology is to provide an understanding of man and his society with reference to both biological and cultural aspects. The student will be confronted with the widest historical and comparative frameworks with which to view the variety of human cultures. A survey of the concepts, techniques, and substantive knowledge of the various branches of this field will be given; *e.g.*, physical anthropology, ethnology, social anthropology, archaeology, and linguistics.

COURSE DESCRIPTIONS

- 1f. **Introduction to Anthropology.** Prehistoric man and culture. Origins of man and development of modern races. Growth and differentiation of the cultures of man from the Stone Age to the dawn of civilization in the Bronze and Iron Ages. (5 cr)
- 2w. **Introduction to Anthropology: Cultural Anthropology.** The varieties and range of human behavior as revealed through the study of "primitive" societies in all parts of the world. A scientific analysis is made of the ways in which "primitive man" organized his life. The course is directed toward a deeper and broader understanding of human capacities and purposes. (5 cr)

ECONOMICS AND BUSINESS (EB)

OBJECTIVES

The purpose of the curriculum in economics and business is to provide the liberal arts student with a basic understanding of the nature and functioning of the economic system, together with some introduction into selected business areas. The student will be prepared for a career in government, in business, or for further study in graduate school.

REQUIREMENTS FOR A MAJOR

Prerequisites—EB 1, 2, 31, Math 53.

Requirements—EB 51, 52, 55, 56, 71; plus 9 additional credits in economics and business in courses numbered 50 and above.

REQUIREMENTS FOR A MINOR

Prerequisites—EB 1, 2.

Requirements—EB 52, 55; plus 9 additional credits in economics and business courses numbered 50 and above.

COURSE DESCRIPTIONS

- 1w. **Principles of Economics I.** An introduction to basic economic concepts and problems with emphasis on the mixed capitalistic enterprise system, business and labor organizations, national income, modern income determination, and fiscal and monetary policies. (4 cr; prereq soph)

- 2s. **Principles of Economics II.** An introduction to economic analysis with emphasis on supply and demand, theory of the firm, pricing factors of production, international trade, and current economic problems. (4 cr; prereq 1)
- 10f. **Introduction to Economics.** A study of the economic system with emphasis on problems and policies in economics; economic institutions, markets and prices, income distribution; business fluctuations and economic growth; international economic relations and comparative economic systems. (5 cr; restricted to students who do not take 1 or 2)
- 31f. **Fundamentals of Accounting.** An introductory course presenting the basic accounting cycle, a critical look at accounting values, and the use of accounting data. Fundamentals of cost accounting, budgeting, and accounting systems as tools of business control will be included. The relationship of accounting with law and economics will also be stressed. (4 cr)
- 32w-33s. **Fundamentals of Accounting.** A study of the basic elements of accounting, adjustments, closing entries, special journals; accounting for partnerships and corporations; preparation of special reports; accounting for inventory and depreciation; and interpretation of financial statements. (3 cr per qtr; prereq 31)
- 51w. **Money and Banking.** A study of our monetary system; analysis of commercial bank operation; the economic role of financial institutions; powers of the Federal Reserve System and the Treasury; and monetary and fiscal policies for control of the business cycle. (3 cr; prereq 2)
- 52f. **Intermediate Economic Theory.** An analytical approach to decision-making by individual economic units under conditions of competition, monopoly, and monopolistic competition; the resulting allocation of resources among competing uses and the division of total output among industries, products, and firms; the role of government in influencing and regulating business decisions. (5 cr; prereq 2)
- 53s. **Labor Economics.** A survey of trade unionism—history, philosophy and objectives, government, and labor legislation; collective bargaining—procedures and tactics, issues involved, and adjustment of disputes; economics of the labor market—employment and unemployment, wage determination, and standards of living. (5 cr; prereq 2; not offered 1965-66)
- 55w. **Income and Employment Theory.** Determinants of national income, employment and price level; aggregate consumption, investments; flow of funds analysis; introduction to macro-economic dynamic fundamentals of growth economics, inflation, business cycles. (5 cr; prereq 2)
- 56s. **Public Finance.** An analysis of the economics of public expenditures and taxation, including the administration of public funds, intergovernmental fiscal relations, public borrowing, debt management and fiscal policy, distribution of tax burden, incidents of taxes, and the tax systems and the major taxes. (3 cr; prereq 2)
- 57w. **Business Cycles.** An examination of the leading business cycle theories and statistical data of business fluctuations; relationship of cycles to economic growth; methods of forecasting proposals for economic stabilization. (3 cr; prereq 2; not offered 1966-67)
- 58w. **Introduction to Mathematical Analysis in Economics.** Designed to acquaint students with rudimentary mathematical techniques and their application to economic analysis. (3 cr; prereq 52, 55, and Math 51; not offered 1965-66)
- 71f. **Economic Thought.** The origin and development of economic thought from the ancient Greeks to the present, concentrating primarily on the contributions of major economists associated with the classical, Austrian, and neoclassical schools of thought. (3 cr; prereq 2 or 10 or Δ)
- 72s. **International Economics.** A study of the economic basis for gain in international trade; historical development of theory and policy; population and capital movements; the exchange-rate policies; tariffs; international balance of payments; foreign aid and investment policies; and the Common Market. (5 cr; prereq 51 or Δ)
- 73f. **Comparative Economic Systems.** A comparison of the functioning of the major economic systems in the world and theories of their systems; the market economy, the command economy, and liberal socialism. (3 cr; prereq 2 or 10 or Δ)

- 74s. **Economic Development of the Western World.** Evolution of economic institutions of the Western world from the late Middle Ages to the 20th century; the rise of nascent capitalism, financial capitalism, commercial capitalism, industrial capitalism, and urbanism. (3 cr; prereq 2 or 10 or Δ ; not offered 1966-67)
- 80f. **Risk Management.** A study of risk, uncertainty facing the future, and the various means of handling risk and eliminating uncertainty with emphasis on insurance in business applications. (3 cr; not offered 1966-67)
- 81w. **Business Law I (Contracts and Sales).** A study of law as it relates to contracts and sales using text and case studies. (3 cr)
- 82s. **Business Law II (Business Organizations).** A study of commercial law as it relates to corporations, partnerships, proprietorships, and other specialized organizations using text and case studies. (3 cr; prereq 81 or Δ)
- 83f. **Investments.** A study of various investment opportunities open to the public with emphasis on stocks and bonds. Evaluation of investment safety, return expectations, and available investment service will be emphasized. (3 cr; not offered 1965-66)
- 84w. **Business Finance.** A study of the financial instruments, stocks, bonds, notes, available for use by corporations and other business organizations in securing capital; and the regulation of corporations for the public good by the Securities Exchange Commission and state agencies. Includes a review of corporate financial policy. (3 cr; prereq 31 or Δ)
- 85s. **Finance Management.** Case studies demonstrating alternatives in using various business finance tools and the study of business in financial difficulties. (3 cr; prereq 84)
- 90f, 91w, 92s. **Directed Study.** Provides an opportunity for the capable student to do research and carry on individual learning. (0-3 cr; prereq Δ)

GEOGRAPHY (Geog)

OBJECTIVES

The purpose of the course offerings in geography is to provide a basic understanding of the world distribution of geographic phenomena and to introduce the student to geographic tools and methods. The ability to intelligently use geographic tools, particularly maps, is essential for responsible citizenship and in many professions, notably teaching.

COURSE DESCRIPTIONS

- 1f. **Geography of Natural Resources.** Physical characteristics and geographic distribution of the world's natural resources; major regional differences in the problems of physical resource development. (5 cr)
- 41s. **Geography of Primary Production.** Introductory economic geography with special emphasis on commodities of commercial significance. Particular attention is given to the world patterns of raw material occurrence and production, as well as to the associated centers of industrial fabrication. (5 cr)

HISTORY (Hist)

OBJECTIVES

The purpose of the curriculum in history is to provide the student with accumulated knowledge of the various transitions of man and his institutions during the past. Having acquired a "factual" foundation, the student is then expected to critically evaluate historical interpretations of previous and contemporary scholars. An understanding of history is indispensable for the individual as a member of society to comprehend his role in the contemporary world.

REQUIREMENTS FOR A MAJOR

Prerequisites—Hist 11, 12, 13.

Requirements—33 credits including Hist 50, 87, 88, 89.

REQUIREMENTS FOR A MINOR

Prerequisites—Hist 11, 12, 13.

Requirements—15 credits.

REQUIREMENTS FOR TEACHER PREPARATION

Major

Prerequisites—Hist 11, 12, 13.

Requirements—Hist 50, 61, 62, 70, 71, 72, 87, 88, 89; Ed 60E; and required professional education courses.

Minor

Prerequisites—Hist 11, 12, 13.

Requirements—Hist 62, 70, 71, 72; Ed 60E; and required professional education courses.

Students planning to teach history in the secondary schools may find it especially useful to gain a wide acquaintance with the other social science disciplines.

COURSE DESCRIPTIONS

- 11f. **Europe and North America in the Modern Era I.** An integrated approach to the history of western European and North American civilization. The Renaissance to 1715. Includes medieval background, the Renaissance, the Reformation, exploration and discovery, intellectual ferment, trends toward both absolutistic and representative forms of government, and the origins and initial growth of the American colonies. (5 cr)
- 12w. **Europe and North America in the Modern Era II.** An integrated approach to the history of western European and North American civilization. 1715 to 1870. Includes enlightened despotism, the French Revolution, the Napoleonic period, the independence of the American colonies, the American Constitution, Jacksonian Democracy, manifest destiny, the revolutions of 1848, the causes of the American Civil War, nationalism, the reconstruction of the American South, the industrial revolution, and intellectual change. (5 cr)
- 13s. **Europe and North America in the Modern Era III.** An integrated approach to the history of western European and North American civilization. 1870 to the present. Includes imperialism, the background of World War I, American populism and progressivism, economic and social change, the Russian Revolution, the growth of democratic institutions, "normalcy," the great depression, the American new deal, fascism, the World War II, and the cold war and its implications. (5 cr)
- 50f. **Ancient and Medieval History.** History of ancient Greece and Rome, and western Europe during the Middle Ages. Emphasis is on institutional and intellectual developments of the Hellenic period and of the medieval era. (5 cr)
- 60f. **History of Modern Europe I.** The Renaissance to the eve of the French Revolution. Religious, political, and intellectual developments are emphasized, with particular attention directed to the Reformation of the 16th century and the Enlightenment of the 18th century. (5 cr; prereq 11 and 12, or Δ)
- 61w. **History of Modern Europe II.** 1788 to 1890. Emphasis on the French Revolution and on political and institutional developments of western continental Europe during the 19th century. (5 cr; prereq 12 or Δ)

- 62s. **History of Modern Europe III.** 1890 to the present. Emphasis is placed on political, economic, and diplomatic history of western continental Europe. (5 cr; prereq 13 or Δ)
- 70f. **American History.** Colonial and Early National periods to 1815. Emphasis is placed upon political, constitutional, and intellectual developments; the significance of religion in the colonies, particularly New England; the influence of slavery and the plantation system in the South; the American Revolution; the Constitution and the Supreme Court; the political philosophies of Hamilton, Adams, and Jefferson; the rise of democracy and the two-party system. (5 cr; prereq 11 and 12, or Δ)
- 71w. **Nineteenth-Century America.** Emphasis is placed upon political, constitutional, and intellectual developments; the political philosophies and policies of Jackson, Calhoun, Clay, Webster, and other pre-Civil War leaders; the rise of sectionalism and the controversy over slavery; Lincoln and the Civil War; the effect of Reconstruction upon North and South; Social Darwinism and its opponents; postwar industrial change, agricultural discontent, and the Populist Revolt. (5 cr; prereq 12 and 13, or Δ)
- 72s. **Twentieth-Century America.** Emphasis is placed upon political, constitutional, and intellectual developments; the Progressive Era; the political philosophies and accomplishments of Roosevelt, Taft, and Wilson; world war and the return to "normalcy"; the crisis of the great depression; the significance of the new deal reforms; and recent political trends. (5 cr; prereq 13 or Δ)
- 73f. **American Economic History I.** The development of economic institutions and the influence of economic change upon American history, with some consideration of economic thought, in the 18th and 19th centuries; commercial capitalism; the rise of industrial capitalism; the economic basis of sectionalism; the impact of the industrial and agricultural revolutions; and the rise of big business. (3 cr; prereq 12 and 13, or Δ; not offered 1965-66)
- 74w. **American Economic History II.** A continuation of Hist 73 with an emphasis upon the development of economic institutions in the 20th century; the rise and decline of finance capitalism; the increasing significance of government regulation of the economy; the new deal and the rise of state capitalism; and the problem of automation. (3 cr; prereq 13 or Δ; not offered 1965-66)
- 75s. **Problems in American History.** A colloquium in American history in which outstanding books and articles about a specific subject will be discussed. Normally the subject will be changed from year to year. (3 cr; prereq 11, 12, and 13 or Δ)
- 76w. **History of the Old South.** Emphasizes economic, political, and cultural developments which have tended to make the South a distinct "nation within a nation" in the United States; the influence of slavery, the Negro, the plantation system, and staple crop agriculture upon the South; southern sectionalism; and the role of the South in the coming of the Civil War. (3 cr; prereq 11 and 12, or Δ; not offered 1966-67)
- 77s. **History of the New South.** Political, economic, and cultural developments in the South from the Reconstruction Era to the present day; the struggle of the South to maintain its traditions in a rapidly changing, rapidly industrializing world; the rise of industry in the New South; the impact of the two world wars and of the new deal; recent economic and political trends; and the "Negro revolution." (3 cr; prereq 12 and 13, or Δ; not offered 1966-67)
- 80w. **History of the Russian Empire.** The growth of Russia as a nation under the Tsars; development of institutions and policies to 1905. (3 cr; prereq 12 or Δ; not offered 1966-67)
- 81s. **History of the Soviet Union.** The Bolshevik movement; overthrow of the old regime; establishment of the Soviet state; contemporary political and economic policies. (3 cr; prereq 13 or Δ; not offered 1966-67)
- 82w. **History of England.** 1485 to 1714. Tudor and Stuart periods. Emphasis on political, social, and economic developments. (3 cr; prereq 11 or Δ; not offered 1965-66)
- 83s. **History of Great Britain.** 1714 to 1918. Emphasis on political, social, and economic developments. (3 cr; prereq 12 and 13 or Δ; not offered 1965-66)

- 87f. **Methods of Historical Research and Writing.** Techniques of gathering research material, and of organizing, writing, and documenting research papers. (1 cr; prereq history major or Δ)
- 88s. **American Historiography.** An evaluation of the interpretations of important historians who are writing or who have written American history. (1 cr; prereq history major or Δ)
- 89s. **European Historiography.** An evaluation of the interpretations of important historians who are writing or who have written European history. Emphasis is placed on authors whose works appeared in the 19th or early 20th centuries. (1 cr; prereq history major or Δ)
- 90f, 91w, 92s. **Directed Study.** Provides the student with an opportunity to study analytically a restricted topic in history. The topic will be determined by the individual student and the instructor. (0-3 cr; prereq history major or Δ)

ORIENTATION (Orie)

- 1f. **Study Skills.** Practical assistance to the student in developing efficient methods of study and concentration, organizing material, preparing for examinations, and improving reading ability. Attention to the orientation of students in their attitudes and motivation, and the relation of these to satisfactory performance. (1 cr)

POLITICAL SCIENCE (Pol)

OBJECTIVES

The purpose of the political science curriculum is to aid students in assuming the role of intelligent, active, and responsible citizens. It also prepares students for careers in the fields of professional activity associated with political science. Accordingly, three areas of concentration are offered to meet the individual needs of students—American government and politics, comparative government and international relations, and political theory.

REQUIREMENTS FOR A MAJOR

Prerequisites—Pol 5, A-B, 25.

Requirements—30 credits.

The student concentrating in American government and politics should take Pol 51, 52-53, 54, 55, 56; and 8 credits from the fields of comparative government and international relations, and political theory.

The student concentrating in comparative government and international relations should take Pol 71, 72, 73, 74; and 10 credits from the fields of American government and politics, and political theory.

The student concentrating in political theory should take Pol 60, 61, 62, 63; and 14 credits from the fields of American government and politics, and comparative government and international relations.

REQUIREMENTS FOR A MINOR

Prerequisites—Pol 5, A-B, 25.

Requirements—15 credits.

REQUIREMENTS FOR TEACHER PREPARATION

Major

Prerequisites—Pol 5, A-B, 25.

Requirements—Pol 51, 56, 60, 71, 72, 74; 4 elective credits in political science; Ed 60J; a social science minor; and required professional education courses.

Minor

Prerequisites—Pol 5, A-B, 25.

Requirements—Pol 51, 60; 7 credits in political science; Ed 60J; and required professional education courses.

COURSE DESCRIPTIONS

- 5f. American Government and Politics.** Analysis of principles, organization, procedures, and powers of government in the United States. The federal system, national constitution, civil and political rights, party system; nature, structure, powers, and procedures of legislative, executive, and judicial departments of the national government. (5 cr)
- Aw-Bs. The State in the Modern World.** Introduction to political science. The scope and methods of study of forces and interests in politics, nature of the state and government, forms of government, electoral systems and party systems in the world, basic concepts of political science. Examination of the development, structure, and operation of the modern state with emphasis on nation-state totalitarian government and democratic government. (3 cr per qtr)
- 25s. World Politics.** Introduction to contemporary international politics, nationalism, imperialism, foreign policies of major powers. Elements of national power; forces affecting international relations, international conflicts, and techniques for their solution. (3 cr)
- 51w. State and Local Government.** Analysis of principles, organization, procedure, and function of state and local government in the United States. The states in the federal system; state constitutions and problems of revision; organization, powers, and functions of the legislative, administrative, and judicial branches of the state government. Municipal politics and administration in the United States. State and local relations. Special attention is given to the nature and working of politics in Minnesota. (5 cr; prereq 5 or Δ ; not offered 1965-66)
- 52f-53w. American Constitutional System.** Judicial interpretation of the constitution, separation of governmental powers, relation of state and national governments, control of interstate commerce, jurisdiction of courts. (3 cr per qtr; prereq 5 or Δ ; not offered 1965-66)
- 54s. The Constitution and Civil Liberties.** A study of free speech, loyalty in a democratic state, citizenship, freedom of religion, rights of persons accused of crimes, and government's responsibility to protect persons from racial and religious discrimination, with special attention to the role of law and judges. (3 cr; prereq 5 or Δ ; not offered 1965-66)
- 55f. Introduction to Public Administration.** Development of administrative organization; administration and the executive, legislative, and judiciary; principles of organization including line and staff relationships, the staff services of finance and personnel, formal and informal control. (5 cr; prereq 5 or Δ ; not offered 1965-66)
- 56s. American Political Parties.** Organization, operation, and development of the American party system. Relations between national, state, and local organization, state and national committees, the convention system, the primary, campaign methods, and finance. (3 cr; not offered 1965-66)
- 60f. Contemporary Political Ideologies.** Major currents of political theory from Marx to present: Marxism, socialism, syndicalism, anarchism, fascism, political ideologies of antidemocratic thought and totalitarian regimes. (3 cr; prereq Δ)
- 61f. Development of Political Thought: Ancient and Middle Ages.** A survey of classical Greek thought, Plato and Aristotle, primitive natural law, Cynics and Stoics, theory in Roman Republic and Empire, early Christianity and the church fathers, moral theory and political theory, empire and church in ideology, Roman and canon law, St. Thomas, political thought in the 14th and 15th centuries. (5 cr; prereq Δ)
- 62w. Development of Political Thought: Modern.** Machiavelli, theories during the Renaissance, Reformation, and the Counter Reformation. Early modern absolutism, the

emergence of modern contract theory, the emergence of constitutionalism, liberalism, and utopianism. (5 cr; prereq Δ)

- 63s. **American Political Thought.** The development of the American political tradition from the Puritan theocracy to recent phases of American political life. (3 cr; prereq Δ)
- 71f. **Governments and Politics of Europe.** An analysis of the major governmental systems of Europe; evolution, structure, and functioning of the political institutions of Great Britain and the Soviet Union. (5 cr; prereq Δ)
- 72w. **Governments and Politics of Asia.** A comparative analysis of the governments and politics of China, Japan, and India. Their international relations and foreign policies; traditional as well as contemporary forms of political behavior; nationalism and communism as political forces. (5 cr; prereq Δ)
- 73s. **International Law.** Relation of international law to individuals, states, international community, jurisdictional problems, survey of principles developed in diplomatic agents and consuls, treaties, arbitration, treatment of aliens, pacific settlement. War and hostile measures short of war, military occupation, war crimes, neutrality, collective security sanctions. (5 cr; prereq Δ)
- 74w. **International Relations and Organizations.** An examination of the nature of the national state system, of the forces affecting international relations, of the source of conflicts in international politics, and of their solution. General development and basic principles of world organization; principles, structures, methods, and actual operation of international governmental institutions; special attention to the United Nations and related agencies and to their evolution from the League of Nations system. (5 cr; prereq 25 or Δ)
- 90f, 91w, 92s. **Directed Studies.** Individual research topics; normally restricted to political science majors. (0-3 cr per qtr; prereq Δ)

PSYCHOLOGY (Psy)

OBJECTIVES

The purpose of the curriculum in psychology is to provide an understanding of the application of the scientific method to the problems of the behavioral sciences, and to provide sufficient factual and theoretical background to promote a critical understanding of individual and social human behavior. The curriculum meets the needs of liberal arts students as well as students planning specialization in one of the fields of psychology at the graduate level.

REQUIREMENTS FOR A MAJOR

Prerequisites—Psy 1, 2, Math 53 or 56.

Requirements—35 credits, to include Psy 50, 51, 53, 60, and three of the following tutorials: 52, 55, 56, 61, 62, 63, or 70, of which at least one must be 52, 55, or 56, and another must be 61, 62, 63, or 70.

REQUIREMENTS FOR A MINOR

Prerequisites—Psy 1, 2.

Requirements—15 credits.

COURSE DESCRIPTIONS

- 1f,w. **General Psychology I.** Survey of methods and results in the study of the human behavior of man: the course of his development, the role of motivation, processes of learning, the organization of his personality, the nature of intelligence, higher mental processes, and properties of social interaction. Includes rudiments of statistical analysis and psychological measurement. (4 cr; 3 lect per wk)

- 2w,s. General Psychology II.** Introduction to experimental psychology. The physiological basis of behavior, structure, and function of the central nervous system, sensation, perception, learning, concept formation, motivation, and rudiments of experimental methods. (5 cr; 4 lect and 3 hrs lab per wk)
- 50f. Motivation and Conditioning.** Methodology and important findings in the study of conditioning and motivation. Special emphasis on problems involved in the interpretation of experimental results. Development of familiarity with methodological problems and research techniques in laboratory. (4 cr per qtr; prereq 2; 3 hrs lect and 3 hrs lab per wk)
- 51w. Human Learning.** Methodology and important findings in the study of human learning. Relationships between complex learning and simpler forms of learning. Development of familiarity with methodological problems and research techniques in laboratory. (4 cr per qtr; prereq 50 or Δ ; 3 hrs lect and 3 hrs lab per wk)
- 52s. Tutorial in Learning.** (3 cr; prereq 50, 51)
- 53s. Design and Analysis of Experiments.** The analysis of variance, multiple group comparisons, factorial and fractional designs, determination of variance components and expected mean squares, and analysis with concomitant variables. (4 cr; prereq Math 53 or Math 56 or Ψ Math 56 or Δ)
- 55f. Sensation and Perception I.** Hearing. The physiology and measurement of deafness; the measurement of speech intelligibility; the relationship of sound to work efficiency; empirical studies of the relationship of sound systems to the enjoyment of music; the study of subjective scales of sound. (4 cr; prereq 2; 3 hrs lect and 3 hrs lab per wk and tutorial)
- 56w. Sensation and Perception II.** Visual perception. The physiology of the eye; theories of color blindness and other visual defects; color mixture; the relationship of the amount of light to the efficient functioning of the visual system; the effect of visual feedback on manipulation tasks; variables influencing the perception of form and distance; certain adaptation effects. (4 cr; prereq 2; 3 hrs lect and 3 hrs lab per wk and tutorial)
- 60f. Personality I.** Introduction to personality structure and dynamics; psychoanalytic and neo-Freudian concepts; experimental studies of personality dynamics; the nature, forms, and causes of anxiety; analysis of human motivation. (5 cr; prereq 1)
- 61w. Personality II.** The nature of fantasy and dreams and their role in human behavior; achievement fantasy and motivation; creative processes and personalities; identification and the sense of identity; conceptions of personal maturity. (5 cr; prereq 60 or Δ ; 3 lect per wk and tutorial)
- 62s. Personality III.** Current theory and findings regarding disordered or socially deviant behavior. Etiology and symptom patterns of the schizophrenias, affective psychoses, neuroses, character disorders, psychopathy, addictions, brain injury, and mental retardation. Introduction to psychotherapy. (5 cr; prereq 60 or Δ ; 3 lect per wk and tutorial)
- 63w. Psychological Development of the Child.** The development of behavior from conception to adolescence, sensory functions, emotion, motivation, language, cognitive functions, personality, and social behavior. (5 cr; prereq 1; 3 lect per wk and tutorial)
- 65w. Differential Psychology.** Nature of intelligence. Individual abilities, aptitudes, and personality variables. Psychological correlates of age, sex, race, and socio-economic status. Effects of heredity and environment. Applications to applied psychology, education, industry, and current social problems. (5 cr; prereq 1)
- 70f. Persuasion and Belief.** The establishment of individuals' beliefs and attitudes, and the processes by which they change, including suggestion, influences on conformity and independence, hypnosis, "thought reform," and other mediums of personal influence. (3 cr; prereq 1; 2 lect per wk and tutorial)
- 90f, 91w, 92s. Directed Study.** Individualized instruction for advanced undergraduates. Specific content and manner of instruction will depend on the interests and enthusiasms of students and staff. It is expected that three kinds of activity will be subsumed under this course: (a) individual research and reading projects in selected areas,

under the supervision of staff members; (b) a seminar on history and systems of psychology as an empirical science; and (c) seminars concerned with the exploration in depth of topics of current interest, to be announced. (0-3 cr per qtr; prereq 1, 2, Math 53 or Math 56, and Δ)

SOCIOLOGY (Soc)

OBJECTIVES

The purpose of the curriculum in sociology is to acquaint the student with materials, especially of an empirical nature, having to do with the "natural groups" of his society and the relationship of individuals to these groups.

To meet the general needs of the student in sociology, two special sequences (i.e., general and pre-social work) are offered which will prepare him for essentially different careers.

REQUIREMENTS FOR A MAJOR

General Sociology Sequence

The general sequence is recommended for a terminal liberal arts major as well as preparation for graduate work in sociology.

Prerequisites—Soc 1, 2, 3, Math 53.

Requirements—Soc 60, 65, 75, 80, 81, 85, 86, 87, and either 53 or 54.

Pre-Social Work Sequence

The pre-social work sequence is recommended as preparation for graduate work in schools of social work as well as preferred preparation for some beginning positions in social welfare agencies. It also serves to prepare the student for an enlightened participation as a citizen in community social welfare activities.

Prerequisites—Soc 1, 2, 3, Pol 5, Psy 1, Math 53, and either Anth 2 or EB 10.

Requirements—Soc 50, 51, 52, 53, 54, 60, 80, 85, 86, 87.

REQUIREMENTS FOR A MINOR

Prerequisites—Soc 1, and 2 or 3.

Requirements—22 credits to include Soc 60, 85, 86, 87.

REQUIREMENTS FOR TEACHER PREPARATION

Major

Prerequisites—Soc 1, 2, 3, Math 53.

Requirements—Soc 50, 60, 80, 85, 86, and 87; plus 9 elective credits in sociology courses numbered 50 or above; the social science minor; Ed 60J; and required professional education courses.

Minor

Prerequisites—Soc 1, and 2 or 3.

Requirements—22 credits to include Soc 60, 85, 86, 87; Ed 60J; and required professional education courses.

COURSE DESCRIPTIONS

If. **Man in Modern Society.** Characteristics of human group life. Analysis of factors associated with development of human group life and man's social environment; the structure of the social environment and its influence upon the individual's behavior. (3 cr)

- 2w. **The American Community.** Sociological analysis of modern American society. Topics emphasized will be the characteristics and distribution of population, urban-rural differences, social factors in business and governmental systems, occupational groups, the determination of social status, ethnic communities, and an analysis of mass culture. Attempts to familiarize the student with current research methods. (3 cr; prereq 1)
- 3s. **Social Problems.** A survey course in contemporary social problems with special emphasis on personal demoralization and social disorganization. An analysis of the role of society's value pattern in bringing about social problems will be made. (3 cr)
- 50f. **An Introduction to the Theory and Practice of Social Work.** A survey of social service with consideration of areas of social needs, social agencies, their purpose and function, and the philosophy and methodology of social work practice. (3 cr; prereq 3)
- 51w. **Social Work Methods.** Introduction to the concepts and methodology of social work practice. (3 cr; prereq 50 or Δ)
- 52s. **Introduction to Public Welfare.** Function of government in the field of welfare services. (3 cr; prereq 50 or Δ)
- 53f. **Theories of Criminal and Delinquent Behavior.** Survey of the field of criminology. Evaluation of theories dealing with criminal and delinquent behavior. Analysis of treatment of offenders and prevention of crime. (3 cr; prereq 1 or 3)
- 54w. **Prejudice and Discrimination in Inter-Group Relations.** Analysis of the phenomena and theories relevant to prejudice and discrimination. Critical appraisal of current and theoretical approaches to resolving this problem. (3 cr; prereq 1 or 3)
- 60f. **Social Psychology.** Research and theory regarding the relation of the individual to social groups. Emphasis on socialization processes; effects of social interaction and isolation; cultural influence and its limits; mass behavior and the effects of extreme social situations, conflict, and rapid cultural change upon the individual. Specific methods for acquiring knowledge in social psychology will be discussed. (5 cr; prereq 1)
- 65s. **Culture and Personality.** The role of culture in the formation of personality. Problems of individual adjustments to the demands of culture. Evidence will be gathered from diverse cultures. (3 cr; prereq 60 or 9 cr in sociology, anthropology, or psychology)
- 75w. **Population Trends and Problems.** The cultural causes and effects of population changes with particular emphasis upon birth rates, death rates, and migration. Problems of prediction will be noted. Special topics will include the dimensions of the labor force, the effects of governmental population policies in various countries, and the part population trends play in power politics. (3 cr; prereq 1)
- 80s. **Analytical Social Theory.** An examination of the major types of sociological theory and their particular criticisms and dilemmas. (3 cr; prereq 1)
- 81s. **Methods of Social Research.** A survey of current methodological approaches used in the behavioral sciences, and their limitations and advantages upon application to specific types of problems. (3 cr; prereq 1)
- 85f. **Social Organization of Small Groups and Institutions.** A general introduction to the organization and structure of small-scale social groups. The integration and disintegration of social groups and social institutions. Examples from the study of bureaucracies, voluntary organizations, and other kinds of institutions. This would include an analysis of the informal life in formal institutions. (3 cr; prereq 1)
- 86w. **The Family.** The study of the development of family unity or disunity, roles of members, methods of investigation, the cycle of family life, and cultural and subcultural variations of the family. (3 cr; prereq 1)
- 87s. **Urban Society.** An analysis of urban social processes. Includes a discussion of social stratification and mobility, ecological factors, the historical trend toward urbanism and suburbanism, the nature of social life in cities. (5 cr; prereq 1)
- 90f, 91w, 92s. **Directed Study.** Research; field experience (when feasible) for general sociology and pre-social work majors. (0-3 cr per qtr; prereq Δ for research, 50 and Δ for field experience)

Note: Courses numbered 50 and above are open to sophomores who have a C average unless other specific requirements are indicated.

SOCIAL SCIENCE

Social Science Minor—A special program to prepare students for teaching social studies courses in the secondary schools.

Since most students preparing for secondary education with majors in either history, political science, or sociology will likely be called upon to teach social studies courses requiring backgrounds in several other specialties, it is strongly recommended that they consider this special program leading to the social science minor. It should be noted that as the major area of emphasis varies, the requirements of the minor also change in order to provide the student with adequate background in the other social sciences.

REQUIREMENTS FOR A MAJOR

The student will select a major in history, sociology, political science, or physical education. For requirements, see the appropriate curriculum.

REQUIREMENTS FOR A MINOR

Sociology Major

Pol 5, 25, EB 10, Hist 11, 12, 13; plus 5 additional credits in history.

Political Science Major

Hist 11, 12, 13, EB 10, Soc 1, 3; plus 5 additional credits in history or geography.

History Major

Geog 1, Pol 5, 25, EB 10, Soc 3; plus 15 credits in political science or sociology.

Physical Education Major

Pol 5, 25, EB 10, Hist 11, 12, 13, Soc 1, 3.

Division of Science and Mathematics

BIOLOGY (Biol)

OBJECTIVES

The purpose of the curriculum in biology is to meet the following needs: (1) the provision of some knowledge of biology as part of a liberal arts curriculum; (2) the preparation of students for graduate study in the various subdisciplines of biology and related professional schools; (3) the preparation of secondary school biology teachers; and (4) the preparation of industrial biologists. It is believed that these objectives can best be attained by providing a co-ordinated basic curriculum in biology.

REQUIREMENTS FOR A MAJOR

Prerequisites—Biol 1-2, Chem 4-5.

Requirements—Biol 51, 52, 53, 54; plus a minimum of 8 credits in other biology offerings.

REQUIREMENTS FOR A MINOR

Prerequisites—Biol 1-2.

Requirements—15 credits, with approval of division chairman.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in biology, Ed 60B, as well as required professional education courses. In lieu of 8 additional credits in the biology major, students are advised to take Biol 62 and 71. The recommended minor for teacher preparation is Biol 51, 52, 53.

COURSE DESCRIPTIONS

- 1f-2w. General Biology.** Introduction to living things both plant and animal, and to the major biological concepts. Structure, function, classification, and evolution of organisms. (5 cr per qtr; 3 hrs lect and 4 hrs lab per wk)
- 51s. Biological Maintenance.** (General Physiology) Consideration of principles of cellular physiology including physical and chemical organization of the cell, excitation and response, metabolism and correlative mechanisms of unicellular and multicellular organisms. (5 cr; prereq 2 and Chem 4-5; 3 lect and 6 hrs lab per wk)
- 52w. Biological Continuity.** (Genetics) An introduction to the principles and mechanisms of inheritance and variation, including cytological, statistical, and biochemical genetics, with some discussion of evolutionary theories and the genetic problems of man. (5 cr; prereq 51 or Δ ; 4 lect and 3 hrs lab per wk)
- 53s. Biological Relationships.** (Ecology) A study of the relationship of organisms to each other and to their nonliving environment and a study of biogeography with special emphasis on North America. (5 cr; prereq 2; 3 lect and 6 hrs lab or field study per wk)
- 54f. General Bacteriology.** An introduction to the morphology, physiology, taxonomy, genetics, and ecology of microorganisms. Lectures and laboratories dealing with isolation, identification and culture of microorganisms from air, milk, soil, and water. Lectures relating the science of bacteriology to industry and disease. (5 cr; prereq 10 cr in chemistry and 6 cr in biology or Δ ; 3 lect and 6 hrs lab per wk)
- 60f. Plant Taxonomy.** Introduction to the taxonomy of flowering plants, with representative materials drawn largely from Minnesota flora. Families of plants and their relationship; floral structure; taxonomic terms; nomenclature; literature; methods of collection and identification. (3 cr; prereq 2 or equiv; 2 hrs lect and 4 hrs lab or field study per wk; not offered 1965-66)
- 61w. Plant Morphology.** A study of the vegetative and reproductive structures, life histories, and phylogeny of vascular plants. (5 cr; prereq 2; 3 hrs lect and 6 hrs lab per wk; not offered 1965-66)
- 62w. General Plant Physiology.** Introduction to plant physiology. Emphasis on fundamental principles requisite to understanding physiological phenomena encountered in higher land plants. Enzymes, respiration, fermentation, photosynthesis, mineral nutrition, water and solute metabolism, hormones, tropisms. (5 cr; prereq 51 or Δ ; 3 hrs lect and 6 hrs lab per wk; not offered 1965-66)
- 70f. Invertebrate Zoology.** A comparative study of the structure, function, development, and evolution of invertebrate animals. (5 cr; prereq 2 or Δ ; 3 hrs lect and 6 hrs lab per wk)
- 71s. Comparative Vertebrate Anatomy.** A comparative study of vertebrate structure and form, with emphasis on ontogenetic and phylogenetic concepts. (5 cr; prereq 2; 3 hrs lect and 6 hrs lab per wk)
- 72w. Comparative Vertebrate Embryology.** An introduction to developmental biology, emphasizing vertebrate ontogeny and with special consideration given to the mechanisms of cellular differentiation and organogenesis. (5 cr; prereq 2; 3 hrs lect and 6 hrs lab per wk)
- 73s. General Entomology.** Structure, life histories, habits, and classification of various orders of insects. (3 cr; prereq 2; 2 hrs lect and 4 hrs lab per wk)
- 90f, 91w, 92s. Directed Studies in Biology.** (1-3 cr per qtr)

CHEMISTRY (Chem)

OBJECTIVES

The chemistry curriculum at the University of Minnesota, Morris may be viewed as a summing up, at a level appropriate to the undergraduate student, of that facet of man's study of nature which deals with the structure of matter and the description of and conditions required for material change.

As such, the curriculum may be the means to two goals. On the one hand, it provides some answers and methods of finding others to those whose intellectual propensities lead them to ask certain kinds of questions about nature. Such propensities may draw the students into further formal study at the graduate level and into research.

On the other hand, the curriculum may be a stepping-stone to a career in secondary teaching or industry. Since these goals are not identical, though not mutually exclusive either, the chemistry staff recognizes that the course requirements for a chemistry major should depend upon the goals of the student.

REQUIREMENTS FOR A MAJOR

Prerequisites—Chem 4, 5, 11; Math 3, 4; Phys 21, 22, 23.

Requirements—Math 50, 51, 52; Chem 51, 52, 53 and lecture of Chem 54; Chem 61, 71, 72; Chem 81, 82, 83, and seminar of Chem 84, 85, 86.

Students intending to enter graduate school or desiring accreditation by the American Chemical Society should take Chem 62, either Chem 73 or the laboratory portion of Chem 54, and the laboratory of Chem 84, 85, and 86 in addition to the regular requirements for a chemistry major, and should satisfy their foreign language requirements by taking German.

REQUIREMENTS FOR A MINOR

Prerequisites—Chem 4, 5, 11; Math 3, 4; Phys 21.

Requirements—Chem 51, 52, 61; Math 50, 51.

Students majoring in biology should substitute Chem 71 for Chem 61 in their minor, and all students are urged to take both for a particularly strong and well balanced minor.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in chemistry, Ed 60, as well as required professional education courses.

COURSE DESCRIPTIONS

- 4f-5w. General Chemistry.** Introduction to atomic and molecular structure, the principles governing chemical reactions and the specific chemical and physical properties of the major elements in light of their position in the periodic table. (5 cr per qtr; prereq high school algebra; 4 hrs lect, 3 hrs lab, and 1 hr rec per wk)
- 11s. Semimicro Qualitative Analysis.** Continuation of the study of the specific properties of the elements and their compounds, with special emphasis upon aqueous solution equilibria and their application to the qualitative analysis of chemical substances. (4 cr; prereq 4-5; 3 hrs lect and 4 hrs lab per wk)
- 51f. Introductory Physical Chemistry.** Introduction to classical thermodynamics and chemical kinetics. (4 cr; prereq 11, Math 50; 3 hrs lect, 1 hr rec, and 3 hrs lab per wk)
- 52w. Structure of Organic and Inorganic Molecules I.** An introduction to the structure of the solid state and of the covalent compounds of the Group IV, V, VI, and VII elements; stereoisomerism of organic and inorganic molecules. (4 cr; prereq 51; 3 hrs lect, 1 hr rec, and 3 hrs lab per wk)
- 53w-54s. Physical Chemistry I and II.** Continuation of Chem 52 which will include more intensive work in classical thermodynamics and an introduction to statistical

- mechanics, an introduction to quantum chemistry, and their application to a deeper understanding of the gaseous, liquid, and solid states, chemical equilibria, and kinetics of chemical reactions. (4 cr per qtr; prereq 52, Phys 23, Math 52; 3 hrs lect and 3 hrs lab per wk; not offered 1965-66)
- 61w. Analytical Chemistry I.** An extension of the principles of aqueous solution chemistry and heterogeneous systems, with particular emphasis placed on acid-base and oxidation-reduction titrations and gravimetric methods of analysis. (5 cr per qtr; prereq 11; 3 hrs lect and 6 hrs lab per wk; not offered 1965-66)
- 62s. Analytical Chemistry II.** A study of further analytical principles and techniques, including spectrophotometry, electrochemistry, colorimetry, chromatography. (5 cr; prereq 53, 61; 3 hrs lect and 6 hrs lab per wk; not offered 1965-66)
- 71s. Organic Mechanisms.** A study of the mechanisms of the principal types of organic reactions: nucleophilic aliphatic substitution, electrophilic and nucleophilic aromatic substitution, addition reactions, reactions of carbonyl groups and those of the related active hydrogen compounds, molecular rearrangements, and some free-radical processes. (5 cr; prereq 52; 3 hrs lect and 6 hrs lab per wk)
- 72f. Organic Synthesis.** A study of the methods of preparing the principal organic functional groups and complex molecules, proper choice of reagents and the use of protective groups during synthetic operations. (5 cr; prereq 71; 3 hrs lect and 6 hrs lab per wk; not offered 1965-66)
- 73w. Natural Products.** The chemistry of proteins, carbohydrates, and lipids. (2 cr; prereq 71; 2 hrs lect per wk; not offered 1965-66)
- 81f, 82w, 83s. Structure II, III, and IV.** A 3-quarter lecture sequence dealing with the structure and properties of inorganic compounds, with particular attention to coordination compounds, and synthetic and naturally occurring organic compounds in terms of modern theories of chemical bonding. (2 cr per qtr; prereq 54, 61, 71; 2 hrs lect per wk; not to be offered until 1967-68)
- 84f, 85w, 86s. Advanced Chemistry.** A 3-quarter sequence consisting of one seminar and an arranged laboratory, designed to cover more specialized topics in chemistry, acquaint the students with the chemical literature and uses thereof, and to afford them an opportunity of establishing a laboratory project of their own design and following to some extent their own interest, at a level appropriate to a college senior. (3 cr per qtr [seminar only at 1 cr per qtr]; prereq §81-82-83; not to be offered until 1967-68)
- 90f, 91w, 92s. Directed Studies in Chemistry.** (1-3 cr per qtr)

ENGINEERING GRAPHICS (EG)

OBJECTIVES

The purpose of the offering in engineering graphics is to provide the prerequisite for the preengineering sequence on the Morris Campus.

COURSE DESCRIPTION

- 25f. Engineering Graphics.** Engineering representation and analysis of systems of projection; the co-ordinate system, graphical solution of space problems, intersections, and developments. Precision in graphics and techniques of sketching; pictorial projection systems, size description, standard and simplified practice applied to graphic communication. (4 cr; prereq solid geometry and Math 4; 3 hrs lect and 4 hrs lab per wk)

GEOLOGY (Geol)

OBJECTIVES

The purpose of the course offerings in geology is to introduce the liberal arts student to that important scientific discipline which deals with the nature and de-

velopment of the earth's structure, the forces which act upon the earth's crust and the results as shown in man's physical environment.

COURSE DESCRIPTIONS

- 1f,w. Earth Features and Their Meaning.** Introductory course. General education elective. Explanation of the natural landscape as produced by such agents as the atmosphere, water, glaciers, volcanoes, and mountain-building forces acting on the materials of the earth. (3 cr)
- Af,w. General Geology Laboratory.** Physical properties of common minerals and rocks; interpretation of topographic maps. (2 cr; prereq 1 or ¶1)
- 2s. Historical Geology.** Résumé of the history of the earth and its inhabitants as recorded in the rocks, with special emphasis on North America. (3 cr; prereq 1)
- Bs. General Geology Laboratory.** Identification of fossils; interpretation of geologic maps. (2 cr; prereq 2, A or ¶2)

MATHEMATICS (Math)

OBJECTIVES

The purpose of the curriculum in mathematics is to develop in the student competence in mathematical techniques, to sharpen mathematical intuition and abstract reasoning, and to encourage and stimulate the type of independent thinking that leads to new problems requiring research beyond the confines of the textbook. This will provide the basic background for students desiring to teach mathematics, enter graduate school, or obtain positions in applied mathematics or statistical fields.

REQUIREMENTS FOR A MAJOR

Prerequisites—Math 3, 4; and/or math placement examination.

Requirements—Math 50, 51, 52, 54, 61, 62, 64, 82, 83; two electives; and either 74 or 73.

REQUIREMENTS FOR A MINOR

Prerequisites—Math 3, 4; and/or math placement examination.

Requirements—Math 50, 51; four courses in two different areas (abstract algebra, geometry, statistics, etc.) to be selected from courses numbered 50 or above. Math 61, 62, 64, and 73 are especially recommended for the secondary education math minor.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in mathematics; Ed 60F; as well as required professional education courses.

COURSE DESCRIPTIONS

- Pf,w. Preparatory Mathematics.** Remedial elementary high school algebra preparatory to Math A for those students not qualified for college mathematics. (0 cr; special fee required)
- Af,w. Intermediate Algebra.** Intermediate high school algebra. (0 cr; prereq P or 1 yr elem high school algebra and satisfactory score in math placement test; special fee required)
- Tf,w,s. Trigonometry.** Analytic trigonometry emphasizing identities, equations, and properties of the functions; right and oblique triangles with logarithmic computation; designed for students who have not completed high school trigonometry. (0 cr; prereq 1 yr elem high school algebra; special fee required)
- Gw. Solid Geometry.** For students who did not take solid geometry in high school. Includes lines and planes in space, dihedral and polyhedral angles, prisms and cylinders,

- pyramids and cones, spheres and spherical polygons. (0 cr; prereq 1 yr high school plane geometry; special fee required)
- 3f,w. College Algebra.** Includes some properties of sets, the system of real numbers, absolute values, inequalities; functions, graphs; exponential and logarithmic functions, complex numbers, theory of equations, determinants, systems of equations, partial fractions; binomial theorem, probability; mathematical induction, progressions and sequences. (5 cr; prereq Δ and satisfactory score on proficiency exam)
- 4f,w,s. Calculus I.** Designed to introduce the basic ideas and formal development of differentiation. Covers straight lines, function, limits, continuity, differentiation, velocity and acceleration, Rolle's theorem, theorem of the mean, maxima and minima, related rates and some applications. (5 cr; prereq 3 or Δ or satisfactory score on proficiency exam)
- 50w,s. Calculus II.** The definite integral, theorem of the mean for integrals, indefinite integrals, change of variable, plane analytic geometry, differentiation and integration of trigonometric, logarithmic, and exponential functions, hyperbolic functions, parametric equations, arc length and curvature. (5 cr; prereq 4)
- 51f,s. Calculus III.** Polar co-ordinates, vectors and vector methods of integration with applications; solids of revolution, area of a surface of revolution, moments and centers of mass, theorems of Pappus, numerical integration, solid analytic geometry and vectors in three dimensions. (5 cr; prereq 50)
- 52w. Calculus IV.** Indeterminate forms, infinite series; Taylor's series, partial differentiation, maxima and minima; LaGrange multipliers, multiple integration with applications, and the elements of linear algebra. Introduction to solution of ordinary differential equations. (5 cr; prereq 51)
- 53w,s. Introduction to Statistics.** Designed to provide students with a basic knowledge of the scope, nature, tools, language, and interpretation of elementary statistics, gathering and recording data; constructing statistical tables, graphic representation of statistical information; mean, median, mode, percentile; measures of variation; the normal curve and sampling; correlation; tests of significance. (5 cr; prereq high school algebra, Math A, or Δ)
- 54f. Introduction to Probability and Mathematical Statistics.** Elementary probability, addition and multiplication theorem; random variables and their probability distributions; statistical concepts, use, presentation and interpretation of data, mean, median, mode, and measures of variations; correlation and tests of significance. (3 cr; prereq 4 or Δ)
- 55w. Elements of Mathematical Statistics I.** Univariate and multivariate distributions; law of large numbers; sampling, likelihood methods, estimation, confidence intervals and hypothesis testing. (4 cr; prereq 54 and 50, or 50, or Δ ; 3 hrs lect and 2 hrs lab per wk)
- 56s. Elements of Mathematical Statistics II.** Continuation of topics in Math 55 and covering regression and analysis of variance; best unbiased and likelihood procedures, decision theory; nonparametric and distribution free methods. (3 cr; prereq 55)
- 58w. Computer Programming.** Introductory survey of computer systems and their applications. Introduction to programming using FORTRAN or ALGOL. Computer-oriented mathematics; computer theory; Turing machines and automata. Student will have the opportunity to assemble and check out programs of his own devising related to his field of interest, or will be given standard problems to program. Classroom procedure: one 2-hour lecture and one 1-hour lecture per week. Two weekend field trips to tour computer facilities and University of Minnesota Computer Center to run student programs. (3 cr; prereq 4 or 53 or Δ ; not offered 1965-66)
- 59w. Numerical Analysis.** Finite differences, interpolation, summation of series, numerical integration. Euler-Maclaurin formula and asymptotic expansions; numerical solutions of differential, algebraic and transcendental equations; Newton's and Graeffe's method. (3 cr; prereq 52; not offered 1966-67)
- 61s. Modern Algebra.** Definitions and elementary theory of groups, rings, integral domains and fields. (3 cr; prereq 50 or Δ)

- 62f-63w. Linear Algebra.** Linear dependence of vectors; matrices; determinants; systems of linear equations; vector spaces; linear transformations; characteristic values and vectors; bilinear and quadratic forms; hermitian forms; canonical forms of matrices. (3 cr per qtr; prereq 51 or Δ for 62, 62 for 63)
- 64s. Foundations of Mathematics.** Elements of set theory, cardinal and ordinal numbers, transfinite cardinals, Peano postulates, axiom of choice, logic and the axiomatic approach in mathematics. (3 cr; prereq Δ ; not offered 1965-66)
- 65s. History of Mathematics.** Trends and developments in mathematics from the ancients to modern man. (3 cr; prereq Δ ; not offered 1966-67)
- 68s. Number Theory.** Properties of whole numbers. Topics included are Euclidean algorithm, divisibility, prime numbers, congruences, diophantine analysis, etc. (3 cr; prereq 4 or Δ ; not offered 1965-66)
- 73s. College Geometry.** A treatment of the advanced topics of Euclidean geometry including constructions with ruler and compass, study of the circle and triangle, harmonic points and lines, and other topics. An introduction to non-Euclidean geometries. (3 cr; prereq Δ ; not offered 1965-66)
- 74s. Modern Geometry.** Projective and affine geometry and their relations to other geometries. (3 cr; prereq 51 or Δ ; not offered 1966-67)
- 77f. Introduction to Topology.** Set functions, Cartesian products. Spaces and maps. Properties of spaces and maps: separation axioms, convergence, compactness, connectedness. Product spaces, quotient spaces, and function spaces. Local properties. Metrizable and metric spaces. (3 cr; prereq 51 or Δ ; not offered 1966-67)
- 82s. Calculus V and Differential Equations.** Vector fields, line and surface integrals, Green's and Stokes' theorem, ordinary differential equations plus selected topics from Fourier analysis, Laplace transforms, orthogonal functions, and their applications to ordinary and partial differential equations. (5 cr; prereq 52)
- 83f-84w-85s. Advanced Calculus.** Real number system, limits and continuity, point sets, functions of several variables, partial differentiation and applications, implicit functions, Jacobians, transformations and mappings, vectors, line and surface integrals, theory of integration, Riemann-Stieltjes integral, uniform convergence, power series, improper integrals, Fourier series, special functions. (3 cr per qtr; prereq 82 or Δ for 83, 83 or Δ for 84, 84 or Δ for 85)
- 86s. Elementary Theory of Complex Variables.** Complex numbers, derivatives and integrals of analytic functions, elementary functions and their geometry, Cauchy's integral theorem and formula, Laurent expansions, evaluation of contour integrals by residues. (3 cr; prereq 52; to be alternated yearly with Math 59)
- 90f, 91w, 92s. Directed Studies in Mathematics.** (1-5 cr)

PHYSICAL SCIENCE (PSci)

OBJECTIVES

The purpose of the physical science course is to present to the student the principal concepts that have developed in the physical sciences, particularly from the Renaissance to the present and to give a description of the physical phenomena and an examination of the logical processes which have led to the development of these concepts.

COURSE DESCRIPTIONS

- 1f. Physical Science I.** A study of motion, forces, the planetary system, the structure and method in physical science, and the conservation principles. (5 cr; prereq high school algebra and plane geometry; 3 hrs lect and 4 hrs lab per wk)
- 2w. Physical Science II.** A study of the origins of the atomic theory in physics and chemistry, the theories of fields in electricity and magnetism, and the quantum theory. (5 cr; prereq high school algebra and plane geometry; 3 hrs lect and 4 hrs lab per wk)

PHYSICS (Phys)

OBJECTIVES

The purpose of the curriculum in physics is to contribute to a better understanding of the physical sciences in the modern world, to provide the physics background for the preprofessional areas of engineering and medicine, and to provide the foundation for graduate study or for careers using physics in industry, research, and teaching.

REQUIREMENTS FOR A MAJOR

Prerequisites—Phys 21-22-23.

Requirements—Phys 50, 51, 65-66-67, 68, 70, 88, 84-86 and 75 or 78.

REQUIREMENTS FOR A MINOR

Prerequisites—Phys 21-22-23.

Requirements—Phys 50 and 51 or 5 credits of electives in physics courses numbered 50 or above.

In addition, Chem 4-5 and 1 quarter of organic or physical chemistry is strongly recommended for physics majors.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in physics; Ed 60; as well as required professional education courses.

COURSE DESCRIPTIONS

- 21w-22s-23f. General Physics.** Mechanics, heat, wave motion, sound, optics, electricity, and magnetism. (5 cr per qtr; prereq ¶Math 4 for 21, 21 and Math 50 for 22, 22 and ¶Math 51 for 23; 4 hrs lect, 1 hr quiz, 2 hrs lab per wk)
- 50w. Intermediate General Physics.** Introductory course in atomic physics including elements of kinetic theory and atomicity of matter. (5 cr; prereq 23, ¶Math 52; 4 hrs lect, 1 hr quiz, 2 hrs lab per wk)
- 51s. Intermediate General Physics.** Elementary nuclear physics, wave motion, and wave phenomena. (4 cr; prereq 50, ¶Math 52; 3 hrs lect and 2 hrs lab per wk)
- 65f-66w-67s. Mechanics and Electromagnetism.** Theoretical course for advanced students in mechanics, electricity, and magnetism (ferromagnetism and application of these concepts). (3 cr per qtr; prereq 23 and Math 52; 3 hrs lect per wk)
- 68s. Electrical Measurements Laboratory.** An experimental course covering ballistic and current galvanometers, magnetic flux measurements, potentiometers, D. C. bridges and audiofrequency A. C. bridges. (2 cr; prereq 23 and Math 52; 4 hrs lab per wk)
- 70f. Thermodynamics.** Concepts of heat exchange. First and second laws, phase changes, equations of state, black body radiation. (3 cr; prereq 23 and Math 52; 3 hrs lect per wk)
- 75w. Physical Optics.** Theory and application of interference, diffraction, diffraction gratings, and resolving power; polarized light and crystal optics. (3 cr; prereq 23 and Math 52; not offered 1965-66)
- 78w. Optics Laboratory.** Experimental course covering spectroscopy, optics of compound lenses, interferometry, and polarized light. (2 cr; prereq 23 and Math 52; 4 hrs lab per wk; not offered 1965-66)
- 84f-86s. Modern Physics.** Selected topics in atomic and nuclear physics. Emphasis on an interpretation of experimental phenomena. Topics include: photoelectric effect, atomic and molecular structure and spectra, special relativity, wave mechanics, nuclear physics, radioactivity, and X rays. (4 cr per qtr; prereq 51 or equiv and Math 52; 4 hrs lect per wk; not offered 1965-66)

88f,w,s. **Selected Topics Laboratory.** Experimental problems in which the student has some special interest. (2 cr; prereq 50 and 68 or Δ; 4 hrs lab per wk; not offered 1965-66)

90f, 91w, 92s. **Directed Studies in Physics.** (1-3 cr per qtr)

PUBLIC HEALTH (Hlth)

5w,s. **Personal and Community Health.** The study of individual and community health problems, normal body functions, and the causes and prevention of disease in the individual, family, and community. (2 cr)

Division of Education

EDUCATION (Ed)

OBJECTIVES

As part of its function as a liberal arts college in western Minnesota the University of Minnesota, Morris must make provisions for the training of students who wish to become either elementary or secondary school teachers.

The requirements for majors and minors in the various academic disciplines for prospective secondary school teachers have been designed to insure the kind of comprehensive and intensive training necessary for the teaching of the disciplines.

The requirements for elementary majors will allow the student to become familiar with the total elementary school curriculum and will provide the intensive training necessary to become an effective elementary teacher.

The Division of Education offers courses to complete the training of students interested in becoming teachers by providing them with an understanding of human growth and development, the nature of the learning process, and the principles and methods of teaching and by providing them with practical training in these areas.

REQUIREMENTS FOR SECONDARY CERTIFICATION

Students planning to teach in the secondary schools of Minnesota must meet the certification requirements of the State Board of Education. At the University of Minnesota, Morris the program designed to meet these requirements is as follows:

1. Completion with a grade point average of at least 2.50 (C+) of an academic major. (All majors at the University of Minnesota, Morris exceed the minimum of 36 credits required by the State Board of Education.)††
2. If an academic minor is selected, completion of it with a grade point average of at least 2.00 (C). A minor is not required but is encouraged. (All minors at the University of Minnesota, Morris exceed the minimum of 23 credits required by the State Board of Education.)††
3. Completion of a minimum of 27 credits in professional education which must include Ed 50-51-52, a methods course in both the major and minor fields (Ed 60, 69, and 80).

REQUIREMENTS FOR ELEMENTARY CERTIFICATION

Students planning to teach in the elementary schools of Minnesota must meet the certification requirements of the State Board of Education. At the University of

†† Teaching majors available at the University of Minnesota, Morris include: art, biology, chemistry, English, French, history, mathematics, music, physical education, physics, political science, sociology, Spanish, and speech.

†† Teaching minors available at the University of Minnesota, Morris include: art, biology, chemistry, English, French, history, mathematics, music, physical education, physics, political science, social sciences, sociology, Spanish, and speech.

Minnesota, Morris the program that has been designed to meet these requirements is as follows:

Completion with a grade point average of at least 2.50 (C+) in the elementary education major. The elementary education major consists of 50 credits including the following: Ed 50, 53, 54, 70A, 70B, 70C, 70D, 70E, 70F, 70G, 70H, 75, 76, 79, and 80. This program meets the minimum standard of the Minnesota State Board of Education.

ADDITIONAL REQUIREMENTS

It is recognized that not all students, by reason of academic competence, physical health, interest, and temperament, are well suited to fulfilling the intellectual, physical, and emotional demands of the teaching profession. For this reason, in addition to the requirements listed above, students wishing to pursue the professional education program will be required to have the continued approval of the Faculty Committee on Teacher Education. Suitability of the student for the teaching profession will be periodically reviewed as he progresses through the program. The criteria for evaluation will be: general academic competence, proficiency in oral and written communication, physical health, emotional stability, and social adjustment. Evaluation procedures will include classroom observations, personal interviews, and physical and psychological examinations. Students possessing disqualifying traits will be guided toward remedial action or advised against entering the teaching profession.

COURSE DESCRIPTIONS

- 50f. Introduction to Education.** Introductory course required of all students who plan to teach; basic orientation to public school teaching; the role of the school in the American society; consideration of critical educational issues; and consideration of teaching as a profession. (3 cr)
- 51w. Introduction to Secondary Education II—Curriculum.** Consideration of the development of the high school in America; introduction to theory, principles, and practices underlying teaching methods, curriculum, and administration; consideration of the relationship between the curriculum and the child (adolescent). (3 cr)
- 52s. Introduction to Secondary Education III—Educational Psychology.** Introductory educational psychology stressing concepts in child development, individual differences, psychology of learning, tests and measurements, elementary statistics, evaluation, basic practice in instructional method, and a study of programmed learning and its application to secondary education. (5 cr; prereq Psy 1)
- 53w. Introduction to Elementary Education II—Curriculum.** Introduction to theory and principles underlying elementary school organization, curriculum, and teaching methods. (3 cr)
- 54f. Introduction to Elementary Education III—Educational Psychology.** Introductory educational psychology stressing understanding of human development and its relationship to the development of the elementary school and its curriculum, individual differences, and tests and measurements. (4 cr; prereq Psy 1)
- 60w. Methods of Teaching in the Secondary School.** Objectives, curriculum, special methods, materials, and evaluation applied to the teaching of subject matter areas in the secondary school. Prospective secondary teachers are expected to complete a methods course in both their major and minor fields. (Prereq 52)
- 60A. Art. (3 cr)
- 60B. Biology. (3 cr)
- 60C. English. (3 cr)
- 60D. Foreign Language. (3 cr)
- 60E. History. (3 cr)
- 60F. Mathematics. (3 cr)

- 60G. Music. (3 cr)
- 60H. Natural Science. (3 cr)
- 60I. Physical Education. (3 cr)
- 60J. Social Science. (3 cr)
- 60K. Speech. (3 cr)

- 69Aw-Bw.** Directed Student Teaching in the Secondary School.** Observation, tutoring, assisting, and teaching in area high schools under the direct supervision of the high school and University faculty. In addition to the practicum period spent in the high school, students will be expected to participate in a series of student teaching seminars on the Morris Campus. Student registers for 69A and 69B during same quarter. (4 cr for each; prereq completion of methods courses in major and minor areas)

- 70. Methods of Teaching in the Elementary School.** Objectives, curriculum, and methodology of teaching the various areas of the elementary school curriculum. Special emphasis will be given to the underlying theory of methodology, its derivation from understanding of human development, individual differences, and psychology of learning. Selection of instructional materials and evaluation for each area of the program will be given consideration. Prospective elementary teachers are expected to take the entire Ed 70 sequence. (Prereq 54 or Δ)
 - 70A. Art. (2 cr)
 - 70B. Language Arts. (3 cr)
 - 70C. Mathematics. (3 cr)
 - 70D. Music. (2 cr)
 - 70E. Physical Education. (2 cr)
 - 70F. Reading. (3 cr)
 - 70G. Science. (3 cr)
 - 70H. Social Studies. (3 cr)

- 75w. Children's Literature.** Survey of literature written for children. Special emphasis will be given to determine criteria for the selection of children's books. The various uses of literature with children will be considered. (3 cr)

- 76s. Learning Difficulties.** Diagnosis and treatment of learning difficulties at the elementary school level. Special consideration will be given to identifying and correcting learning difficulties in the skills areas including arithmetic, reading, and the language arts. (3 cr; prereq student teaching or Δ)

- 79Aw-Bw.** Directed Student Teaching in the Elementary School.** Observation, tutoring, assisting, and teaching in area elementary schools under the direct supervision of the elementary school and University faculty. In addition to the practicum period spent in the elementary school, students will be expected to participate in a series of student teaching seminars on the Morris Campus. Student registers for 79A and 79B during same quarter. (5 cr for each; prereq sr)

- 79C.** Directed Student Teaching in the Elementary School.** For persons who do additional student teaching or complete a different program sequence. (Cr ar)

- 80s. History and Philosophy of Education.** A study of the historical and philosophical development underlying current educational problems and practices; concerned with important educational theories, epistemological concepts, education aims, and sociological and ethical implications. (3 cr; prereq sr)

- 90f, 91w, 92s. Directed Studies.** (1-3 cr per qtr; prereq Δ)

** Admission only by application to director of student teaching.

HEALTH EDUCATION, PHYSICAL EDUCATION, RECREATION EDUCATION, AND ATHLETICS (PE)

OBJECTIVES

The purpose of the curriculum in physical education is to prepare men and women for administering and teaching health education, physical education, recreation education, and interschool athletics. Students who complete the major curriculum will meet the Minnesota requirement for secondary school teaching.

Prospective secondary school athletic coaches who have not majored in physical education must complete the minor to receive certification for coaching in Minnesota.

To qualify for work in recreation programs which use school facilities, students should take PE 25, 86, and 87.

Nonprofessional students may elect to take professional skills courses.

Students who major in physical education are expected to take Biol 1 and 2.

REQUIREMENTS FOR A MAJOR

Men

Prerequisites—PE 5, 20.

Requirements—PE 70, 71, 73, 75, 81, 82, 83, 84, 85, 86; 6 credits from PE 60, 61, 62, 63, 64; 12 credits in selected skills courses as approved by staff.

Women

Prerequisites—PE 5, 20.

Requirements—PE 50, 52, 54, 58, 70, 71, 73, 81, 82, 83, 84, 86; and 12 credits in selected skills courses as approved by staff.

REQUIREMENTS FOR A MINOR

Men

Prerequisites—PE 5, 20.

Requirements—PE 70, 71, 75, 81, 85; 4 credits from PE 60, 61, 62, 63, 64; 7 credits in selected skills courses as approved by the staff.

Women

Prerequisites—PE 5, 20.

Requirements—PE 58, 70, 71, 81; 5 credits from PE 50, 52, 54; 7 credits in selected skills courses as approved by staff.

REQUIREMENTS FOR TEACHER PREPARATION

Major or minor in the field; appropriate and required professional education courses.

COURSE DESCRIPTIONS

Professional Skills Courses for Men and Women

Courses required for *men only* are indicated by (M) and for *women only* by (W). Major students must select (with adviser approval) two courses each from the PE 1, 2, and 3 areas and six courses from the PE 4 area. Each course meets twice per week for 1 hour of credit.

Rhythms

- 1A. Social Dance
- 1B. Folk and Square Dance

- 1C. Beginning Modern Dance (W)
- 1D. Advanced Modern Dance (W)
- 1E. Elementary Rhythmic Activities

Aquatics

- 2A. Beginning Swimming
- 2B. Intermediate Swimming
- 2C. Advanced Swimming
- 2D. Senior Lifesaving

Team Sports

- 3A. Flag Football and Basketball (M)
- 3B. Speedball and Basketball (W)
- 3C. Soccer and Volleyball (M)
- 3D. Soccer and Volleyball (W)
- 3E. Softball (M)
- 3F. Softball (W)

Individual and Dual Sports

- 4A. Archery and Badminton
- 4B. Bowling
- 4C. Golf
- 4D. Winter Sports
- 4E. Gymnastics
- 4F. Tennis
- 4G. Track and Field
- 4H. Weight Training and Wrestling (M)
- 4I. Recreational Games
- 4J. Exercise and Posture
- 4K. Fundamentals of Body Movement
- 4L. Games of Low and High Organization
- 4M. Self-Testing Activities for Elementary School Physical Education

Professional Theory Courses for Men and Women

Courses required for *men only* are indicated by (M) and for *women only* by (W)

PHYSICAL EDUCATION AND ATHLETICS

10f,w,s. Varsity Sports. Participation on an intercollegiate athletic team. To receive credit students must make the team and meet the eligibility requirements of the college. Maximum of 2 credits may be earned to satisfy one course requirement from PE 3 and one course requirement from PE 4, professional skills courses. Maximum of 6 credits can be applied toward graduation requirements. (1 cr)

20f,s. Introduction to Physical Education. A study of the total concept of health education, physical education and athletics, recreation education, and the vocational opportunities in the field. (3 cr)

- 50f. **The Teaching of Team Sports (W).** The history, skills, strategy, rules, and special techniques of each sport. (3 cr)
- 52f. **The Teaching of Dance (W).** The development of skills required for the teaching of social, folk, square, and creative dance. (2 cr)
- 54s. **The Teaching of Individual and Dual Sports (W).** The development of skills for the teaching of archery, badminton, bowling, golf, tennis, and track and field. (3 cr)
- 58s. **Organization and Administration of Women's Intramurals and Varsity Athletics (W).** The principles, programming, policies, procedures, and facilities for developing these programs. (2 cr)
- 60s. **Track and Field Coaching (M).** A study of the techniques for all track and field events, history, methods of coaching, practice and meet organization, strategy, rules, and officiating. (2 cr)
- 61w. **Basketball Coaching (M).** The history and theory of the game, offense and defense formations, strategy, practice and game organization, officiating, rules, and techniques of coaching each position. (2 cr)
- 62s. **Baseball Coaching (M).** The study of the history and theory of the game, techniques of coaching each position, rules, batting, practice and game organization, strategy, and officiating. (2 cr)
- 63f. **Football Coaching (M).** The history and theory of the game, offensive and defensive formations, strategy, practice and game organization, officiating, rules, and techniques of coaching each position. (2 cr)
- 64w. **Wrestling Coaching (M).** The history and theory of the sport, techniques, practice and meet organization, officiating, rules, strategy, and techniques of coaching holds and escapes. (2 cr)
- 70f. **Human Anatomy.** A study of the human body structure. (4 cr)
- 71w. **Kinesiology.** Practice and study of the scientific principles of movement and the analysis of movement in sports and other physical activities; includes adapted physical education. (5 cr; prereq 70)
- 73s. **Human Physiology.** A study of the human body organ systems and their physiological functions. (4 cr; prereq 70)
- 81w. **History, Principles, and Curriculum of Physical Education.** The study of the history, foundational principles, philosophy of the field, and the development of elementary and secondary school curriculums. (5 cr; prereq 20)
- 82f. **Evaluation in Physical Education.** A study of the procedures used in the field to determine teaching and program effectiveness. Includes tests and measurements. (3 cr; prereq sr)
- 83s. **Organization and Administration of Health Education and Physical Education.** The principles of administration, program co-ordination, student leaders, budget making, facilities, finance, purchase and care of equipment and supplies, liability, office management, and public relations. (3 cr)
- 85f. **Organization and Administration of Men's Intramurals and Varsity Athletics (M).** The principles, staff, policies, facilities, and procedures for developing these programs. (2 cr)
- 90f, 91w, 92s. **Directed Studies** (1-3 cr per qtr; prereq Δ)

HEALTH EDUCATION

- 5w,s. **First Aid.** Lectures, demonstrations and practical work in emergencies, and first aid. Special emphasis on prevention of accidents. American Red Cross Standard and Advanced certificate in first aid awarded upon successful completion of the course. (1 cr)
- 6s. **Water Safety Instructor Course.** Methods and procedures to teach swimming and life-saving courses. Course includes both pool and classroom work. ARC water safety instructor certification given for those who complete course. (2 cr; prereq 2C and 2D or Δ)

- 75f. **Prevention and Care of Injuries (M).** The conditioning of athletes for interschool sports, safety measures, care and prevention of injuries in sports and other physical activities, and practical work in the athletic training room. (2 cr; prereq sr, PE 70, 71)
- 84f. **The School Health Education Program.** The materials for elementary and secondary school health education programs; includes consideration of school age youth health problems, health services, health instruction, and healthful school living. (2 cr; prereq sr)

RECREATION EDUCATION

- 25w. **Introduction to Recreation Education.** A study of the theory of leisure, principles for guiding programs, and philosophy of recreation. (2 cr)
- 86s. **Organization and Administration of Community Recreation.** The development of summer and year-around recreation programs for children, youth, and adults. (3 cr; prereq sr)
- 87f. **Recreational Leadership.** The application of leadership in all aspects and levels of recreation. Includes practical leadership experiences. (3 cr; prereq sr)

INDEX

	Page		Page
Academic Information	24	Examinations to Show Proficiency	14
Activities, Student	19	Exclusion from College	15
Administration	1	Exemption from Regulations	17
Admission, Adult Special	4	Fees	6
Admission by Examination	4	Fees, Special	6
Admission, Freshman	3	Film Series	22
Admission, Nonresident	4	Financial Aids	7
Admission Requirements	3	Geography	52
Admission with Advanced Standing ..	3	Geology	64
Advisement	17	Grade Point Average	13
Adviser, Faculty	17	Grade Points	13
Anthropology	50	Grades	12
Art	36	Graduation Requirements, Summary of	28
Art Exhibits	22	Health, Public	69
Artists Course	22	Health Education	72
Athletic Program	22	Health Insurance	7
Athletics	72	Health Service	18
Audited Courses	16	History	52
Awards	22	History of University of Minnesota,	
Biology	61	Morris	2
Bookstore	18	Honor Case Commission	16
Canceling Out of College	5	Housing	18
Chemistry	63	Humanities	40
Class Attendance	12	Humanities, Division of	36
Classification of Students	13	Incidental Fee	7
Convocations	22	Information, General	2
Cost Information	6	Intramural Program	22
Counseling	17	Languages, Modern	41
Courses of Instruction	36	Library	18
Courses Without Credit	16	Living Accommodations	18
Credit Loads	6	Loans	11
Credits	12	Major, The	27
Credits, Transfer of	3	Mathematics	65
Economics and Business	50	Music	43
Education	69	Nonresident Classification	4
Education, Division of	69	Objectives of Curriculum	24
Educational Opportunities, Special	22	Organizations, Student	20
Employment, Part Time	12	Orientation	55
Engineering Graphics	64	Orientation Week	17
English	38		
Evening Classes	23		
Examinations, Final	14		
Examinations for Credit	13		

	Page		Page
Payment of Fees	7	Publications, Student	21
Philosophy	46	Reading, Developmental	23
Physical Education	72	Readmission to College	15
Physical Science	67	Recreation Education	72
Physics	68	Refunds	7
Political Science	55	Regents, Board of	1
Preprofessional Programs	28	Registration Change	5
Pre-Agricultural Business Ad- ministration	29	Registration Procedure	5
Pre-Agricultural Education	29	Regulations, College	12
Pre-Agricultural Science	29	Repeating a Course	16
Prearchitecture	33	Requirements, Degree	25
Pre-Chemical Engineering	32	Requirements, General Education	26
Pre-Dairy Industries	30		
Predentistry	32	Scholarship Funds, All-University	7
Pre-Engineering	32	Scholarships and Grants-in-Aid	8
Pre-Fishery and Wildlife Manage- ment	30	Scholastic Committee	16
Preforestry	30	Science and Mathematics, Division of	61
Pre-Home Economics	31	Social Calendar	19
Prejournalism	33	Social Science	61
Prelaw	33	Social Sciences, Division of	50
Pre-Medical Technology	34	Sociology	59
Premedicine	33	Speech and Theatre Arts	47
Prenursing	34	Sports	22
Pre-Occupational Therapy	34	Student Activities	19
Prepharmacy	35	Student Behavior Committee	16
Pre-Physical Therapy	34	Student Government	20
Pre-Social Work	35	Summer School	23
Pre-Veterinary Medicine	31		
Preregistration, Summer	17	Teacher Education	27
Probation	14	Transfer Procedure	4
Psychology	57	Tuition	6

MORRIS CAMPUS

1. EDSON HALL AND LIBRARY
2. JUNIOR HALL (Men)
3. SCIENCE OFFICE (Temporary)
4. SCIENCE AND HUMANITIES
5. ENGINEERING
6. WOMEN'S RESIDENCE HALL
7. HUMANITIES AND EDUCATION
8. GREENHOUSE
9. HEATING PLANT
10. SOCIAL SCIENCES, STUDENT SERVICES, BUSINESS OFFICE, FOOD SERVICE
11. SENIOR HALL (Men)
12. SPOONER HALL (Women)
13. ADMINISTRATION BUILDING
14. MUSIC
15. PHYSICAL EDUCATION
16. NEW RESIDENCE HALL (Women)

