

1971

University of Maine at Portland-Gorham Catalog 1971-1972

University of Maine at Portland - Gorham

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University of Maine at Portland — Gorham



Catalog 1971 — 1972

GENERAL REQUIREMENTS FOR ALL BACCALAUREATE DEGREE CANDIDATES AT UMPG

The General Education Requirement of UMPG consists of 30 semester-hours, with at least 6 semester-hours in any interdisciplinary course, such as those offered by SCOGIS with a "SCO" prefix-code. The remaining 24 hours consists of four 6-hour groups of courses, each group either interdisciplinary or chosen from a different one of the four areas below, with course selections restricted to the prefix-code designations listed.

AREA 1: HUMANITIES

CLS (Classics)	FRE (French)	LAT (Latin)
CPEN (Comparative Literature)	GMN (German)	PLY (Philosophy)
ENG (English)	GRK (Greek)	SPN (Spanish)

AREA 2: FINE AND APPLIED ARTS

ARTH (Art History and Appreciation)	MUS (Music)
ARTS (Art Studio Courses)	TSP (Theatre-Speech)
DNCE (Dance)	

AREA 3: SCIENCE AND MATHEMATICS

ASTR (Astronomy)	GEOL (Geology)	OCN (Oceanography)
BIO (Biology)	GSCI (General Science)	PHYS (Physics)
CHEM (Chemistry)	MET (Meteorology)	PSCI (Physical Science)
ESCI (Earth Science)	MS (Mathematics)	

AREA 4: SOCIAL SCIENCES

ANY (Anthropology)	GEOG (Geography)	PSY (Psychology)
CJ (Criminal Justice)	HIST (History)	SOC (Sociology)
ECON (Economics)	POL (Political Science)	SWE (Social Welfare)

Department courses in the student's major area may not be applied toward fulfillment of the General Education Requirement. In addition, students in the School of Business Administration, the School of Education, or the School of Nursing may be further restricted in course selections from one or more of the four areas because of the specific requirements of the program in which they are enrolled.

A student who has matriculated before September 1971 may continue his program under the requirements in force at the time of his matriculation or he may elect to complete the General Education Requirements under the provisions stated above.

The Physical Education Requirement of UMPG requires every freshman and transfer undergraduate student of either sex to satisfy the University's requirement of one year of physical education, unless excused in writing by the dean of his school or college on the basis of one or more of the exemption criteria printed on the inside back cover of this catalog.

UMPG SYSTEM OF COURSE CODING

000-098	No degree credit
10-98	Two digits indicate Associate Degree program.
100-198	Introductory level
200-298	Intermediate level
300-398	Intermediate level
400-498	Senior level; others by permission
500-598	Graduate level
600-698	Professional graduate level, as in the School of Law

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The University of Maine at Portland - Gorham



Academic Calendar for 1971-72

University of Maine at Portland-Gorham

FALL SEMESTER 1971

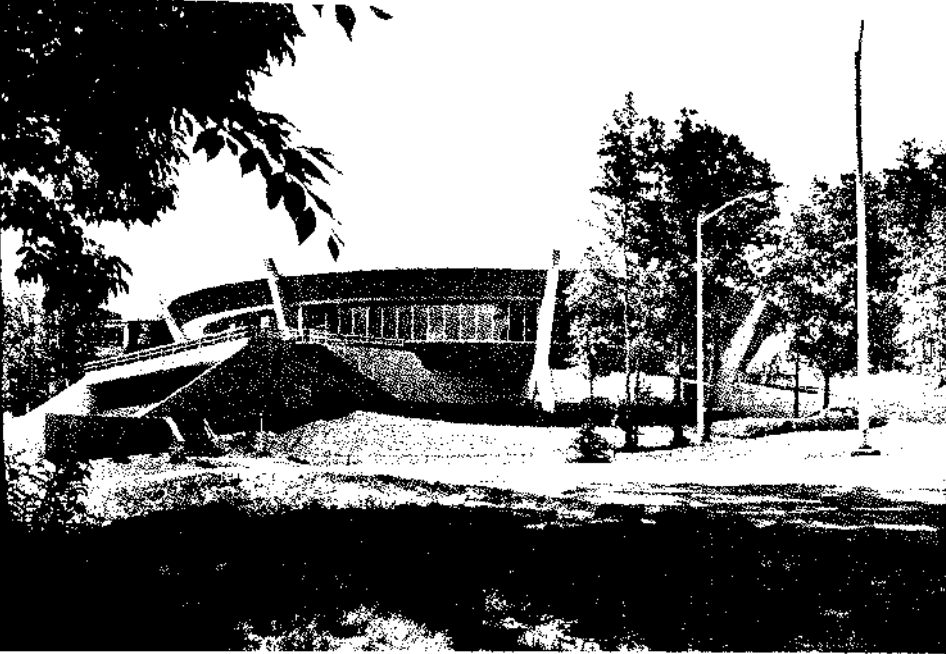
September	1-6	Freshman Orientation
September	7	Registration of all students who have not previously completed it in person or by mail.
September	8	Classes Begin
November	25-26	Thanksgiving Recess
December	16	Classes End
December	17-23	Final Examinations

INTERSESSION 1972

January	10-20	Reserved for the use of departments, schools, and the College of Liberal Arts for the purpose of planning and other academic activities.
January	21-22	Spring semester registration of all students who have not previously completed it.

SPRING SEMESTER 1972

January	24	Classes Begin
March	20-24	Spring Recess
May	13	Classes End
May	15-20	Final Examinations
May	26	Commencement Exercises



THE UNIVERSITY OF MAINE AT PORTLAND-GORHAM

The University of Maine at Portland-Gorham is a regional center of the University of Maine, offering a diversity of courses leading to bachelors' and masters' degrees in a variety of subject areas. It is a consolidation of the former University of Maine in Portland and the Gorham State College of the University of Maine and comprises two campuses, both on State Route 25 which crosses the Maine Turnpike one block south of Turnpike Exit 8. The Portland Campus is three miles east of Exit 8, and the Gorham Campus is seven miles to the west of that exit.

Bus transportation between the two campuses is provided for students, Monday through Friday throughout the academic year whenever the regularly scheduled day classes are in session. Parking lots on both campuses are available for students commuting in their own automobiles. Dormitory facilities are provided only at the Gorham Campus, but dormitory students who pay for board and room at the Gorham Campus may obtain lunch without extra charge at the Portland Campus on days when their class schedules require them to be at the Portland Campus at lunch time.

More than 3,000 full-time undergraduate students are enrolled at the University of Maine at Portland-Gorham. In addition to these full-time undergraduates, a number of full-time graduate students are enrolled at the University of Maine School of Law, a unit of the University of Maine at Portland-Gorham, currently located at 68 High Street, Portland.

In addition to the full-time students, approximately 6,000 part-time students are enrolled in late-afternoon, evening, and Saturday courses offered by the Continuing Education Division of the University of Maine at Portland-Gorham. About 500 CED courses are offered during the academic year, making it possible for part-time students to earn undergraduate degrees in business administration, education, and liberal arts. Graduate programs are available in business, library service, and education. Most of the course offerings are given at either the Portland or Gorham campus, but some in-service training courses are offered in various towns throughout Cumberland and York counties.

The Continuing Education Division is also responsible for the Summer Session, meeting the needs of an additional 3,000 students taking 280 or more day and evening summer courses. Many summer session courses are offered in three-week units of intensive study, some starting in June, some in July, and some in August. Other daytime summer courses are offered in six-week sessions, and a few are scheduled in five-week or two-week sessions. Summer evening courses are normally offered in an eight-week session, with classes meeting two evenings a week.

Although Continuing Education courses are open to all enrollees at UMPG, students enrolled in a full-time day degree-candidate program do not normally take the evening courses when their schedule permits them to take courses of an equivalent nature offered during the day.

In an effort to relate the University effectively with the surrounding Greater Portland community, both the Continuing Education Division and the Cooperative Extension Service offer various types of programs outside the scope of the normal undergraduate or graduate university courses. A few of these programs are listed in a section beginning on page 199.



Admission -- Undergraduate Studies

The approval of candidates seeking admission to the University of Maine at Portland-Gorham is on a selective basis. Candidates must be graduates of approved secondary schools or hold the high school equivalency diploma. The University seeks candidates whose preparatory program, scholastic achievement, interest, motivation, and personal recommendations are indicative of success with University studies. With the merger of the Portland and Gorham campuses, the University has established the following Schools and Colleges to which students may apply at the Undergraduate level:

COLLEGE OF LIBERAL ARTS

The College of Liberal Arts currently offers four-year programs leading to the degree of **Bachelor of Arts**, with the following majors:

Art Major	French Major	Psychology Major
Biology Major	History Major	Sociology Major
Economics Major	Mathematics Major	Social Welfare Major
English Major	Philosophy Major	Theatre-Speech Major
	Political Science Major	

Selected students in the College of Liberal Arts also have the opportunity to apply for admission to the Honors Program, described near the beginning of the Liberal Arts section of the catalog.

The College of Liberal Arts also offers a four-year program leading to the degree of **Bachelor of Science**, with a major in **Criminal Justice**.

SCHOOL OF BUSINESS AND ECONOMICS

In addition to its four-year programs, the School of Business and Economics offers a two-year program leading to the degree of **Associate of Science in Business Administration**.

The School of Business Administration currently offers four-year programs leading to the degree of **Bachelor of Science**, with the following majors:

Business Administration Major	Economics Major
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SCHOOL OF EDUCATION

The School of Education currently offers four-year programs leading to the degree of **Bachelor of Science**.

Secondary Education majors include:

Biological Science Major	History Major	Social Sciences Major
English Major	Mathematics Major	Theatre-Speech Major
French Major	Sciences Area Major	

Other Programs of the School of Education include:

Elementary Education	Art Education	Industrial Arts Education
Kindergarten-Primary Ed.	Music Education	Industrial-Vocational Ed.

SCHOOL OF NURSING

The School of Nursing offers a program of four years and one summer session which leads to the degree of **Bachelor of Science**, with a major in nursing.

SCHOOL OF GENERAL AND INTERDISCIPLINARY STUDIES

While a University must continually strive to maintain the traditional functions, it must also be flexible enough to allow for innovation and experimentation. An educational system, if it is to survive, must always strive for a balance between the richness of its past and the novelty of the present. At UMPG the School of General Interdisciplinary Studies (SCOGIS), is one way of providing such innovation.

This school is envisioned as a catalyst in the process of educational change. SCOGIS will offer a flexible creative curriculum, stressing innovation in teaching, development of new learning models, and interdisciplinary, problem-oriented programs.

SCOGIS programs and courses will not duplicate offerings of the other academic units of the University. The major emphasis will be placed on studies, themes, and projects leading to a baccalaureate degree in general and interdisciplinary studies. Provision will also be made for independent study and tutorial work.

The faculty of SCOGIS will be drawn from all academic units of the University and the community at large according to guidelines and procedures developed by the SCOGIS students, administration and faculty.

Information concerning program offerings may be obtained from the Office of Dean of SCOGIS – UMPG.

SECONDARY SCHOOL PREPARATION

Requirements for admission to the University are established by each school and college within the University. The requirements indicated below are in keeping with the degree programs currently established.

COLLEGE OF LIBERAL ARTS

English	4 Units
*Mathematics	3 Units
**Sciences	2 Lab Units
History/Social Science	2 Units
***Foreign Language	2 Units
*Mathematics Majors	4 Units
**Biology and Premedical Majors	3 Lab Units
***Foreign Language Majors	3 Units

SCHOOL OF BUSINESS AND ECONOMICS

Four-Year Baccalaureate Program

English	4 Units
Algebra	2 Units
Geometry	1 Unit
Elective	9 Units

Two-Year Associate in Business Administration

Candidates applying to this program of study may have either a college preparatory or a commercial business background. It should be noted that candidates with commercial business backgrounds must have records of strong academic achievement to be considered. English and mathematics are the basic prerequisites for this program. All other work in high school would be elective course study.

SCHOOL OF EDUCATION

English	4 Units
*Mathematics	3 Units (Recommended 2 Algebra, 1 Geometry
**Sciences	2 Lab Units
History/Social Science	2 Units
***Foreign Language	Optional
*Mathematics majors in Secondary Education 4 Units	
**Biology and Science Area majors in Secondary Education 3 Lab Units	
***Foreign Language majors in Secondary Education 3 Units	

SCHOOL OF NURSING

English	4 Units
Mathematics	3 Units (Algebra I, II, Geometry I)
Sciences	2 Lab Units (Biology, Chemistry)
History/Social Science	1 Unit
Foreign Language	Optional

COLLEGE ENTRANCE EXAMINATION BOARD AND AMERICAN COLLEGE TESTING

1. The University of Maine at Portland-Gorham Admissions Office will accept either Scholastic Aptitude Test & Achievement Test scores, or American College Test scores for candidates seeking admission. All candidates applying for admission must submit test scores from either the Scholastic Aptitude Test & Achievement Test battery or the American College Testing program unless arrangements for testing to be waived have been approved by the Director of Admissions.

2. Applicants should work with the high school guidance office in registering for and counseling in the preparation for the required testing.

3. Candidates submitting Scholastic Aptitude Test & Achievement Test results are required to submit **three Achievement Scores** in support of their application. One test should be either the English Composition Achievement or the Literature Achievement. When possible, the second test should relate to the student's field of study, i.e., history, mathematics, foreign language, sciences, etc. The third achievement to be submitted is the student's choice.

Students applying to the Associate Degree Program in Business Administration are not required to take the Achievement tests.

4. High School juniors are encouraged to take achievement tests in non-continuing subjects at either the May or July test dates. Guidance Counselors should be consulted for details.

REPORTING TEST RESULTS

Candidates are required to submit all test results **no later than February of the senior year**. Scores must be submitted to the University Admissions Office from the Educational Testing Service, Box 592, Princeton, New Jersey 08540, Box 1025, Berkeley, California 94701, or The American College Testing Program, P.O. Box 451, Iowa City, Iowa 52240.

Dates for the Scholastic Aptitude Test and Achievement Tests 1971-72.

November 6, 1971 (SAT only)	April 15, 1972 (SAT only)
December 4, 1971	May 6, 1972 (Achievement Tests only)
January 8, 1972	July 8, 1972
March 4, 1972	

Dates for the American College Testing Program 1971-72.

October 16, 1971	February 26, 1972
December 11, 1971	April 22, 1972
	July 15, 1972

APPLICATION PROCEDURE

1. Obtain a copy of the University brochure and the necessary application forms from the Director of Admissions or from the high school principal or guidance counselor.
2. Select the program which promises fulfillment of personal ideals, interests and abilities. Be ready to take specific entrance examinations upon request of the Art, Music, or Industrial Arts Departments if you are applying to one of these programs.
3. Mail the application and application fee of \$10.00 (non-refundable) to the Director of Admissions, University of Maine, Portland-Gorham, 96 Falmouth Street, Portland, Maine 04103.
4. The high school will send a transcript of work completed along with recommendations and teacher evaluation.

ADMISSION PROCEDURES

1. After the student's application has been reviewed and evaluated, the Director of Admissions will notify the applicant of the appropriate decision.
2. Upon acceptance, the student will be required to make appropriate deposits. A deposit of \$50.00 will be required of each residence hall applicant. A deposit of \$25.00 is required of all commuting students.
3. Admission to the University is not final until the student has satisfactorily completed all Admissions Office requirements.
4. Physical and mental health are basic considerations in admitting an applicant to the University. The Admissions Office reserves the right to refuse admission to any candidate who is not fully qualified to meet these University standards of personal fitness.
5. The University reserves the right to cancel the acceptance of any application it deems necessary for academic or personal reasons.
6. Interview: With the exception of candidates applying to the Art, Music, and Industrial Arts programs, interviews are optional. If students desire an interview, they should arrange for one with the Admissions Office. Students are encouraged to visit the University and acquaint themselves with its facilities.

ADDITIONAL REQUIREMENTS FOR ADMISSION

COLLEGE OF LIBERAL ARTS

ART All applicants for the Art Major will be asked to present a portfolio of their work before they will be considered for admission to the University. Students will be notified by the Art Department of the appropriate procedures to follow.

MUSIC All candidates for the Music Major will be asked to appear before the faculty of the Music Department for an instrumental or vocal audition. Written music aptitude and achievement tests will also be administered. Students will be notified by the Music Department of the appropriate procedures to follow.

SCHOOL OF EDUCATION

INDUSTRIAL ARTS Applicants for the Industrial Arts Technology program are required to take special aptitude tests at the University; they should have had a minimum of one unit in either industrial arts or drafting (graphics) in high school. Students will be notified by the Industrial Arts Department of the appropriate procedures to follow.

FOREIGN STUDENTS

Candidates applying for degree status at the University are required to submit official school and college transcripts to the Director of Admissions. Candidates from foreign countries whose native language is **not English** are required to submit test results of the TOEFL examination (Test of English as a Foreign Language). In addition, candidates must submit test results of the Scholastic Aptitude Test (SAT).

Candidates applying who have completed at least one year of University studies at an English-speaking University with acceptable grades are not required to take the SAT examination. They must, however, take the TOEFL examination if English is **not** the native language.

Financial assistance for foreign students applying to UMPG is extremely limited. It is, therefore, regrettable that the University cannot encourage greater numbers of foreign applications. Foreign students who have met academic requirements and require no financial assistance from the University may expect more favorable consideration.

ADMISSION TO ADVANCED STANDING – TRANSFER STUDENTS

Admission to the University of Maine at Portland-Gorham as a transfer student is on a selective basis and is controlled by classroom, dormitory, and quota space. A student who has attended any institution of learning beyond high school is classified as a transfer student even though the student may in the final analysis not transfer in credits. A student accepted for admission from an accredited institution will receive advanced standing credit when the work is "C" grade or better in courses corresponding to those offered by the University of Maine at Portland-Gorham and if applicable to the student's program of study.

Students applying for admission from any institution which is not accredited by the New England Association of Colleges and Secondary Schools or any other regional accrediting agency must have a 2.75 average (on a 4.0 scale) to be considered for advanced standing credit. The Admissions Office, in conjunction with the Dean of a particular School or College within the University may defer for one semester acceptance of credit from a non-accredited institution.

All applicants for admission to advanced standing must complete the same forms as an incoming freshman and request that official transcripts be mailed to the Director of Admissions from any previous colleges attended. Student copies are not acceptable. Copies of catalogs including course descriptions must accompany all transcripts for evaluation.

Students seeking advanced standing must submit, in addition to the application, a high school transcript, Scholastic Aptitude Test results, and a character recommendation from the Dean of Students Office of the college or colleges previously attended.

ADVANCED PLACEMENT

It shall be the policy of the University of Maine at Portland-Gorham to grant credit for the introductory course in a subject field to an enrolled student who presents evidence of competency in that field by completing the appropriate Advanced Placement Examination of the College Entrance Examination Board with a score of either four (well qualified) or five (very well qualified). A score of three will be examined for credit on an individual basis by the department concerned.

COLLEGE LEVEL EXAMINATION PROGRAM

The schools and colleges at the University of Maine at Portland-Gorham will, during the academic year 1971-72, review the question of advanced standing credit as offered by the College Level Examination Program. To date no formal policy has been adopted.

The one exception to the above statement is in the School of Nursing. Candidates are urged to discuss with the Dean of the Nursing School opportunities for credit acceptance by examination.

FINANCIAL AID

Students seeking admission to the University of Maine at Portland-Gorham who anticipate requesting financial aid must apply through the College Scholarship Service Program, Box 176, Princeton, New Jersey 08540. The Parents' Confidential Statement may be secured through the local high school guidance office or by writing to the Financial Aid Office at the University of Maine at Portland-Gorham, College Avenue, Gorham, Maine 04038.

Married students applying for financial assistance must fill out The Student's Confidential Statement and return it to the College Scholarship Service, Box 1501, Berkeley, California 94701. This form is available in the Financial Aid office of the University of Maine at Portland-Gorham, College Avenue, Gorham, Maine 04038.

Financial Information

STUDENT EXPENSES: Academic Year of 1971-72

The financial requirements of the University, changing costs, state and legislative action, and other matters may require an adjustment of these charges and expenses. The University reserves the right to make adjustments to the estimated charges and expenses as may from time to time be necessary in the opinion of the Board of Trustees up to the date of Final Registration for a given academic term. The applicant acknowledges this reservation by the submission of an application for admission or by registration.

ONE-TIME FEES

<i>Application Fee</i> — A one-time fee which must accompany application	\$ 10.00
<i>Matriculation Fee</i> — A one-time fee required of each student who registers for the first time for formal enrollment in a program leading to a specific degree	15.00

ANNUAL EXPENSES: FULL-TIME UNDERGRADUATE STUDENTS

<i>Undergraduate Tuition for a Resident of Maine</i>	450.00
(Tuition for Non-Residents, as defined below, is \$1300.)	
<i>Student Activity Fee</i> (required of all full-time undergraduates)	16.00
<i>Books and Supplies</i> — Textbooks, personal laboratory equipment, etc., are not furnished by the University. Annual costs vary from \$100 to	200.00
<i>Personal Expenses</i> — Over and above food and lodging, recent estimates indicate an annual average of at least	350.00
<i>Voluntary Health Insurance</i> — Optional but strongly recommended	28.50

ADDED EXPENSES FOR DORMITORY RESIDENTS

<i>Board and Room for Dormitory Residents</i> (per academic year)	1000.00
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Note: In the event that special dormitory guards are established, the interested students will be charged a fee adequate to cover the cost of these guards.

OPTIONAL MEALS FOR OFF-CAMPUS RESIDENTS: \$484 per academic year.

LATE REGISTRATION

A *Late-Registration Fee of \$10* is charged a student who registers after the prescribed day of registration. *Students must register each semester, one semester at a time.*

TUITION FOR OTHER CLASSIFICATIONS OF STUDENTS

Continuing Education Division and Summer Session — A registration fee of \$5 per semester is charged each part-time daytime student, each Continuing Education student, and each Summer Session student. Summer Session students are charged \$25 per semester hour for courses carrying degree credit. Continuing Education students are charged \$25 per semester hour for courses carrying degree credit, up to a maximum of \$225 per semester. The tuition, fees, and related maximums set forth herein do not apply to non-degree credit work. CED bulletins announce the fees for their non-degree courses.

Other Part-time Students — Registration fee of \$5 per semester, plus tuition for residents of Maine of \$25 per semester-hour up to a maximum of \$225 per semester, or tuition for non-residents of Maine of \$65 per semester-hour up to a maximum of \$650 per semester.

School of Law — Tuition for residents of Maine and non-residents covered by the New England Pact is \$550 per year; tuition for other non-residents is \$1550 per year. The \$10 Application Fee and \$15 Matriculation Fee are also charged. For other expenses, see the School of Law catalog.

DEPOSITS

A deposit of \$25 is due when the applicant is notified of acceptance by the Director of Admissions. If a dormitory room is requested, an additional \$25 is due. These deposits will be applied toward the student's account when he registers. (They should not be confused with the matriculation fee of \$15, which is a non-refundable charge.)

The deposits are forfeited in case an applicant withdraws after June 1. If a freshman, transfer, or readmission applicant notifies the Director of Admissions of withdrawal prior to June 1, the deposits will be refunded.

Upperclassmen desiring to live in a dormitory must pay a room deposit of \$25 during the spring in order to assure that rooms will be reserved for them in the fall. This deposit will be applied to the fall semester bill. If it is found that dormitory accommodations are not desired, the deposit will be refunded if the Housing Office is notified by August 1. If notice is not given by that date, the deposit will be forfeited.

PAYMENT OF BILLS:

All University bills, including those for room and board in University buildings, are due and payable on or before the beginning of each semester. Bills may be paid at the business offices at either campus. Checks should be made payable to the University of Maine.

REFUND POLICY:

No refunds of advance payments will be made unless these are requested prior to June 1. No refunds can be made of either the Application Fee or the Matriculation Fee. Refunds of other charges are made only when the student notifies the Business Office in writing of his official withdrawal.

Refunds on tuition, room, and board, less debt service on room and board, may be made according to the following schedule:

Time Written Notification of Withdrawal Is Received	Percentage of Refund (Less Debt Service)
2 weeks or less after registration	80%
3rd week after registration	60%
4th week after registration	40%
5th week after registration	20%
Over 5 weeks after registration	0%

RULES GOVERNING RESIDENCE:

A student is classified as a resident or a non-resident for tuition purposes at the time he is admitted to the University. The decision, to be made by the treasurer, is based upon information furnished by the student and any other relevant information. In general, in order to be considered eligible to register as a resident, a student must have established a bona fide year-round residence in the State of Maine with the intention of continuing to maintain it indefinitely. The tuition status as determined at the time of enrollment normally prevails as long as the student remains in attendance. Members of the Armed Forces and their dependents are normally granted in-state tuition rates during the period when they are on active duty within the State of Maine.

In all cases the University reserves the right to make the final decision as to resident status for tuition purposes.



STUDENT LIFE, ACTIVITIES, AND SERVICES

STUDENT LIFE

The University of Maine at Portland-Gorham supplements its academic curriculum by offering students a wide variety of services and activities ancillary to normal classroom educational experiences. Philosophically, the Student Affairs Division seeks to assist students toward educational fulfillment through (1) services to aid with personal, social, financial and vocational needs and (2) co-curricular experiences in the form of organizations and cultural activities to help maximize individual student development.

The unique physical arrangement of the University of Maine at Portland-Gorham allows students to sample suburban and urban environments on both a predominantly residential and a primarily commuter campus. Students are encouraged to take an active role in the social and professional programs offered, as well as other extra-curricular activities including campus governance.



STUDENT ACTIVITIES

Extra-curricular activities form an important part of the educational experience of students on every university campus. The University of Maine at Portland-Gorham encourages students to take advantage of the many opportunities to broaden intellectual horizons and to work together with other students either on university committees or through participation in campus clubs or other organizations. Not only is there value in social learning derived from participation, but many of the recognized functions of student organizations relate to the curriculum and classroom experiences of the students. Typical of the many extra-curricular activities and organizations available to students are the following:

Student Organizations

There are over sixty student organizations on the Portland-Gorham campuses which reflect a wide spectrum of honoraries, professional associations, university governance committees, and social or religious organizations. Such organizations include:

Academic and Professional Organizations — Business Club, Circulo Espanol, Forum Club, International Education Club, International Relations Club, Le Cercle Francais, Mathematics Club, Student Education Association.

Musical Organizations — A Cappella Choir, Concert Band, Gorham Chorale.

Religious Organizations — Inter-varsity Christian Fellowship, Newman Club, Religious Affairs Club.

Social and Service Organizations — Art Club, Associated Women Students, Circle K, Modern Dance Club, Outing Club, Sailing Club, Surf Club.

Special Interest Organizations — Varsity Club, Young Democrats, Young Republicans.

Student Publications — The **Daemon** and the **Light House** are literary journals for the Gorham and Portland campuses respectively. Both offer the entire campus community a forum for creative expression and present the reader with a panorama of campus artistic and writing endeavors. **The Observer** and **The Viking** are weekly student newspapers for the Gorham and Portland campuses respectively. Both are staffed and published by students interested in various aspects of journalism. A yearbook, the title of which may vary from year to year, is also published annually by the students.

Honor Societies -- **Fidus Achates** is a service honorary to assist incoming freshmen on the Gorham campus, while the **Owls** form a sophomore men's honorary to assist incoming Portland freshmen. A similar honorary society of sophomore women on the Portland campus is known as the **Eagles**. **Top-of-the-Tree** is an honorary drama organization. **Epsilon Xi Tau** is an international honor fraternity for industrial arts and industrial vocational education. **Centaurus/Pegasus** is a men's and women's senior honorary society.

Fraternities and Sororities -- The Greek system offers an additional aspect of development in social living and communication through objectives of group unity and close friendship. The opportunity to provide these objectives is enhanced through the typical fraternity and sorority living unit.

The **Inter-Fraternity Council**, the governing unit of fraternities, is intended to insure continuity of purpose and high ideals expressed by all fraternities through self-governance. The **Inter-Sorority Council** serves the same function for the sorority system. Greek letter societies on the Portland-Gorham campuses are the **Delta Chi**, **Kappa Delta Phi**, **Phi Mu Delta**, **Tau Epsilon Phi**, and **Tau Kappa Epsilon** fraternities, and the **Alpha Xi Delta**, **Kappa Delta Epsilon**, **Omega Zeta Chi**, and **Phi Mu** sororities.

Volunteer Services

Interesting volunteer service projects to assist various aspects of the University, as well as local communities, are coordinated by the Division of Student Affairs. These projects offer students an opportunity to become involved in areas of need in the Portland-Gorham communities. Typical projects include the recording of "talking books" for blind students, work with children at the Cerebral Palsy Center, and activities with children at the Pineland State Hospital.

Student Union and Student Center

A Student Union at Nos. 92 and 94 Bedford Street in Portland and a Student Center at Gorham provide facilities for out-of-class activities or for leisure moments on campus, including lounge space, game rooms, study areas, snack facilities, and meeting rooms where organizations are able to schedule events.





STUDENT SERVICES

Student Health Services

To provide adequate student health services, the Portland campus maintains a Health Center open 8:00 A.M. to 4:00 P.M., Monday through Friday, with a registered nurse in attendance who is available for first aid, consultation, and temporary emergency care. A physician is available from 11:00 A.M. to 12:00 Noon, Monday through Friday, for consultation.

On the Gorham campus, an Infirmary is maintained and open 24 hours a day, 7 days a week, with four full-time registered nurses who are also available for consultation, emergency, and in-patient care. A physician is in attendance Monday through Friday from 1:00 P.M. to 2:00 P.M.

Health and Accident Insurance is available at a nominal fee and covers a portion of off-campus physicians' charges, hospitalization, surgery, and medication.

Placement Operation

Career Planning and Placement offices offer continuous assistance to undergraduates, graduates, and alumni. The Portland office offers services in the areas of business and industry, nursing, and education. The Gorham office specializes in educational and teacher placement. Considered as a whole, the placement program

- encourages early assessment by the individual of his capabilities as they relate to vocational objectives;
- provides information on the broad range of careers available;
- offers counsel on specific vocational opportunities;
- assists the student in obtaining part-time summer employment, as well as full-time career employment;
- aids the individual in evaluating graduate study as an element of his professional preparation;
- acquaints candidates with the recruiting process to the end that they will make a most effective presentation of their qualifications.

The Placement Office on each campus keeps a complete, up-to-date set of credentials on all students who register with that office. The office sets up campus interviews, as well as duplicating credentials for recruiters. Credentials are also forwarded to graduate schools, government agencies and prospective employers. Students seeking information about placement services are welcome to contact the Placement Office at either campus.

Counseling and Testing Center

Students experiencing educational, vocational, emotional, and other personal concerns are offered individual attention by the University counseling specialists. Students may make appointments through the Student Affairs Offices at both campuses, or directly through the Counseling Office in Portland. This service is free of charge.

Although counseling is a major responsibility of the Counseling and Testing Center, students are assisted in whatever personal service they need. For example, they may receive specialized testing through interest inventories, personal preference instruments, aptitude tests, or tests required for admission to graduate schools. These are all conducted at the Counseling and Testing Center.

Foreign Student Advisor

The University maintains an office providing information to assist all students who are not citizens of the United States. The Foreign Student Advisor aids these students in interpreting the administrative regulations of the University; the local, state, and federal laws; the locally accepted standards of conduct; and the expectations and reactions of those he will encounter in the University community.

THE ALUMNI OFFICE OF UMPG

The recent appointment of an Alumni Director for the University of Maine at Portland-Gorham is intended to insure the development of an organization in which all alumni can participate. Groups with particular loyalties to any part of the University may expect assistance in carrying on their activities.

It is expected that a university-wide association may be formed to encompass both the organizations already in existence and those which will take shape in the future. The Gorham Alumni Association, with over 6,500 members and a history of ninety years, now promotes UMPG with special emphasis on the campus "on the Hill." The Tri-Alumni Association, smaller in membership because of Portland's more recent establishment, supports that urban campus in the interest of the University. With increasing numbers of students commuting between the two campuses for classes and other activities, the development of a body of alumni identified with both campuses and possessing loyalty to the unified institution is foreseen. To enable any graduate to continue whatever relationship he feels to any part of the institution, or to the institution as a whole, is the purpose of the Alumni Office of the University of Maine at Portland-Gorham.

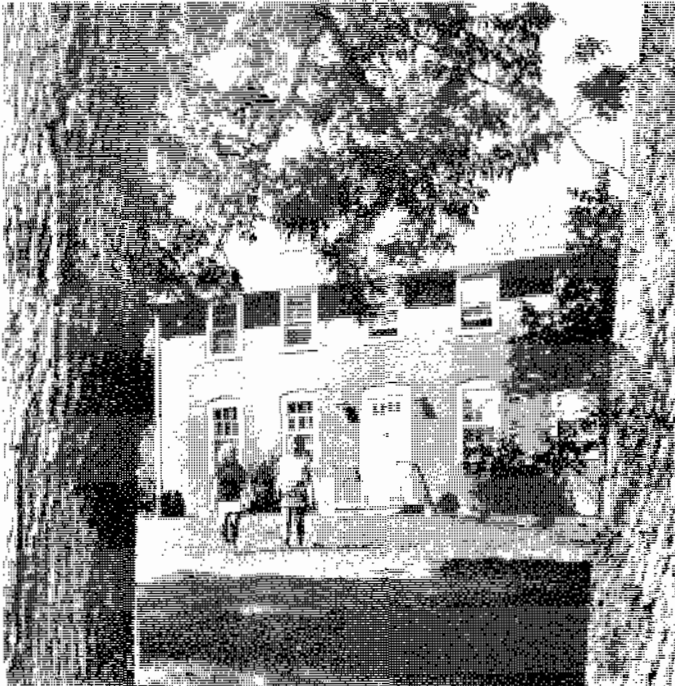
Student Housing

The Gorham campus provides living accommodations for approximately 1,000 men and women students. Both Portland and Gorham Housing Offices are located in the Student Affairs Department to assist students who are either living on or off-campus. Both offices also maintain an up-to-date file of rooms, apartments, and homes which are for rent in the community.

Students wishing housing on the Gorham Campus should file an application with the Housing Office. Priority in residence hall placement is given to students who carry the major portion of their academic program at the Gorham Campus. Others are placed as space is available.

Before a room is assigned to a student in a residence hall, he or she will be required to sign a room contract for the academic year or the remaining part thereof, depending upon the date of admission to the hall. All residence-hall students must also contract for meals, as all dormitory residents are required to contract for both room and meals.

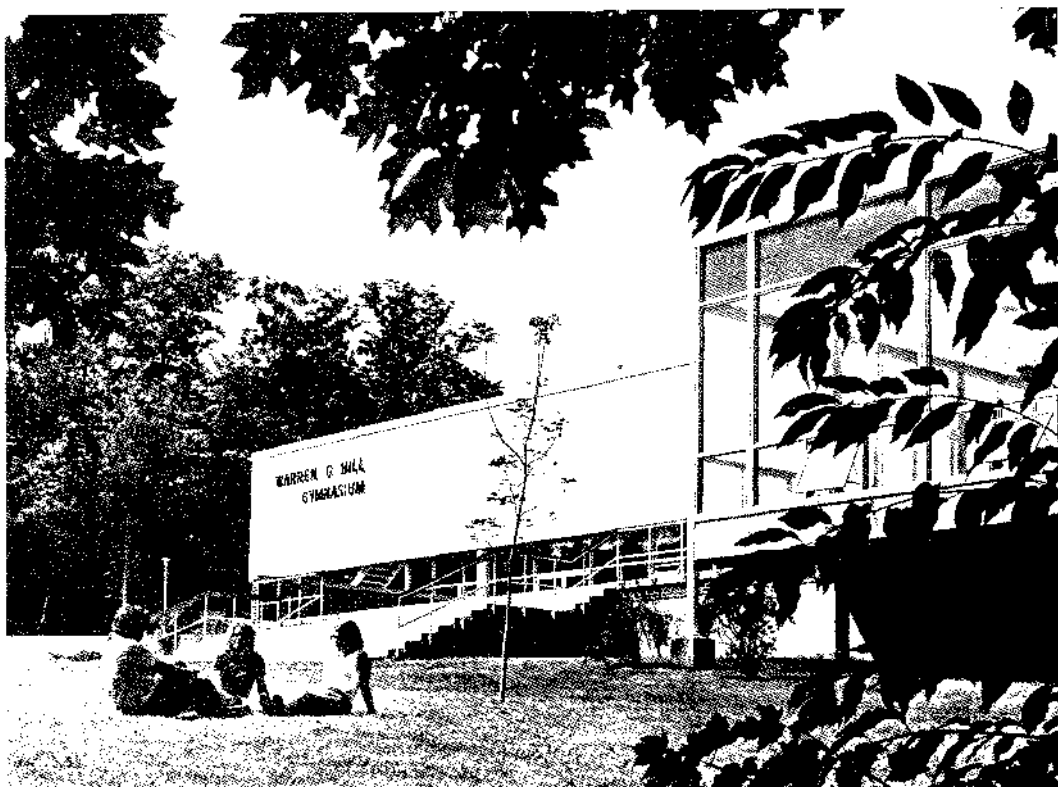
Students living off campus, however, may contract for all their meals at the cafeteria at the Standard rate, listed under "Financial Information," or they may make their own arrangements. Individual meals or snacks may be purchased at either the Gorham cafeteria or the Portland cafeteria during the hours when these cafeterias are open to commuting students.



Tower
Residences ►

McLellan House — Women's Honor Residence





Warren G. Hill Gymnasium at Gorham

INTERCOLLEGIATE ATHLETICS FOR MEN

Intercollegiate athletics, an integral part of the physical education program, provides special opportunities to develop physical skills and to encourage leadership and sportsmanship among outstanding athletes.

As one of the members of the New England State College Athletic Conference, the University of Maine at Portland-Gorham competes successfully in varsity cross country, soccer, sailing, fall golf, basketball, skiing, baseball, tennis, golf, track and field. A freshman basketball schedule completes the present program.

As a member of the National Association of Intercollegiate Athletics (District 32), the college has participated in district play-offs in soccer, basketball, cross country, golf, and tennis. The University of Maine at Portland-Gorham is also a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference, and the New England College Athletic Conference. The Warren Hill Gymnasium on the Gorham campus and the new physical education building on the Portland campus are two of the best designed and adequately equipped sports facilities in the area.

INTERCOLLEGIATE ATHLETICS FOR WOMEN

To provide opportunities for the more highly skilled students, there are varsity and, in some sports, junior varsity teams in field hockey, archery, tennis, volleyball, badminton, basketball, skiing, gymnastics, bowling, and lacrosse. Operating under the Division for Girls and Womens Sports guidelines and

the policies of the Commission on Intercollegiate Athletics for Women. University of Maine at Portland-Gorham teams compete against other Maine colleges and nearby New England colleges. In addition, state intercollegiate tournaments are sponsored by the Maine Association for Physical Education of College Women and are held in all the individual sports above as well as in volleyball and basketball. UMPG teams also have the opportunity to qualify for and participate in regional and national tournaments.

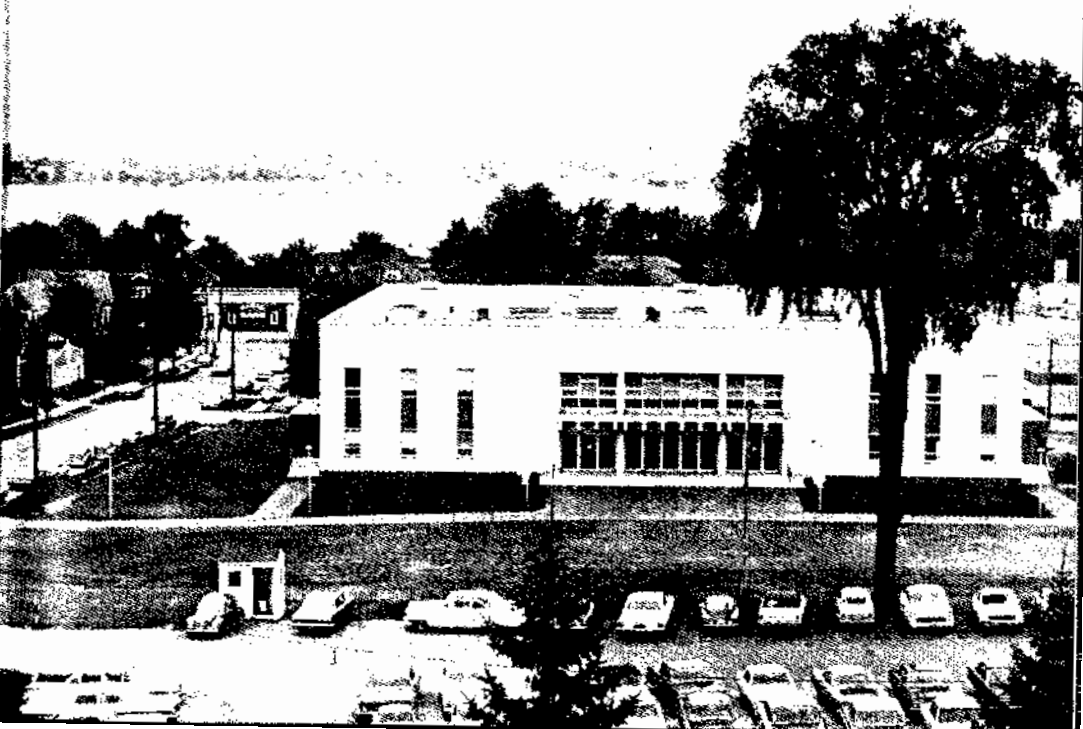
INTRAMURAL SPORTS FOR MEN

Intramural activities are voluntary and are organized to provide activity in as many different sports as a student interest warrants. Special interest groups are encouraged to approach the intramural director for assistance in organizing club sports. When appropriate, competition will be arranged on an extramural basis to provide competition with intramural teams of other colleges and university campuses.

A partial list of intramural sports includes: soccer, tennis, golf, bowling, flag football, cross country, table tennis, basketball, wrestling, badminton, volleyball, softball, track and field, cycle racing, handball, squash, paddleball, foul-shooting, and archery.

Team play, sportsmanship, and individual participation are encouraged throughout the programs. Trophies are awarded to individual members of the championship team in each sport.

The Portland Gymnasium



Any student or organization may organize a team and enter it for competition. Students are encouraged to form teams consisting of students from the same high school, physical education class, fraternity, neighborhood, dormitory, major area, or rooming house. Independent players who have difficulty finding a team in which to participate should report to the Intramural Office for assistance. All business pertinent to intramural activities must be carried on in the Intramural Office, a branch of which is located in the gymnasium building on either campus. In addition to such organized sports, the gymnasias on both campuses are open regularly for drop-in activities.



WOMENS RECREATION ASSOCIATION

The purposes of WRA are varied and are intended to meet the needs and interests of all women students. The Womens Recreation Association is open to all women who are enrolled at UMPG. Student officers and faculty advisors, representing each campus, organize and carry out the program of activities. The recreational activities offered include intramural sports, such as badminton, basketball, tennis and volleyball, modern and folk dance, cheerleading, and clubs in the areas of gymnastics and skiing.



Events of the Arts

THE ANNUAL CONCERT-LECTURE SERIES

The University of Maine at Portland-Gorham offers an annual Concert-Lecture Series, with programs held partly at the Gorham Campus and partly at the Portland Campus. Well-known touring companies, such as the National Shakespeare Company and the Turnau Opera Players, present drama and opera; orchestral groups, instrumental soloists, and singers perform in concerts; poets, writers, and touring speakers on relevant issues give public lectures, which are often preceded by afternoon workshops or informal seminars open to interested students. Nearly all these programs are open to registered students without charge, with a limited number of tickets available to the general public at a nominal charge.

Programs at the Gorham Campus are usually scheduled in either Russell Hall or Bailey Hall Auditorium, while Portland programs are held in either Luther Bonney Auditorium or the Portland Campus Gymnasium.

STUDENT PERFORMANCES

Drama groups at both the Gorham and Portland Campuses offer one or more public presentations each semester. The Art Theatre at the Portland Campus has developed into a significant campus and community activity, emphasizing contemporary experimental theatre. The Treehouse Players of the Gorham Campus have won critical acclaim for the polished and almost professional quality of their productions. During the summer of 1971 the Players were selected to present USO performances before American military units in Thule, Greenland, Labrador, Newfoundland, and Iceland.

FILM SERIES

The weekly screenings of the International Film Series at the Gorham Campus provide students and members of the public an opportunity to see many of the most famous films that have ever been produced, both in this country and abroad. The Gorham showings are presented one evening a week, usually on Thursdays, in Bailey Hall Auditorium. Portland screenings of similar films are presented frequently on Friday evenings in Luther Bonney Auditorium.

ART SHOWS AND LECTURES

The University Art Gallery on the Gorham Campus and the Quattro Gallery of the library on the Portland Campus both present a nearly continuous showing of professional works, interspersed with spring exhibitions of paintings, prints, and drawings produced by advanced or graduating students. The Quattro Gallery may be visited during the day and evening whenever the library is open. The University Art Gallery is normally open from 10 a.m. to 5 p.m. daily and from 2 to 5 p.m. on Sundays. In addition to these exhibits, occasional public lectures are presented by members of the Art faculty or visiting artists.



Financial Assistance

The University of Maine at Portland-Gorham offers various forms of financial assistance to students who show that they have a definite financial need if they are to continue their education.

Meeting the financial obligations of a college education is primarily the responsibility of the student and his parents. It is important that each student and his parents work out a financial plan for the period of time the student will be in the University. When such a plan indicates that there is need for financial aid, the University of Maine at Portland-Gorham may assist with loans, scholarships, or part-time work opportunities.

WHO MAY APPLY

Any full-time student enrolled in a program leading to a degree or any candidate applying for admission to the University of Maine at Portland-Gorham may apply for financial aid.

HOW TO APPLY

Prospective first-year students or transfer students should obtain a College Scholarship Service Parents' Confidential Statement from their high school guidance counselor or from any student aid office of the University of Maine. This application should be completed and forwarded to the College Scholarship Service as directed on the application.

Special care should be taken to indicate on the application which campus of the University the student is interested in.

Students who have already enrolled and have completed a semester or more of academic work at the University of Maine at Portland-Gorham should obtain an application through the Student Aid Office.

Students who are married, 23 years of age or over, or veterans of the armed services should indicate this fact when requesting an application. The application should be completed and forwarded directly to the Student Financial Aid Office, the University of Maine at Portland-Gorham.

WHEN TO APPLY

Just prior to the Christmas vacation the University Aid Office usually conducts a series of student aid information meetings at which students may obtain applications. Students applying for admission to the University of Maine at Portland-Gorham must submit the College Scholarship Service forms

at the same time that they apply to the University. First-year recipients will be notified during the spring semester of their senior year in high school.

Students currently enrolled at Portland Community are required to submit their application for the coming academic year on or before January 1. Recipients will be notified on or about July 15. All students should remember that in order to be considered for aid, applications must be completed each year.

CONDITIONS FOR AWARDS

Students may be granted financial assistance if a definite need is indicated by the Parents' Confidential Statement and in an evaluation made by the Financial Aid Office.

Students on academic or disciplinary probation will not be considered for any form of financial assistance, and funds may be withdrawn if a student is placed on academic or disciplinary probation.



SOURCES OF FINANCIAL ASSISTANCE

GRANTS AND SCHOLARSHIPS

The University of Maine at Portland Gorham participates in the Educational Opportunity Grants Program. Funds are provided by the federal government for grants to students who have exceptional financial need.

University Scholarships are granted annually to approximately 300 students who are in good academic standing, and have a definite financial need.

The Simmons Foundation, Inc., Grant Program consists of funds awarded annually to approximately 15 students who have demonstrated financial need.

Recipients of the following Special Scholarships are selected by the Student Financial Aid Office according to the qualifications established by the donors. These awards are based on financial need, academic excellence, and outstanding campus leadership:

Class of 1950	American Association of University Professors Scholarship
Given in memory of Barbara Payne	
Class of 1963	ARA Self Reliance Award
Given in memory of Nancy Chandler	Simmons Foundation Grant
Alumni Association	Mabel Kennedy Student Nursing Grant
Presented in memory of Walter E. Russell	Carl Beyer Law Student Grant
Alumni, Southern Branch	George D. Woodward Accounting Student Grant
Alumni, Portland Branch	Roland Irish Business Administration Grant
Charles F. Martin	Mabel S. Davis Grant
Gertrude L. Stone	Maine Medical Center — Combined Women's Boards Nursing Grant
Frances Howarth	Lucy Stone League Law Student Grant
Frank F. Brown	James B. Langley Law Student Grant
Fannie E. Gray	Israel Bernstein Law Student Grant
Hervey Hanscom	Kenneth and Marjorie C. Baird Law Student Grant
Bailey-Jenkins	Hollis W. Moore Industrial Arts Award
Given by Richard Jenkins in memory of his parents and honoring Dr. Bailey	Portland Junior College Grant
Richard Goodridge	Phillip I. Milliken Grant
Gertrude Prinn Scholarship	
Woodward-Alumni Scholarship	
Delta Chi Fraternity Scholarship	
Kappa Delta Epsilon Sorority Scholarship	

LOANS

The University of Maine at Portland-Gorham participates in the National Defense Student Loan Program. Funds are provided by the federal government. Students may borrow funds from the government under this program with interest and payments deferred until after completion of their degree work. Loans average approximately \$300 for an academic year. Limited funds require that loans be made on the basis of need.

The University of Maine at Portland-Gorham is a participating member in the United Student Aid Fund, Inc., Loan Program. Under this program students may borrow money directly from participating local banks with payments and interest deferred until after the completion of their degree. Students may borrow up to \$1,000 annually as undergraduates and up to \$1,500 annually as graduate students for a total not to exceed \$7,500. Applications for these loans are to be secured directly from participating banks and then submitted to the University Aid Office.

There are a number of revolving short-term emergency loan funds on both the Portland and Gorham campuses. These funds should be applied for through the Student Affairs Offices on either campus. Normally loans are not made in excess of \$40.

WORK

The University of Maine at Portland-Gorham participates in the College Work-Study Program. Funds are provided by the federal government and the University to employ students both on and off campus. Student earnings through this program are to be used to help defray educational expenses. Special consideration in hiring is given to students from low income families.

The University operates another work program referred to as Student Employment. This program is funded by the University and operates in the same way as the College Work-Study Program described above.

NURSING STUDENTS

The University of Maine at Portland-Gorham participates in the federally funded Nursing Loan and Scholarship Program. In order to qualify for either of these programs, a nursing student must be enrolled in an accredited degree program, such as that of the UMPG School of Nursing. Awards of both loans and scholarships are based on student need. Interest and payments may be deferred until after completion of the degree program. There are provisions for cancelling a portion of this loan for students who pursue a career of nursing.

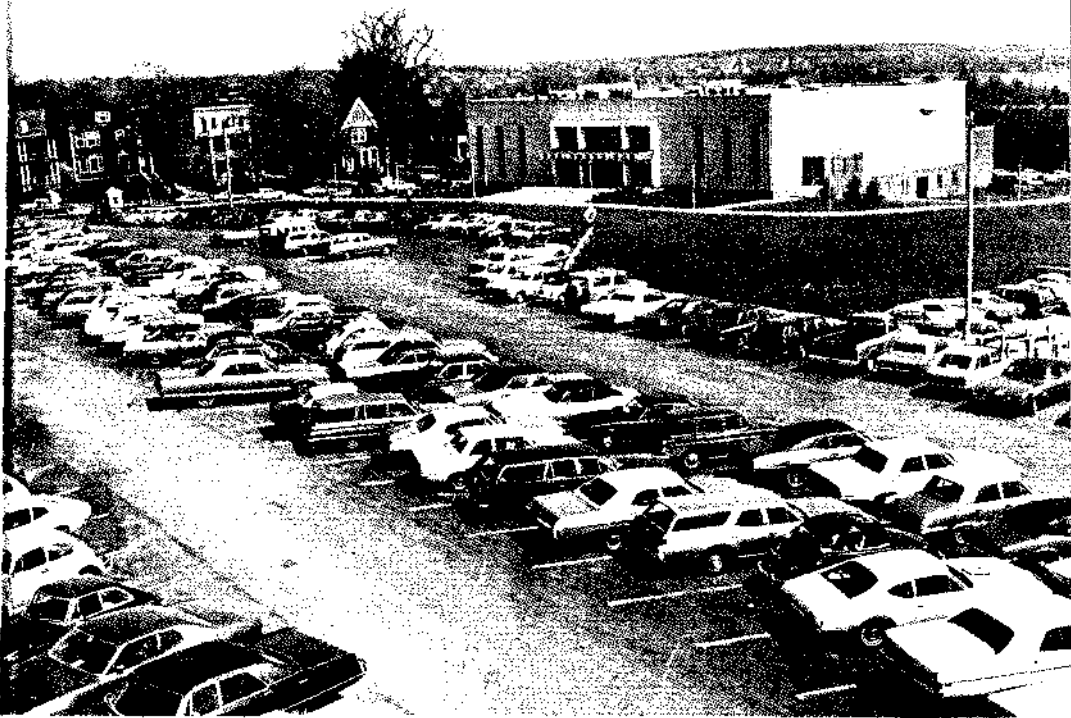
LAW ENFORCEMENT STUDENTS

The Law Enforcement Education Program offers both loans and grants for college study by students preparing for careers connected with criminal justice and by persons already employed by police departments, courts, and correctional agencies. The funds are provided by the federal government and are awarded on the basis of financial need and certain priority quotas.

Student Regulations

STUDENT HANDBOOK

The Student Affairs Office of the University of Maine at Portland-Gorham compiles the official **Student Handbook**, which explains such matters as campus policies, the governance structure, and the functions of various campus offices. The handbook also contains the UMPG Disciplinary Code, which is designed to protect the rights of all individuals in the University. The handbook is distributed to all registered students.



MOTOR VEHICLE REGULATIONS

In the interest of safety for all students, policies regulating the use of motor vehicles on the UMPG campuses are strictly enforced. The Plant Department distributes campus maps showing parking areas, together with regulations governing the use of motor vehicles, to each student who registers for classes.

Because of limited parking space, freshmen and sophomores classified as resident students are not permitted to have or operate motor vehicles on the Gorham Campus.

All other students are permitted to park their motor vehicles only in the proper designed areas.

UMPG Academic Policies

1971-1972

GENERAL REQUIREMENTS FOR ALL BACCALAUREATE CANDIDATES

The General Education Requirement of UMPG consists of 30 semester-hours, with at least 6 semester-hours in any interdisciplinary course, such as those offered by SCOGIS with a SCO prefix-code. The remaining 24 hours consists of four 6-hour groups of courses, each group either interdisciplinary or chosen from a different one of four areas: (1) Humanities, (2) Fine and Applied Arts, (3) Science and Mathematics, and (4) Social Sciences. Details as to the prefix-codes of acceptable course selections are given on the inside front cover of the catalog.

Departmental courses in the student's major may not be applied toward fulfillment of the General Education Requirement.

A student who has matriculated before September 1971 may continue his program under the requirements at force at the time of his matriculation, or he may elect to complete the General Education Requirements under the provision stated above.

The Physical Education Requirement of UMPG requires all freshmen and transfer students, both men and women, 20 years of age or under, to satisfy the University's requirement of one year of physical education. Further details are given on the inside front cover of the catalog.

ATTENDANCE POLICY

The attendance policy is left to the discretion of the individual faculty member. Each semester, it is the responsibility of the faculty member to inform the students in each class of his attendance requirements for that class. Whenever, in the opinion of the instructor, a student's absences impair the quality of his work, the instructor will report this fact to the Dean of the appropriate School or College.

EXAMINATION POLICY

The examination policy is left to the discretion of the individual faculty member to inform the students in each class of his examination requirements for that class. A final course-evaluation will be scheduled for all classes at a designated time and place during examination week.

Usually, two to four preliminary examinations are administered in each course and count heavily on the final grade. Final examinations are normally scheduled at the end of each semester according to a regular schedule. Finals cannot be taken before the regularly scheduled time.

ABSENCE FROM A FINAL EXAMINATION

An absence from a final examination must be made up during the semester immediately following the one in which the absence occurred, unless the time limit has been extended by the Dean. Courses not made up within the time limit are automatically marked as F.

Students who miss a final examination and are failing the course at the time may be given the grade of F instead of being marked I for the semester grade. A student who misses a final examination should immediately contact the instructor to apply for a special examination.



GRADE REPORTS

Regular grade reports are sent to all students at the end of each semester. Final grades cannot be secured in advance from the Registrar.

At the middle of each semester deficiency reports are made to Freshmen and also to their parents in cases where Freshmen are 20 years of age or younger. Parents are also notified when academic action is taken, but all reporting to parents is omitted in the case of students who are over 20 or married.

THE GRADING SYSTEM

Grades at the University of Maine at Portland-Gorham are given in terms of letters representing levels of achievement. The basis for determining a grade is the relative extent to which the student has achieved the objectives of the course. The student's work in each course is graded as follows:

A — High honors.

B — Honors.

C — Satisfactory, successful, and respectable meeting of the course objectives.

D — Low-level work, below the average required for graduation for an undergraduate, and a failing grade for a graduate student. In addition, individual departments may limit the number of D grades accepted, as stated in the departmental sections of this catalog. The paragraph below on "Minimum Grade Policy" should also be noted.

F — Failure to meet the course objectives.

P — Pass: given only for certain courses open to the pass-fail option.

I — Incomplete: a temporary grade given when the student, due to extraordinary circumstances, has failed to complete required work. Required work must be completed and a grade submitted in the semester following the semester in which the I grade was received. An I which is not removed during this period becomes an F.

WP — Withdrawal while passing: Approved withdrawal from a course, after the end of the first five weeks, when the student is doing satisfactory work to the date of recommendation for the withdrawal. The WP grade is not considered in grade-point average computation.

WF — Withdrawal while failing: Approved withdrawal from a course, after the first five weeks, when the student is doing failing work to the date of recommendation for the withdrawal. The WF grade is treated as an F in grade-point average computation.

GRADE-POINT AVERAGES

The academic standing of each student is computed by the Registrar at the end of every semester. The following table represents the rating scale:

A — 4 grade points per credit hour

B — 3 grade points per credit hour

C — 2 grade points per credit hour

D — 1 grade point per credit hour

F — 0 grade points

s
a
s

To compute the grade-point average for a semester, first multiply the grade points earned in each course by the number of credit hours assigned to that course. The resulting product is the number of quality points for that course. Then divide the total number of quality points earned during the semester by the total number of credits carried in that semester. The result is carried out to two decimal places to produce the grade-point average for that semester.

To compute the cumulative grade-point average, divide the total quality points earned by the total credits carried in all semesters. If a course has been repeated, the initial grade remains on the record but does not count toward the grade-point average.

DEAN'S LIST

At the end of each semester, full-time students with grade-point averages of 3.2 or better are placed on the Dean's List.

MINIMUM GRADE POLICY

Minimum cumulative grade-point averages for all undergraduate programs at UMPG are as follows:

	<i>Minimum Cumulative Grade-Point Averages</i>	
	<i>For Good Standing</i>	<i>For Probationary Standing</i>
Freshmen: end of 1st semester	1.35	1.15
Freshmen: end of 2nd semester	1.60	1.35
Sophomores: end of 1st semester	1.80	1.60
Sophomores: end of 2nd semester	2.00	1.80
Juniors & Seniors: end of each semester	2.00	1.80

Students with majors or minors in English, History, or the Social Sciences Area, including both those in the baccalaureate program of the College of Liberal Arts and also those in the Secondary Education program of the School of Education, must achieve at least six credits with grades of B or better in their major or minor requirements. No grades of D will count toward fulfillment of the major or minor requirements in these programs. No required course may be repeated more than once.

PASS-FAIL OPTION

Outside of courses in his major or minor area of concentration, or courses taken to satisfy UMPG General Education Requirements, an undergraduate student is permitted to register for a maximum of six hours of pass-fail credits in any one semester, up to a maximum of 18 hours of the total credit-hours required for graduation.

An undergraduate in the School of Education may register for a total of 18 hours of pass-fail credits in addition to possible pass-fail credits for Student Teaching and the related seminar. Student Teaching and the related seminar are considered as a single bloc for election of the pass-fail option. Required courses in the Core Curriculum and in the student's major may not be taken pass-fail; and only one course in the minor may be taken pass-fail.

ADD-DROP

Once a student has completed his registration, a period of one week is permitted for dropping or adding courses. This procedure permits a student to make the necessary course changes in his planned curriculum. Also, during the first five weeks of the term a student may drop any course without having a grade recorded. All Add-Drops are initiated at the Registrar's Office. All students who register for a course and withdraw will be graded WF unless they officially complete the procedure of dropping the course.

Any student who finds that his name is not on the instructor's official list should check immediately with the Registrar's Office to make necessary corrections in his registration records.



CHANGE OF MAJOR WITHIN A SCHOOL OR COLLEGE

is Permission to change from one major to another is granted only by the Office
nt of the Dean and the head of the department in which the student expects to
ng major. A form for the change must be obtained from the Dean's Office. A
ng change-of-major form must be filed with both the Dean's Office and the
all Registrar's Office.

CHANGE OF COLLEGE OR SCHOOL

st Information on the procedure for change of College or School may be ob-
r- tained from the Admissions Office.

WITHDRAWAL FROM THE UNIVERSITY

The procedure for withdrawal from the University is to secure an official withdrawal slip from the Registrar's Office. The student will then be instructed to take the slip for signature to the several campus offices concerned. Once he has obtained the necessary signatures, he will return the slip to the Registrar's Office for checking. After it is checked and found satisfactory, he will leave the slip at the Business Office.

If a student withdraws from the University after the first five weeks of classes, he will receive a WP in courses in which he is passing and a WF in courses in which he is failing. The WF grade is treated as an F in grade-point average computation.

Withdrawn students who wish to re-enter the University must apply to the Director of Admissions for re-admission.

SUSPENSION

Students may be suspended from the University either by the University Committee on Academic Standing or by the University Disciplinary Committee. Academic suspension is automatic when a student receives a semester average below 1.0. Other standards vary from college to college and from class to class. Students are urged to consult advisers to learn the standards that apply to them. For details about disciplinary suspension and dismissal, consult the "Disciplinary Code," published by the Office of Student Affairs.

PROBATION

A student may be placed on academic probation by the Committee on Academic Standing if he is making unsatisfactory progress toward meeting graduation requirements. He is liable to be suspended at the end of the following semester unless substantial progress is made. Since exact standards vary somewhat from college to college and from class to class, students are urged to discuss with advisers in the appropriate academic Dean's Office the record they should maintain to avoid probation or suspension.

A student may remove himself from probation through Summer Session courses if his courses have been approved in advance by his adviser and the appropriate Dean.

CLASS MEMBERSHIP

Since a minimum of 120 credit-hours is required for graduation in most four-year programs, at least 30 credit-hours should be earned each year. To progress satisfactorily through college, a student is expected to carry at least 15 credit-hours each semester. Permission must be obtained from the advisor and the appropriate Dean if a student wishes to carry less than 12 or more than 18 credit-hours.

For standing as a sophomore, a student shall have completed at least 19 percent of the hours required for graduation, for junior standing 44 percent, and for senior standing 69 percent, except in the School of Nursing wherein the respective percentages are 25 percent, 50 percent, and 75 percent.

The requirements by classes, schools and college are:

<i>School or College</i>	<i>Required Number of Credit-Hours</i>			
	<i>Sophomore</i>	<i>Junior</i>	<i>Senior</i>	<i>Total to Graduate</i>
Liberal Arts	23	53	83	120
Business and Economics				
Baccalaureate Programs	23	53	83	120
Two-Year Business	23	—	—	62
Education				
Music Education	26	60	94	136
Industrial Arts Education	25	55	88	127
All Other Programs	23	53	83	120
Nursing	30	60	90	120

GRADUATION REQUIREMENTS

A candidate for a bachelor's degree must (a) receive passing grades in all courses required by the University, his school or college, and his major department; (b) accumulate the number of credit hours required by the school or college in which he is registered; (c) achieve an accumulative average of not less than 2.00; (d) meet the requirements of his major department.

GRADUATION WITH DISTINCTION

Baccalaureate Degrees with Distinction are conferred at commencement for the following attainments in rank.

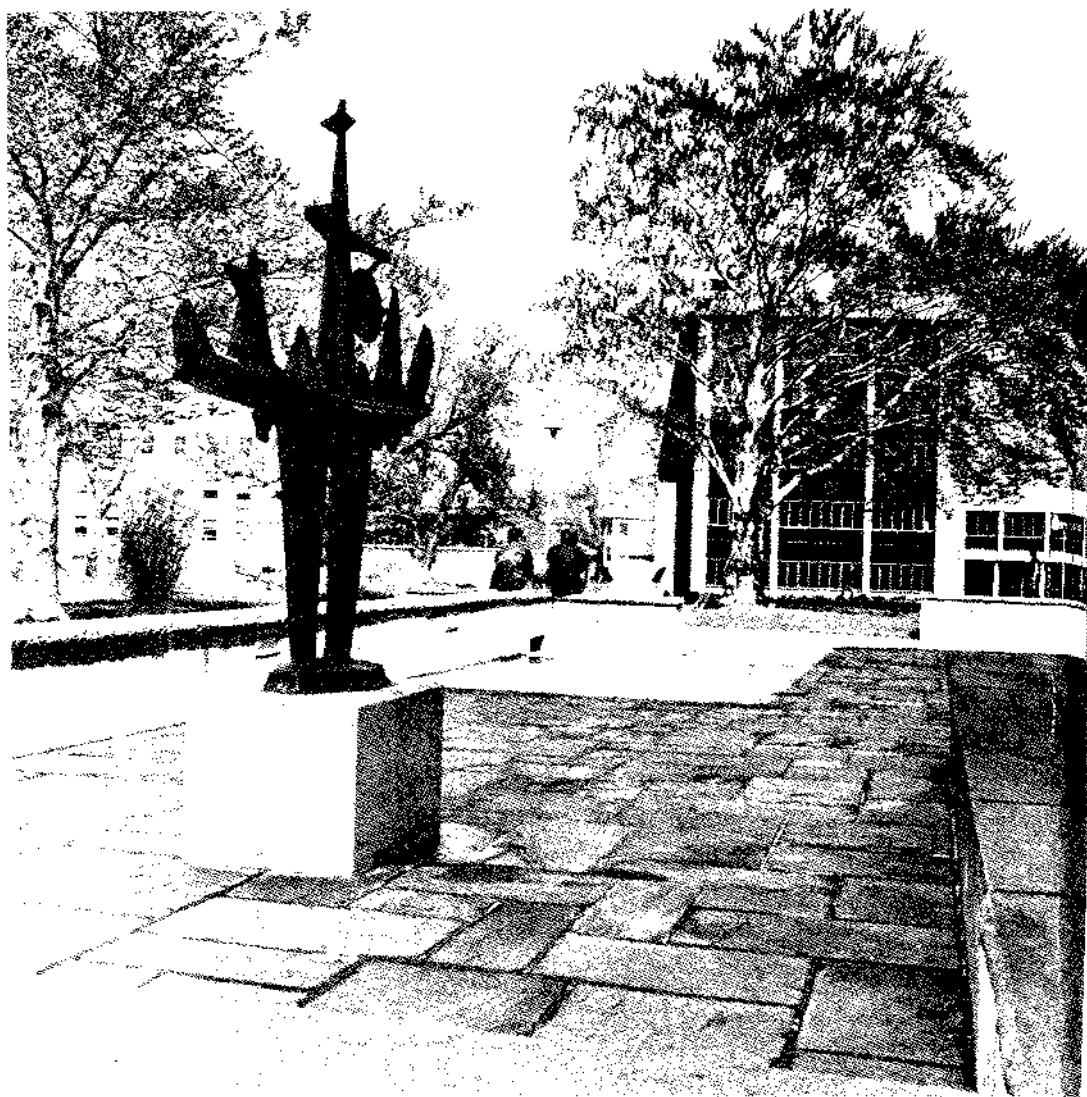
Seniors having an average grade of 3.50 or above will be graduated with highest distinction, 3.25 to 3.49 with high distinction, and 3.00 to 3.24 with distinction if they meet the criteria listed on the next page.



The average grade is based on the completion of at least seven-eighths of the required hours, which must include at the time of graduation three years of resident study at the University of Maine at Portland-Gorham. Candidates must take their senior year at the University of Maine at Portland-Gorham or receive permission from their Dean to complete work elsewhere.

GRADUATION WITH HONORS

A degree with Honors, with High Honors, or with Highest Honors is awarded to seniors who successfully complete the Honors Program, which is described in a section of the catalog immediately before the departmental listing of course descriptions for the College of Liberal Arts.



College of Liberal Arts

ROBERT A. ESTES, Acting Dean
WILLIAM L. WHITING, Associate Dean

The College of Liberal Arts offers programs of study and service to all undergraduate students of the University. Students enrolled in the School of Business and Economics, the School of Education, or the School of Nursing all must take a number of courses offered by the College of Liberal Arts to meet the requirements for their baccalaureate degrees. A student with a major in one of the Liberal Arts departments or disciplines may take all his academic work in the College of Liberal Arts, with the exception of the six hours of interdisciplinary work stipulated by the General Education Requirements of the University.

DEPARTMENTAL ORGANIZATION

The College of Liberal Arts at UMPG is composed of the following departments, each of which is described in turn on the following pages:

Art Department
Biological Sciences Department
Criminal Justice Department
English Department, including the disciplines of English and of Comparative Literature
Foreign Languages and Classics Department, including the disciplines of Literature and Civilization in English Translation, Classics (including Greek and Latin), French, German, and Spanish
Geography and Anthropology Department
History Department
Mathematics Department
Music Department
Philosophy Department
Physical Sciences and Engineering Department, including the disciplines of Astronomy, Chemistry, Earth Science, Engineering, General Science, Physical Science, and Physics
Political Science Department
Psychology Department
Social Welfare Department
Sociology Department
Theatre-Speech Department

BACHELOR OF ARTS PROGRAMS

Programs of study leading to a Bachelor of Arts degree are available for students who meet the admission standards for the programs in question, who satisfy the General Education Requirements of the University, and who desire to concentrate in one of the following major areas:

Art	French	Psychology
Biology	History	Social Welfare
Economics	Mathematics	Sociology
English	Philosophy	Theatre-Speech
	Political Science	

BACHELOR OF SCIENCE PROGRAM IN CRIMINAL JUSTICE

A Bachelor of Science degree with a major in Criminal Justice may be earned through a new program offered by the College of Liberal Arts. Details are given at the beginning of the course description section of the Criminal Justice Department.

ACADEMIC MAJORS

PROVIDED BY THE COLLEGE OF LIBERAL ARTS

FOR THE SCHOOL OF EDUCATION

The College of Liberal Arts cooperates with the School of Education by offering various programs enabling students of Education to concentrate in any one of a number of subject areas, as explained in the introductory section of the course descriptions of each of the following departments of the College of Liberal Arts:

<i>Liberal Arts Department</i>	<i>Programs for School of Education Students</i>
Art	Art Education
Biological Sciences	Biological Science Major (Secondary Education) Biological Science Minor (Secondary Education) (Certain biological sciences are also included in the Science Area Major and Minor for students of Education, as listed under Physical Sciences.)
English	English Major and Minor (Secondary Education) English Major and Minor (Elementary or Kindergarten-Primary Education)
Foreign Languages	French Major (Secondary Education)
Geography-Anthropology	Social Science Area Major (Secondary Education) Social Science Area Major and Minor (Elementary or Kindergarten-Primary Education) Geography Minor (Elementary or Kindergarten-Primary Education)
History	History Major and Minor (Secondary Education) History Major and Minor (Elementary or Kindergarten-Primary Education)
Mathematics	Mathematics Major and Minor (Secondary Education) Mathematics Major and Minor (Elementary or Kindergarten-Primary Education)
Music	Music Education
Physical Sciences and Engineering	Science Area Major (Secondary Education) (Certain biological sciences are included in this program.) Science Area Minor (Elementary or Kindergarten-Primary Education) (Certain biological sciences included)
Theatre-Speech	Theatre-Speech Major (Secondary Education)



REQUIREMENTS FOR DEGREE PROGRAMS

Three levels of requirements must be satisfied before candidates can be awarded degrees. **Departmental Requirements** have to do with the courses required for specific majors. **School or College Requirements** are set by the school or college in which the candidate is enrolled. **General Requirements** pertain to all baccalaureate degree candidates at the University of Maine at Portland-Gorham.

DEPARTMENTAL REQUIREMENTS

The Departmental Requirements for majors in each of the programs listed in the preceding paragraphs are defined in the paragraphs immediately preceding the course descriptions for the various departments of the College of Liberal Arts. Whenever a major program leading to the degree of Bachelor of Arts is offered directly by a department, and another program meeting the academic major needs for a candidate for a Bachelor of Science degree for a student in the School of Education is also available, both major programs are defined in this departmental section of the College of Liberal Arts.

SCHOOL OR COLLEGE REQUIREMENTS

Students in the School of Education whose program requires them to satisfy one of the Departmental Requirements for academic majors, as listed in the departmental section of the College of Liberal Arts, must also meet the School of Education requirements set forth under the section of the catalog dealing with the School of Education.

At the time of the printing of this catalog in August 1971, students in the College of Liberal Arts are required to meet no additional College Requirements beyond the Departmental Requirements and General Requirements. The College of Liberal Arts may, however, adopt added College Requirements prior to the publication of the next catalog. If this should happen, information relative to such additional requirements may be obtained from the office of the Dean of Liberal Arts.

GENERAL REQUIREMENTS FOR ALL BACCALAUREATE DEGREE CANDIDATES AT UMPG

The General Education Requirement of UMPG consists of 30 semester-hours, with at least 6 semester-hours in any interdisciplinary course, such as those offered by SCOGIS with a "SCO" prefix-code. The remaining 24 hours consists of four 6-hour groups of courses, each group either interdisciplinary or chosen from a different one of the four areas below, with course selections restricted to the prefix-code designations listed.

AREA 1: HUMANITIES

CLS (Classics)	FRE (French)	LAT (Latin)
CPEN (Comparative Literature)	GMN (German)	PLY (Philosophy)
ENG (English)	GRK (Greek)	SPN (Spanish)

AREA 2: FINE AND APPLIED ARTS

ARTH (Art History and Appreciation)	MUS (Music)
ARTS (Art Studio Courses)	TSP (Theatre-Speech)
DNCE (Dance)	

AREA 3: SCIENCE AND MATHEMATICS

ASTR (Astronomy)	GEOL (Geology)	OCN (Oceanography)
BIO (Biology)	GSCI (General Science)	PHYS (Physics)
CHEM (Chemistry)	MET (Meteorology)	PSCI (Physical Science)
ESCI (Earth Science)	MS (Mathematics)	

AREA 4: SOCIAL SCIENCES

ANY (Anthropology)	GEOG (Geography)	PSY (Psychology)
CJ (Criminal Justice)	HIST (History)	SOC (Sociology)
ECON (Economics)	POL (Political Science)	SWE (Social Welfare)

Department courses in the student's major area may not be applied toward fulfillment of the General Education Requirement. In addition, students in the School of Business Administration, the School of Education, or the School of Nursing may be further restricted in course selections from one or more of the four areas because of the specific requirements of the program in which they are enrolled.

A student who has matriculated before September 1971 may continue his program under the requirements in force at the time of his matriculation or he may elect to complete the General Education Requirements under the provisions stated above.

The Physical Education Requirement of UMPG requires all freshmen and transfer students, both men and women, 29 years of age or younger, to satisfy the University's requirement of one year of physical education. Students over 29 years of age are exempt from physical education. Veterans and students with physical disabilities are not automatically exempted and should contact the office of the Dean of the School of Education for information on exemptions. Students who can demonstrate an acceptable level of skill and knowledge in a particular activity in physical education must first register for the activity and make arrangements with the instructor for an evaluation.

UMPG SYSTEM OF COURSE CODING

000-098	No degree credit
10-98	Two digits indicate Associate Degree program.
100-198	Introductory level
200-298	Intermediate level
300-398	Intermediate level
400-498	Senior level; others by permission
500-598	Graduate level
600-698	Professional graduate level, as in the School of Law

The Honors Program

H. DRAPER HUNT, Secretary

Normally, an incoming freshman will be invited to join the Honors Program on the basis of his intellectual curiosity and initiative as displayed in his high school work, as well as on the basis of his C.E.E.B. test scores. Already enrolled students who have demonstrated intellectual curiosity and ability and have maintained a point average of 3.0 or better will be invited to join the program as second-semester freshmen or sophomores. Some few exceptionally qualified juniors may be admitted to the program.

To graduate with honors, a student must successfully complete (with a grade of B or higher) a minimum of four semesters of Honors work, including both semesters of the senior year (HRS 450 and 460) and at least one semester of sophomore group tutorials (HRS 250, 260). A student who has successfully completed the Honors Program will be awarded his degree with honors in one of three categories: Honors, High Honors, Highest Honors, depending upon three factors: the quality of the student's senior thesis or research project; his performance on the comprehensive oral examination; and his accumulative average over seven semesters.

The promising student will find in the special independent study program, as well, flexibility and encouragement for his intellectual curiosity.

Early independent study allows a qualified freshman or sophomore to substitute projects carried out under the guidance of professors in appropriate disciplines, in the place of some general, normally required courses.

COURSE DESCRIPTIONS

HRS 150 Distinguished Freshman Seminar

Discussions and demonstrations displaying the range and nature of liberal arts and sciences. Offered in the fall semester. Limited to selected freshmen. Three credit hours

Mrs. Duclos, Mr. Reuter

HRS 160 Honors Colloquium

Readings and discussion on the basic concepts of Western civilization. Offered in the spring semester. Limited to selected freshmen. Three credit hours

Staff

HRS 250 Honors Group Tutorial I

Oral and written reports under tutorial direction. The student is expected to read widely in areas outside his normal course program and particular field of interest. The books are selected from an honors reading list, and each group tutorial does substantial reading in three or four areas of thought each semester. Open to sophomores and those students admitted to the Honors program at the beginning of the junior year. Three credit hours

Mr. Albee, Mr. Wilson

HRS 260 Honors Group Tutorial II

A spring semester course, similar in description to HRS 250. Open to sophomores and to those students admitted to the Honors Program at the beginning of the junior year. Three credit hours

Staff

HRS 300 Honors Seminar

Discussion groups in such fields as the arts, philosophy and history of science, and the study of society. Content varies from year to year. Normally taken in the junior year. Three credit hours

Staff

HRS 350 Honors: Specialized Studies I

Individual tutorial work in the student's major field. The student will read both in depth and breadth in his chosen area of concentration under faculty guidance, and will select an approved thesis topic by the end of the course. Open to juniors. Three credit hours

Staff

HRS 360 Honors: Specialized Studies II

A spring semester course, similar in description to HRS 350. Open to juniors.

Staff

Three credit hours

HRS 450 Honors Thesis I

The planning and completion of an honors thesis or research topic. The student will work closely with his faculty tutor and should expect to submit his thesis by May 1. This will be followed by a comprehensive oral examination before a faculty board in which a student demonstrates both breadth of knowledge and depth of specialization within his major field. Prerequisite: At least two honors courses, one of which must be either HRS 250 or HRS 260.

Staff

Three credit hours

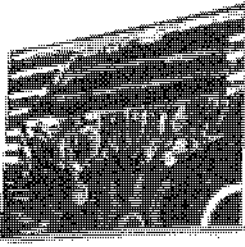
HRS 460 Honors Thesis II

A continuation of HRS 450.

Staff

Three credit hours





Art

Associate Professor Bearce; Assistant Professors Miner, Moore, Rakovan (Chairman), Sawtelle, Ubans; Instructor Franklin.

The Department of Art offers a major in Liberal Arts and a baccalaureate program in Art Education. Graduates of the Art Education program are qualified to teach or supervise art in all grades of the public schools. All students majoring in Art are required to complete the following basic courses in Art which constitute the Art Core:

ART CORE

	<i>Credit hours</i>
ARTH 111 History of Art I	3
ARTH 112 History of Art II	3
ARTS 141 Design I	3
ARTS 142 Design II	3
ARTS 143 Design III	3
ARTS 151 Drawing I	3
ARTS 152 Drawing II	3
ARTS 153 Drawing III	3

In order to be admitted to advanced Art courses any student must take the Art Core.

GENERAL EDUCATION REQUIREMENTS

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

To satisfy the Fine Arts General Education Requirement the following courses are recommended by the Department of Art: ARTH 101 and 102, Introduction to Art and Film as Image and Idea; ARTH 111 (space permitting) and ARTH 112 (space permitting and with permission of the instructor), History of Art I and II; and ARTS 141 (space permitting) and ARTS 151 (space permitting), Design I and Drawing I.

REQUIREMENTS IN LIBERAL ARTS

	<i>Credit hours</i>
Art Core	24
Art Studio	
ARTS 231 Materials and Techniques	3
ARTS 498 Independent Study in Art	3
Electives	24
Art History	
Electives	12
Philosophy	
PLY 220 Aesthetics	3
	<hr/> 69 hours

REQUIREMENTS IN ART EDUCATION

Art Core	24
Professional Education	
EDU 324 and seminar Student Teaching (12 credits) and a seminar (2 credits)	14
ARTE 221 Practicum in Art Education	3
ARTE 321 Principles and Procedures in Art Education	3
EDU 333 Human Growth and Development	3
EDU 103 Philosophy of Education	3
Art Studio	
ARTS 261 Painting I	3
ARTS 271 Photography I	3
ARTS 281 Printmaking—Relief	3
ARTS 291 Sculpture I	3
Majors are also required to take three of the following courses:	
ARTS 231 Handcrafts	
ARTS 232 Ceramics	
ARTS 332 Ceramics II	
ARTS 233 Metalwork I	
ARTS 234 Weaving I	
ARTS 334 Weaving II	9
Art History	
Elective	3
	<hr/> 74



COURSES IN ART

ART HISTORY AND APPRECIATION

ARTH 101 Introduction to Art

Mr. Rakovan, Mr. Minor

Selected experiences using original works, lecture, panel discussion, slides, films, and other means to confront the student with the significance of the visual arts in human history. The aim of the course is to involve the student in direct experiences affecting his own perception of visual form. Prerequisite: permission of instructor.

Three credit hours

ARTH 102 Film as Image and Idea

Mr. Ubans

An approach to the appreciation of motion pictures and allied arts through the understanding and analysis of the context, range, and resources of this, the only major form of creative expression conceived and developed entirely within the industrial age. Principles of evaluation, illustrated through the development of motion pictures to their present state.

Three credit hours

ARTH 111 History of Art I

Mr. Minor

Examination and discussion of the early epochs of art from prehistoric cultures through the Renaissance. Special attention is directed to the relationships of historical and theoretical knowledge to creative expression. Divergent viewpoints of the art historian, the critic, and the artist are explored. The first half of an overview of the visual arts emphasizing the interrelationships of cultural values and the forms of art. Preference given to those matriculated in the Department of Art or those with permission of the instructor.

Three credit hours

ARTH 112 History of Art II

Mr. Minor

A continuation of ARTH 111 from the Renaissance through the 20th Century. In both semesters of the course examples of architecture and sculpture, paintings, etc. are used as the basis of inquiry. Prerequisite: ARTH 111 or permission.

Three credit hours

ARTH 211 History of Architecture and the Urban Environment

Mrs. Wilson

A study of the European-American tradition of architectural design with emphasis upon the basic styles which influence American architecture and their utilization in urban America. Consideration of aesthetic and social interplay of architectural design throughout history, especially as it is manifest in urban design. Prerequisite: ARTH 112.

Three credit hours

ARTH 312 History and Appreciation of the Graphic Arts

An explanation of the graphic techniques: woodcut, engraving, etching, aquatint, lithography, etc. A study of the graphic arts as they have evolved throughout the history of art with emphasis upon the important graphic artists of Europe, America, and the Orient. Prerequisite: ARTH 112.

Three credit hours

ARTH 314 Renaissance Art

Mr. Minor

The effects of the ideas of ancient Greece and Rome on the art forms of the 15th and 16th centuries in Florence, Rome, and other parts of Europe. Northern European ideas in conflict and resolution. Prerequisite: ARTH 112.

Three credit hours

ARTH 316 Western Art from 1850-1900

Mr. Rakovan

A study of the major movements in the first half of the modern era. Prerequisite: ARTH 112

Three credit hours

ARTH 317 Western Art from 1900-1950

Mr. Rakovan

A continuation of ARTH 316 including the growth and development of the modern "isms". Prerequisite: ARTH 112.

Three credit hours

ARTH 411 Philosophy of Art

Mr. Minor, Mr. Moore

An investigation into the theories of art and beauty found in the writings of philosophers, painters, writers, and critics which form the basis of understanding of the fine arts. Readings and discussion of writers from ancient to modern times. Prerequisite: ARTH 112.

Three credit hours

ARTH 412 Contemporary Art

Mr. Ubans

Examination of current developments in all the visual media: 1950 to the present. Prerequisite: ARTH 112.

Three credit hours



ART STUDIO COURSES

ARTS 141 Design I

Mrs. Bearce, Mr. Moore

A coordinated series of experiments with basic design problems directed toward developing a sense of personal integrity, an awareness of the design potential, and the confidence, imagination, and skill needed to realize these potentials. Problems in color and light, systems of space, and visual design of graphic symbols stressing the presentation and use of basic tools. Preference given to those matriculated in Department of Art or those with permission of Instructor.

Three credit hours

ARTS 142 Design II

Mrs. Bearce, Mr. Moore

Basic problems in two-dimensional design with relation to painting, sculpture, graphic arts, and architecture. Problems deal with elements of composition, color, space, time, movement, symbolic representation, and communication. Prerequisite: ARTS 141

Three credit hours

ARTS 143 Design III

Mrs. Franklin

Problems in three-dimensional design utilizing the systemic study of order and space. Construction and analysis of basic forms in various materials (paper, wood, clay, plaster, and plastics). Prerequisite: ARTS 142.

Three credit hours

- ARTS 151 Drawing I** Staff
The craft and concepts of making drawings, stimulated by the forms, spaces, and and images of the tangible world, an introduction to marking tools and surfaces. Exposure to places, events, and objects with the purpose of stimulating the need to draw. Preference given to those matriculated in the Department of Art or those with permission of instructor. Three credit hours
- ARTS 152 Drawing II** Staff
Continuation of Drawing I with drawing from the model. Prerequisite: ARTS 151. Three credit hours
- ARTS 153 Drawing III** Mrs. Bearce, Mr. Moore
Extensive combining of media. Stress on role of images, both object and model. Prerequisite: ARTS 152. Three credit hours
- ARTS 231 Materials and Techniques** Mr. Rakovan
An introduction to materials, methods, and techniques for the professional artist-craftsman. Examination, comparison, and testing of materials, both traditional and experimental. Prerequisite: ARTS 143 and 153 or permission. Three credit hours
- ARTS 232 Ceramics I** Mrs. Franklin
An introduction to methods and processes of clay forming, including modeling, pressing, handbuilding, and the potter's wheel. Emphasis of form and texture, with aspects of glaze composition and firing procedures. Prerequisite: Art core courses. Three credit hours
- ARTS 233 Metalwork I**
An introduction to the methods and processes of forming and treating metals by forging, casting, enameling, stone-setting, vessel-raising. Emphasis on craftsmanship and design concepts. Prerequisite: Art core courses. Three credit hours
- ARTS 234 Weaving I** Mrs. Sawtelle
An introduction to basic fabrics including a study of terms, tools, and procedures used in weaving. Problems may include tie dye, batik, moccasin, stenciling, and black print on various fibers. Prerequisite: Art core courses. Three credit hours
- ARTS 241 Design IV** Mr. Rakovan, Mr. Ubans
Investigation of advanced design problems with emphasis on presentation. Prerequisite: ARTS 143. Three credit hours
- ARTS 251 Drawing IV** Mrs. Bearce, Mr. Moore
Continued drawing with emphasis on independent direction. Prerequisite: ARTS 153. Three credit hours
- ARTS 261 Painting I** Staff
An introduction to pigments, grounds, and methods of painting in varying media. Emphasis on technical and formal problems. Prerequisite: Art core courses. Three credit hours
- ARTS 271 Photography I** Mr. Ubans
Photography as a creative medium. Provision of basic skills in the use of the camera and laboratory equipment. Investigation and practice in the fundamental techniques and processes of black and white photography as an art form. Prerequisite: Art core courses. Three credit hours
- ARTS 281 Printmaking—Relief** Staff
Introduction to Relief Printmaking: Woodcut, Linoleum Block, Wood Engraving. Prerequisite: Art core courses. Three credit hours
- ARTS 282 Printmaking—Stencil** Mr. Rakovan, Mr. Ubans
Introduction to silk screen printing, including photo-mechanical reproduction. Prerequisite: Art core courses. Three credit hours
- ARTS 283 Printmaking Intaglio I** Mrs. Bearce
Introduction to Intaglio printmaking, using etching, engraving, aquatint, mezzotint, and drypoint. Prerequisite: Art core courses. Three credit hours
- ARTS 284 Printmaking Lithography I** Mr. Rakovan
Introduction to the process of lithographic printing from stones. Prerequisite: Art core courses. Three credit hours

- ARTS 291 Sculpture I** Mr. Franklin
Clay modeling with emphasis on structure and anatomy of figure, and their relationship to sculptural form, including the building of an armature and a finished plaster cast. Prerequisite: Art core courses. Three credit hours
- ARTS 332 Ceramics II** Mr. Franklin
Application of design principles in production of ceramicware with a concentration on advanced problems in wheel thrown forms and hand building sculptures. Prerequisite: ARTS 232. Three credit hours
- ARTS 334 Weaving II** Mrs. Sawtelle
Advanced work on hand and foot treadle looms; how to design and produce pattern weaves; the practical application of various fibers used in weaving. Prerequisite: ARTS 234. Three credit hours
- ARTS 351 Drawing V** Mrs. Bearce, Mr. Moore
Making personal and complete drawings and series of drawings. Emphasis on individual concepts and personal expression. Prerequisite: ARTS 251. Three credit hours
- ARTS 361 Painting II** Staff
Studies, principally from tangible situations, in the organization of pictorial ideas, the derivation of forms, and the control of space. Use of various painting media. Prerequisite: ARTS 261. Three credit hours
- ARTS 362 Painting III** Mr. Rakovan
Exploration of the concepts and techniques of painting with emphasis on individual expression. Prerequisites: ARTS 361. Three credit hours
- ARTS 363 Watercolor** Mr. Minor
Watercolor, wash, dry-brush, ink and wash, gouache, and other techniques in water-media. Emphasis on individual concepts and personal expression. Prerequisite: Art core courses. Three credit hours
- ARTS 371 Photography II** Mr. Ubans
Exploration of concepts and techniques of photography with emphasis on individual forms of expression. Prerequisite: ARTS 271. Three credit hours
- ARTS 383 Printmaking Intaglio II** Mrs. Bearce
Continuation of Intaglio I with emphasis on viscosity techniques. Prerequisite: ARTS 283. Three credit hours
- ARTS 384 Printmaking Lithography II** Mr. Rakovani
Continuation of Lithography I with emphasis on color printing. Prerequisite: ARTS 284. Three credit hours
- ARTS 391 Sculpture II** Mrs. Franklin
The theory and practice of sculptural composition using a variety of techniques with traditional and new materials. Prerequisite: ARTS 291. Three credit hours
- ARTS 409 Advanced Problem in Art** Staff
An opportunity for the student to do advanced work in the field of his particular interest, culminating in a related project. Prerequisite: Art core courses and permission. Three credit hours
- ARTS 461 Painting IV** Mr. Rakovan
Continuation of Painting III. Emphasis on individual concepts and personal expression. Prerequisites: ARTS 362. Three credit hours
- ARTS 462 Painting V** Mrs. Bearce, Mr. Moore
Continuation of Painting IV. Investigation of advanced painting problems with emphasis on individual expression. Prerequisite: ARTS 461. Three credit hours
- ARTS 498 Independent Study in Art (Senior level degree project)** Staff
An opportunity for the student who has demonstrated critical and analytical capability to pursue a project independently culminating in an artistic or technical creation, reflecting a high caliber of performance. Prerequisite: Art core courses and permission of the instructor. One to six credit hours



ART EDUCATION

ARTE 121 Art for the Classroom Teacher

Mrs. Franklin

A study of growth and development in the creative abilities of children; how to utilize art projects to foster initiative, imagination, cooperation, and appreciation in the classroom. Permission of instructor (not for students matriculated in the Department of Art).

Three credit hours

ARTE 122 Handcrafts

Mrs. Sawtelle

An introduction to the general handcrafts using simple tools and materials. Permission of instructor.

Three credit hours

ARTE 221 Practicum in Art Education (Saturday Workshop)

Mrs. Sawtelle

Designed to give the art major student an early first-hand experience with children and the professional aspects of teaching. The student will work with children from elementary and secondary schools in the area. Matriculation in the Department of Art or permission of instructor.

Three credit hours

ARTE 321 Principles and Procedures in Art Education

Mrs. Sawtelle

A study of growth and development in the creative abilities of elementary and secondary students; introduction to methods of teaching art designed to enrich the curriculum. Prerequisite: ARTE 221.

Three credit hours

ARTE 421 Student Teaching

Mrs. Sawtelle

For student teachers in art, this course takes the form of discussion and problem solving. Students endeavor to arrive at a tentative philosophy of art education and basic instructional techniques. Prerequisite: ARTE 321.

Six credit hours



Biological Sciences

Professor Najarian; Associate Professors Barker, Holmes, Kern, Riciputi, Schwinck; Assistant Professors Dorsey, Greenwood, Mazer, Mazurkiewicz.

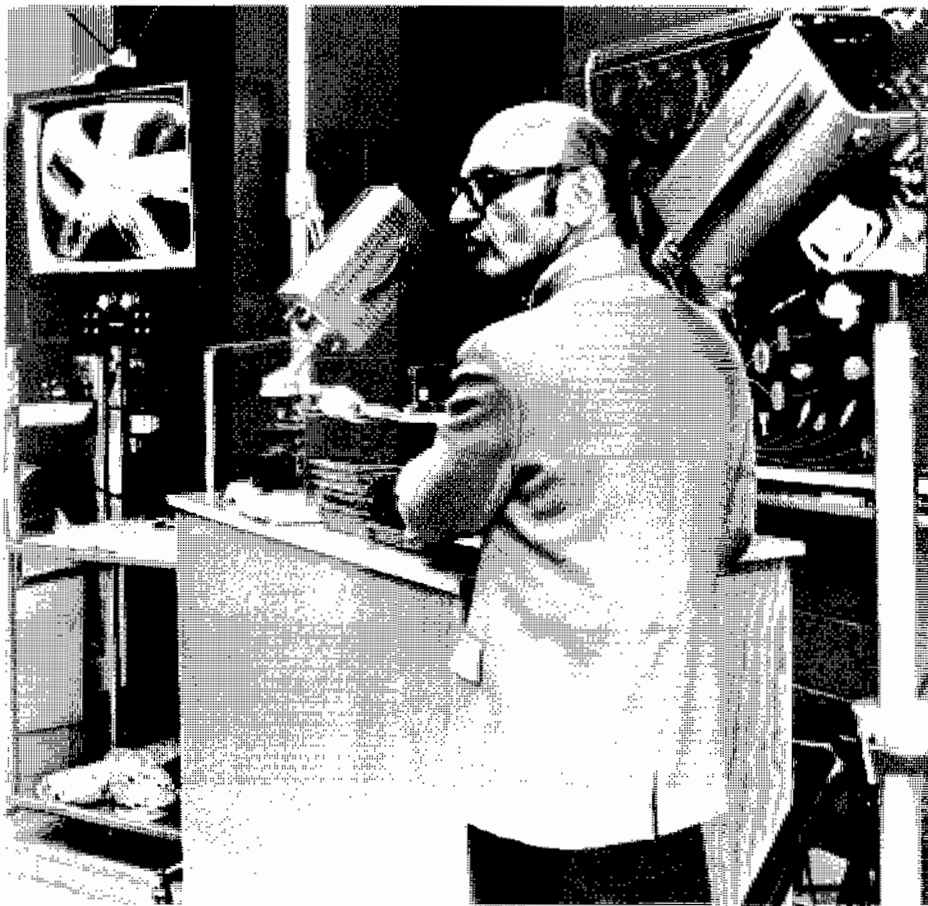
A four-year program is offered in biological sciences. This program may be applicable to a Biological Science major in Secondary Education or a Biology major in Liberal Arts. Although the Liberal Arts major is designed for students desiring graduate work in biology, or students interested in going into medicine, dentistry, or veterinary science, the program can be modified to satisfy requirements in other aspects of life science and para-medical fields.

A Biological Science minor, requiring 18 credit hours in basic and advanced Biology, is available in Secondary Education.

Students who are in the Elementary or Kindergarten-Primary programs of the School of Education, and who are interested in the Biological Sciences, are referred to the Science Area program described in the section of the catalog dealing with Physical Sciences and Engineering. This program includes both physical and biological sciences and offers either an 18-hour academic minor or a 30-hour academic major for such students.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These requirements are printed inside the front cover of this catalog.

In addition to the General Education Requirements, students majoring in Biological Science in the Secondary Education program or Biology in the Liberal Arts program are required to take a minimum of 30 credit hours in Biology and a minimum of 29 credits in allied science. Liberal Arts Biology majors are also required to take a foreign language through the intermediate level.



Closed circuit television is extensively used in laboratory demonstrations. In this picture, the camera on the left is not activated, but it is ready for use with microscopic slides. The camera on the right is focused on a tray in which the instructor is starting to dissect a starfish, the vastly magnified image of which is shown on a number of television screens located so that every student in the laboratory has a clear view.

REQUIREMENTS FOR A BIOLOGY MAJOR IN LIBERAL ARTS OR A BIOLOGICAL SCIENCE MAJOR IN SECONDARY EDUCATION

		<i>Credit hours</i>
*MS 150	Calculus I	3
PHYS 121 and 122	General Physics (4 credits each semester) to be taken as a two-semester sequence	8
CHEM 113 and 114	Chemical Principles (4 credits each semester) to be taken as a two-semester sequence	8
CHEM 251 and 252	Organic Chemistry (3 credits each semester) to be taken as a two-semester sequence	6
CHEM 261 and 262	Organic Chemistry Laboratory (2 credits each semester) to be taken as a two- semester sequence	4
**Foreign Language through Intermediate Level (Liberal Arts only)		0-14
BIO 101 and 102	Biological Principles (3 credits) plus Bio- logical Experiences (1 credit) to be taken together	4
BIO 103 and 104	Biological Diversity (3 credits) plus Survey of Animals and Plants (1 credit) to be taken together	4
BIO 201	Principles of Genetics	3
BIO 203 and 204	Developmental Biology (2 credits) plus Comparative Vertebrate Embryology (2 credits) to be taken together	4
BIO 311 and 312	Microbiology (3 credits) plus Micro- biological Laboratory (2 credits) to be taken together	5
Choice: BIO 331 & 332	Ecological Principles (2 credits) plus Field Ecology (1 credit) to be taken together	3
or BIO 341 & 342	Principles of Limnology (2 credits) plus Limnological Methods (2 credits) to be taken together	4
Choice: BIO 401 & 402	Mammalian Physiology (2 credits) plus Mammalian Physiology Laboratory (2 credits) to be taken together	4
or BIO 411 & 412	Plant Physiology (3 credits) plus Plant Physiology Laboratory (1 credit) to be taken together	4
or BIO 451 & 452	Comparative Physiology (2 credits) plus Experimental Physiology (2 credits) to be taken together	4
BIO 421	Biology Seminar	1
BIO 431	Biology Seminar	1
TOTAL:		59 — 73

*Students not prepared for MS 150 should precede this course with MS 140, Pre-Calculus Mathematics (3 credits).

**Credits to be earned depend upon the language proficiency of the student. Challenge examinations are available through the intermediate level.



COURSES IN BIOLOGICAL SCIENCES

- BIO 101 Biological Principles** Staff
 A study of the structure and function of cells and a consideration of multicellular organisms, in terms of heredity, evolution, and ecology. Three credit hours
- BIO 102 Biological Experiences** Staff
 Laboratory studies of the structure, function, and reproduction of cells and the examination of representative animals and plants. Prerequisite: BIO 101, or concurrent with BIO 101. One credit hour
- BIO 103 Biological Diversity** Staff
 Studies of the structure, function, and behavior of animals and plants. Prerequisite: BIO 101. Three credit hours
- BIO 104 Survey of Animals and Plants** Staff
 Laboratory examination of the structure and function of representative animals and plants. Prerequisite: BIO 103, or concurrent with BIO 103. One credit hour
- BIO 111 Human Anatomy and Physiology** Mr. Kern
 The structure and function of the human body. Prerequisite: BIO 101 recommended. Three credit hours
- BIO 112 Practical Human Anatomy and Physiology** Miss Greenwood
 Laboratory studies of the structures and functions of the human body, including microscopy and physiological experiments. Prerequisite: BIO 111, or concurrent with BIO 111. One credit hour
- BIO 201 Principles of Genetics** Miss Greenwood
 A study of heredity through a discussion of the mechanism and control of gene action. Current research on the nature of mutations and the role of genes in development, behavior, and populations will be examined. Prerequisite: BIO 101. Three credit hours
- BIO 202 Experimental Genetics** Miss Greenwood
 Practical laboratory experience in techniques used in genetics. Prerequisite: BIO 201, or concurrent with BIO 201. Two credit hours

- BIO 203 Developmental Biology** Miss Greenwood
A study of the embryology of several organisms, including man, and an analysis of the mechanisms which influence development. Current research in the fields of aging, regeneration, and metamorphosis will also be considered. Prerequisites: BIO 101.
Two credit hours
- BIO 204 Comparative Vertebrate Embryology** Miss Greenwood
Laboratory experiments and observations on amphibian, chick, and mammalian embryos. Prerequisites: Bio 203 or concurrent with Bio 203.
Two credit hours
- BIO 205 Evolution** Mr. Neuberger
A study of the processes and evidences of organic evolution.
Three credit hours
- BIO 215 Vascular Botany** Mr. Barker
A study of the major groups of vascular plants with emphasis on morphology, life cycles, and ecology. Prerequisites: BIO 101, and BIO 103.
Three credit hours
- BIO 216 Vascular Field Botany** Mr. Barker
Laboratory and field studies on the vascular plants of Maine. Prerequisites: BIO 215, or concurrent with BIO 215.
One credit hour
- BIO 225 Non-Vascular Botany** Mr. Barker
A study of the major groups of non-vascular plants with emphasis on morphology, life cycles, and ecology. Prerequisite: BIO 101, BIO 103.
Three credit hours
- BIO 226 Non-Vascular Field Botany** Mr. Barker
Laboratory and field studies on the non-vascular plants of Maine. Prerequisite: BIO 225, or concurrent with BIO 225.
One credit hour
- BIO 251 History of Biology** Mr. Dorsey
A chronological survey of developments in biological investigations from earliest records to the present day. Emphasis will be placed on the methods of scientific discovery and the relationship between past milestones in biological investigations and modern understanding. Prerequisite: 9 credit hours in biology.
Three credit hours
- BIO 292 Ornithology** Mr. Riciputi
The basic biology of birds: life histories, migration, behavior, and economic importance, with emphasis on species found in eastern North America. (Students supply their own binoculars or spotting scopes.) Prerequisite: BIO 101, or BIO 103.
Two credit hours
- BIO 311 Microbiology** Mr. Holmes
A consideration of protozoa, fungi, bacteria, and viruses of biological and medical importance. Prerequisite: BIO 101, CHEM 114.
Three credit hours
- BIO 312 Microbiological Laboratory** Mr. Holmes
The laboratory isolation and examination of micro-organisms by various techniques. Prerequisite: BIO 311, or concurrent with BIO 311.
Two credit hours
- BIO 321 Histology** Mr. Holmes
A laboratory course which studies the microscopic anatomy of animal tissues and methods of preparing biological material. Prerequisite: BIO 101.
Two credit hours
- BIO 331 Ecological Principles** Mr. Mazurkiewicz
The interrelationships of living organisms and their environments, including man's role as a modifier of ecosystems. Prerequisite: BIO 101.
Two credit hours
- BIO 332 Field Ecology** Mr. Mazurkiewicz
Laboratory and field studies which demonstrate the basic concepts of ecology. (Numerous field trips.) Prerequisite: BIO 331, or concurrent with BIO 331.
One credit hour
- BIO 341 Principles of Limnology** Mr. Mazurkiewicz
Geological, physical, chemical, and biological interrelationships of inland waters, including man's impact on these relationships. Prerequisite: BIO 101.
Two credit hours
- BIO 342 Limnological Methods** Mr. Mazurkiewicz
Laboratory and field methods of investigating the ecological attributes and significance of inland waters. Prerequisite: BIO 341, or concurrent with BIO 341.
Two credit hours
- BIO 351 Invertebrate Zoology** Mr. Najarian
The morphology, physiology, and phylogenetic relationships of non-backboned animals. Prerequisite: BIO 101.
Three credit hours

- BIO 352 Survey of Invertebrates** Mr. Najarian
Laboratory experience on the anatomy, physiology, and behavior of invertebrate animals. Prerequisite: BIO 351, or concurrent with BIO 351. One credit hour
- BIO 361 Parasitology** Mr. Najarian
The life histories and host-parasite relationships of animal parasites, with emphasis on those of men. Prerequisite: BIO 101. Two credit hours
- BIO 362 Parasitological Laboratory** Mr. Najarian
The morphology and life cycles of parasite protozoa, helminths, and arthropods. Prerequisite: BIO 361, or concurrent with BIO 361. Two credit hours
- BIO 372 Biological Techniques** Mr. Dorsey
A survey of laboratory techniques used in Biology. (Spring, 1972 only.) Prerequisite: BIO 101. Two credit hours
- BIO 381 Ichthyology** Mr. Riciputi
The structure, origin, evolution, natural history, classification, zoogeography, and economic importance of fishes, with particular emphasis on species found in the northeastern United States. Prerequisites: BIO 103, BIO 104. Two credit hours
- BIO 382 Field Ichthyology** Mr. Riciputi
Laboratory methods and techniques of collecting and identifying fishes. Extensive field-collecting at various habitats. Prerequisite: BIO 381, or concurrent with BIO 381.
- BIO 401 Mammalian Physiology** Mr. Mazer
Physiological processes in various mammalian species with emphasis on the integration of organ systems. Prerequisite: BIO 101, CHEM 252, CHEM 262. Two credit hours
- BIO 402 Mammalian Physiology Laboratory** Mr. Mazer
Laboratory experiments and observations on mammals. Prerequisite: BIO 401, or concurrent with BIO 401. Two credit hours
- BIO 411 Plant Physiology** Miss Schwinck
A study of the physiological activities of plants, and their growth and development as influenced by internal and external factors. Prerequisites: BIO 103, BIO 104, 1 year chemistry. Three credit hours
- BIO 412 Plant Physiology Laboratory** Miss Schwinck
Laboratory examination of phenomena in plant physiology. Prerequisite: concurrent with BIO 411. One credit hour
- BIO 421 Biology Seminar** Staff
Weekly oral reports and discussions by students and staff, on biological topics of current interest. Prerequisite: biology seniors. One credit hour
- BIO 441 Problems in Biology** Staff
Independent library or laboratory studies on a special topic, as mutually arranged by instructor and student. Prerequisite: by arrangement. Credit arranged
- BIO 451 Comparative Physiology** Mr. Mazer
The physiological variations found in the animal kingdom. Emphasis will be on a working knowledge of functional biology. Prerequisites: BIO 101, CHEM 252, CHEM 262. Two credit hours
- BIO 452 Experimental Physiology** Mr. Mazer
Laboratory experiments and observations on the physiological processes of a wide spectrum of animals. Prerequisites: BIO 451, or concurrent with BIO 451. Two credit hours
- BIO 461 Cell Mechanisms** Mr. Holmes
A physico-chemical analysis of cell processes, with emphasis on mechanisms controlling growth, differentiation, and cell division. Prerequisites: BIO 101, CHEM 252. Three credit hours
- BIO 471 Elements of Bioengineering** Mr. Kirwin
A study of basic electrical and mechanical engineering techniques as they apply to biological systems; operating principles of apparatus for biological instrumentation. Prerequisite: BIO 101, PHYS 122. Three credit hours
- BIO 481 Cell Biology** Miss Schwinck
Structure and function of cells on the cellular, subcellular, and molecular levels. Prerequisites: BIO 101 and BIO 102 and CHEM 252 or CHEM 202 or instructor's permission. Three credit hours

Criminal Justice

ASSISTANT PROFESSOR DONALD L. DÄJLSTROM, Director

Program Leading to the Degree of Bachelor of Science in Criminal Justice

A complete four-year program has been designed to permit each student to select one pattern of concentration from any one of three major sequences:

- (1) Criminal Justice Major with a Political Science Sequence
- (2) Criminal Justice Major with a Sociology Sequence
- (3) A Criminal Justice Sequence

The objective of the program is to provide a basis for examining various activities concerned with the process of criminal justice. Students will receive a broad liberal education in conjunction with their concentration upon specialized areas within the criminal justice system.

Students enrolled in the Criminal Justice Program must complete a minimum of 36 credit-hours in one major sequence, in addition to completing all general-education requirements of the University for the degree.

All students majoring in any sequence will be required to complete the basic core curriculum listed below:

CJ 101	Introduction to Criminal Justice	3
CJ 110	Criminal Law	3
CJ 120	Criminal Evidence	3
CJ 201	Administration of Criminal Justice	3
CJ 315	Police and the Community	3
CJ 316	Police-Community Practicum	3
CJ 325	Scope of Criminal Justice	3

Criminal Justice Majors with a Political Science Sequence will also be required to complete:

POL 101	Introduction to Government I	3
POL 102	Introduction to Government II	3
POL 233	The American City	3
POL 233	American Constitutional Law I	3
POL 234	American Constitutional Law II	3

Criminal Justice Majors with a Sociology Sequence will be required to complete the core courses together with the following courses if regularly scheduled; or Sociology Sequence substitution may be arranged in consultation with the Director.

SOC 101	Introduction to Sociology	3
SOC 350	Sociology in Urban Life	3
SOC 370	Social Problems	3
SOC 371	Race and Culture Conflict	3
SOC 373	Criminology: The Adult Offender	3

The Criminal Justice Majors Sequence will require the core courses together with an additional 15 hours of credit to be selected from the Criminal Justice courses offered.

Elective courses in areas related to any Criminal Justice major sequence may be selected in consultation with the student's faculty adviser. Ordinarily, each student will be expected to complete from 12 to 18 hours of related advanced courses.

COURSE OFFERINGS IN CRIMINAL JUSTICE

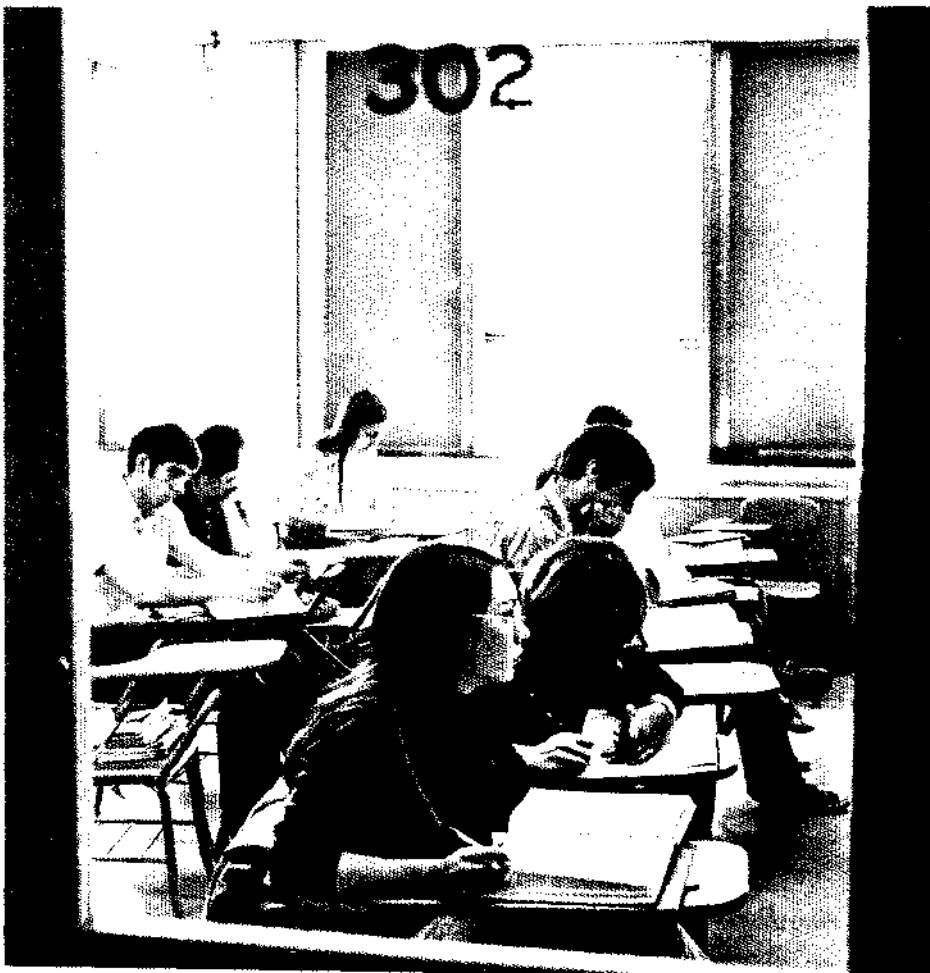
- CJ 101 Introduction to Criminal Justice** Mr. Dahlstrom
Philosophic basis and historic development of the criminal justice system in the United States. Focus will be upon definitions and the role of various agencies involved with the process. Three credit hours
- CJ 102 Police Administration and Personnel** Staff
A survey of organizational principles as they relate to the police service. Emphasis will be upon line, staff, and personnel activities. Three credit hours
- CJ 110 Criminal Law** Staff
An introduction to the basic concepts of criminal law and criminal procedure. Three credit hours
- CJ 120 Criminal Evidence** Staff
An introduction to the rules governing the admissibility of evidence. Focus will be upon arrest, interview, search, and seizure. Three credit hours
- CJ 130 Criminal Investigation** Staff
An introduction to the fundamentals of investigation and inquiry. Some focus upon personal identification theories. Three credit hours
- CJ 135 Police Operations** Mr. Dahlstrom
Theories that relate to police service field operations. Focus will be upon patrol and traffic administration. Three credit hours
- CJ 140 Criminal Information and Records Systems** Staff
The administration of criminal information records. Some focus will be upon the gathering of intelligence information and the various uses of data recall systems. Three credit hours
- CJ 201 Administration of Criminal Justice** Mr. Dahlstrom
This course will focus upon select areas in the administration of the criminal justice process. Prerequisite: CJ 101 or instructor's permission. Three credit hours
- CJ 202 Advanced Police Administration** Staff
An advanced study involving police supervision and common topics. Some focus will be upon comparative police systems. Prerequisite: CJ 102 or instructor's permission. Three credit hours
- CJ 210 Police Role in Social Aspects of Crime** Staff
This course will focus upon the police service's role in various areas defined as deviant and/or delinquent. Three credit hours
- CJ 315 Police and the Community** Mr. Dahlstrom
The police service's role and responsibility within the community. Focus will be upon the organization and functions of the community's crime prevention effort.
- CJ 316 Police-Community Practicum** Staff
This course is offered in cooperation with the Social Welfare Community Laboratory (SWE 254). Prerequisites for any student majoring in a Criminal Justice sequence include CJ 315, SWE 250, or the Director's permission. All students will require permission of the SWE 254 instructor. Three credit hours (optional six)
- CJ 325 Scope of Criminal Justice** Mr. Dahlstrom
Relevant material from an interdisciplinary perspective. This course will focus upon the scope and nature of the criminal justice system. Prerequisite: Senior standing or instructor's permission. Three credit hours
- CJ 399 Research in Criminal Justice** Staff
An independent or organized group research project or activity. Prerequisite: The Director's permission. One to three credit hours

Economics as a Major

IN A PROGRAM LEADING TO A BACHELOR OF ARTS DEGREE

Students interested in receiving a Bachelor of Arts degree in Economics will be required to complete the same requirements as for the Bachelor of Science degree in Economics described under the "School of Business and Economics" section of this catalog, except that students in the Bachelor of Arts program may not take more than 42 hours of Economics courses or 21 hours of Business courses for credit toward a Bachelor of Arts degree.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.





English

Professors Bernard, Hanna, Rutherford (Chairman), Weeks; Associate Professors Baier, Coffin, Jaques, Lewisohn, Reuter; Assistant Professors Burke, Carner, Carper, O'Reilly, Rosen, Selkin, Slavick, Wilson, Wolf; Instructor Miliken.

Major Programs in English

Undergraduates desiring to major in English may do so in either the Bachelor of Arts program of the College of Liberal Arts or under several programs leading to the degree of Bachelor of Science in the School of Education.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

LIBERAL ARTS OR SECONDARY EDUCATION REQUIREMENTS FOR MAJORS

English majors enrolled in the College of Liberal Arts program or in the Secondary Education program of the School of Education are required to

complete 36 credit hours in English courses or, to the extent of not more than 12 credit hours, related courses offered in other departments and approved by the English Curriculum Committee. (The attention of English majors is directed to those courses given by the Foreign Languages and Classics Department in which non-English literature is read in translation.)

Students with majors or minors in English, including both those in the baccalaureate program of the College of Liberal Arts and also those in the Secondary Education program of the School of Education, must achieve at least six credits with grades of B or better in their major or minor in English. No grades of D will count toward fulfillment of the major or minor requirements. No required course may be repeated more than once.

Each student must complete three of the required 36 credit hours in the production of a major paper or project approved by two faculty members, one chosen by the student, the other by the Department Curriculum Committee after consultation with the student. These three hours (ENG 400) shall be taken in the senior year in a guided program.

Each student is expected to fulfill the following minimum requirements: a period course, a major-figure course, a genre course; in addition, each is expected to complete a course in American literature, in English literature before 1600, in English literature of the period 1600-1800, and in English literature since 1800. Any appropriate course, however, may satisfy more than one of these distributive requirements. These requirements may be waived if a student submits an alternative program acceptable to the Department Curriculum Committee.

To meet state certification requirements, all English majors in secondary education are also required to take one course in Shakespeare (ENG 235, 236, 237, or 238) and History of the English Language (ENG 298).

ENGLISH MINOR PROGRAM IN SECONDARY EDUCATION

Secondary Education students in the School of Education may meet the requirements for a minor in English. Details of this program may be obtained from the faculty advisors of Secondary Education students in the School of Education.

REQUIREMENTS FOR ACADEMIC MAJORS AND MINORS IN KINDERGARTEN-PRIMARY AND ELEMENTARY EDUCATION

Students in Elementary Education or Kindergarten-Primary Education in the School of Education may complete 30 hours of English in an approved program for an academic major or 18 approved hours for an academic minor. Details of such programs may be obtained from the appropriate faculty advisors in the School of Education.

COURSE DESCRIPTIONS

ENG 001 Writing Laboratory

Staff

Intended for the use of any student with a writing problem at any time in his college career. The laboratory will be run and supervised by the regular English staff with the help of advanced students.

No credit

ENG 100 College Writing

Staff

An introductory course in writing at the college level. The course will deal with such matters as organizations, strategy, tone, and logic. Note: This course is in no way remedial. Offers graduation credit but not major or humanities credit.

Three credit hours

ENG 120 Introduction to Literature

Staff

Each section of this course offers a program designed to introduce students to the study of literature. The sections vary greatly from one another; information about their programs for each semester can be obtained in the English office. No prerequisites.

Three credit hours

Sections, Fall 1971

Instructor

1 - The Modern Sensibility I: Prose	Mr. Carper
2 - Literary Masterpieces I: Prose	Mr. Milliken
3 - The Major Genres	Mr. Burke
4 - Interpretive Approaches to Literature	Mr. Vincent
5 - Understanding and Appreciating Literature	Mr. Weeks
6 - Understanding and Appreciating Literature	Mr. Weeks
7 - An Approach to Critical Reading	Mr. Rutherford
8 - Sharing the Author's Vision	Mr. Rosen
9 - Sharing the Author's Vision	Mr. Rosen
10 - Poetry of England and America	Mr. Carner
11 - The Modern Sensibility: Prose	Mr. Carper

ENG 150 Topics in Literature

Staff

A wide selection of courses, dealing with this general subject and varying in context from term to term, is offered each semester. Descriptions of current offerings are available in the English office. Seminars may be offered in a two-semester sequence, and more than one section may be taken for degree credit. No prerequisites.

Three credit hours

Sections, Fall 1971

Instructor

1 - The Epic	Mrs. Wolf
2 - American Literature	Mr. Jaques
3 - The Literature of Alienation	Mr. Lewisohn
4 - The Literature of Alienation	Mr. Coffin
5 - Pop Semantics	Mr. Lewisohn
6 - The English Bible	Mr. Bernard
7 - European Literature from Homer to Dante	Mr. Bernard
8 - The Nature of Poetry	Mr. O'Reilly
9 - The Nature of Poetry	Mr. O'Reilly
10 - Indians and Black Men	Mr. Slavick
11 - The Short Novel	Mr. Hanna
12 - The Short Novel	Mr. Hanna
13 - Literature and Insanity	Mr. Selkin
14 - The Politics of Literature	Mr. Wilson

ENG 200 Poetry Workshop

Mr. Rosen

The practice of writing poetry. Class discussions of manuscript poems and conferences with instructor.

Three credit hours

ENG 202 Poetry Workshop I

Mr. Lewisohn

An intensive study of poetic forms and techniques, with extensive discussion of the students' own poetry. Emphasis on understanding various techniques through reading and imitation. No prerequisites.

Three credit hours

ENG 203 Poetry Workshop II

Mr. Lewisohn

Continuation of ENG 202 with emphasis on trends in contemporary poetry and on the students' own creative writing ability.

Three credit hours

ENG 204 Advanced Writing

Mr. Vincent

For students desiring to gain increased proficiency in writing; study of various forms of discourse, but with concentration on exposition. Considers such aspects of writing as persona, appeal to reader, style, logic, strategy.

Three credit hours

ENG 205 Creative Writing

Mr. Vincent

An advanced course. Focus is on the writing of a short story; includes a study of plot, design, point of view, characterization, tension and related techniques, modes of creative thinking, and the transformation of experience into the medium of story. Prerequisite: Consultation with instructor.

Three credit hours

ENG 210 Expository Writing

Mr. Jacques

Primarily for juniors and seniors majoring in Business Administration. Training in clear expository writing of formal reports, business communications, and related materials.

Three credit hours

ENG 220 Old English

Mr. Coffin

The student develops Old English reading ability by working with the best Old English poems and prose. Modern techniques of rapid language acquisition are used. Prerequisite: sophomores or above.

Three credit hours

ENG 221 Beowulf

Mr. Coffin

This Old English poem is studied as the greatest literary work of the first 600 years of English Literature. Partially in modern English. Prerequisite: Old English.

Three credit hours

ENG 224 Chaucer

Mr. Burke

Selections from the major poetry, with attention to the literary and historical background.

Three credit hours

ENG 225 Chaucer and the Middle Ages

Mr. Weeks

The central emphasis of the course will be Chaucer's *Canterbury Tales* which will be read in its entirety. To develop a broader and deeper understanding of the late Middle Ages there will be further readings in the medieval romance, especially the Matter of Britain, and in Chaucer's contemporaries, the *Pearl* poet and William Langland. Prerequisite: Introduction to Literature.

Three credit hours

ENG 226 Medieval Epic and Romance

Mr. Selkin

Readings chosen from among translations of *Beowulf*, *The Song of Roland*, *The Song of the Nibelungs*, *The Laxdaela Saga* and other Icelandic works, *The Poem of The Cid*, various works of Chrétien de Troyes and Wolfram von Eschenbach, *Tristan and Isolt*, and others.

Three credit hours

ENG 230 16th Century Poetry

Mrs. Wolf

Poetry of the sixteenth century with some emphasis on the lyric.

Three credit hours

ENG 231 16th Century Prose and Verse

Mr. Bernard

The prose and the non-dramatic poetry of the 16th century. Major authors of the Tudor Age (1485-1603) in their cultural setting, from Skelton to Donne. Prerequisite: permission of instructor.

Three credit hours

ENG 232 Spenser

Mr. Reuter

Readings in the works of Edmund Spenser with special emphasis on *The Faerie Queene*.

Three credit hours

ENG 236 Pre-Shakespearean Drama

Mr. Bernard

Medieval drama in England to 1590. The evolution of secular drama from its religious origins through the achievement of Marlowe. Prerequisite: permission of instructor.

Three credit hours

ENG 238 Shakespeare's Earlier Works

Mrs. Wolf

Shakespeare's histories, comedies, sonnets. Emphasis will be placed on development of themes, such as order/disorder; ideals of personality; and states of being. Prerequisite: sophomores or above.

Three credit hours

ENG 241 Shakespeare's Later Plays

Mrs. Wolf

A continuation of ENG 238. This semester concentrates on the problem plays and tragedies.

Three credit hours

- ENG 242 Shakespeare: Representative Plays and Genres I** Mr. Vincent
A study of representative plays. Selections from among the following: the histories, with emphasis on the Lancastrian epic; the Roman plays; the comedies — farce, romantic comedy, problem play, romance; and tragedies. Discussion of the Elizabethan stage, textual problems, Shakespeare's style, etc. Background reading and a critical paper.
Three credit hours
- ENG 243 Shakespeare: Representative Plays and Genres II** Mr. Vincent
A continuation of ENG 242.
Three credit hours
- ENG 244 Shakespeare: Special Studies** Mr. Reuter
A study of allegorical elements in selected plays.
Three credit hours
- ENG 245 Elizabethan Prose and Verse** Mr. Bernard
Major and representative non-dramatic writers, exclusive of Milton, in relation to their cultural background, 1557-1660. Prerequisite: permission of instructor. Three credit hours
- ENG 246 British Drama to 1642** Mr. Bernard
Shakespeare's predecessors, contemporaries, and followers to 1642. Prerequisite: permission of instructor.
Three credit hours
- ENG 249 17th Century Prose and Verse**
Section A Mr. Baier
Major and representative non-dramatic writers (exclusive of Milton) in relation to their cultural background, 1600-1660.
Three credit hours
Section B Mr. Reuter
A study of major non-dramatic writers of the 17th century exclusive of Milton and Dryden. Included will be Bacon, Donne, Jonson, Burton, Hobbes, Herrick, Herbert, Vaughan, Marvell, Suckling, Crashaw, Carew, Browne, Traherne, Bunyan, Pepys.
Three credit hours
- ENG 250 Milton**
Section A Mr. Baier
The poetry and the prose, with attention to the literary and historical background.
Three credit hours
Section B Mr. Reuter
A study of all Milton's English poetry with readings in *Christian Doctrine* and other prose selections as background.
Three credit hours
- ENG 262 Restoration and Early 18th Century Prose and Poetry** Mr. Weeks
An exploration of representative writings of the English Neo-classical period as an attempt to understand the cultural climate that developed after the restoration of the monarchy. Readings in Dryden, Swift, Pope, Gay, Addison, and Steele.
Three credit hours
- ENG 263 The Age of Johnson and Blake:** Mr. Selkin
Literature of the Mid and Late 18th Century
Johnson and Boswell and their circle, poetry from Smart and Collins to Burns and Blake, and other works of the period. Prerequisite: at least one previous course in literature is recommended, but not required.
Three credit hours
- ENG 264 Swift** Mr. Selkin
A study of Swift and his poetry and prose — imaginative, political, personal, satiric, and even "unprintable." Enrollment limited to 20, except with permission of instructor. Prerequisite: previous work in 17th and/or 18th century recommended, but not required.
Three credit hours
- ENG 266 Restoration Drama** Mr. Reuter
A study of Restoration and early 18th Century drama with emphasis on innovations in the post-Elizabethan theatre and on changing definitions of the tragic and comic hero. Playwrights studied will include Davenant, Dryden, Otway, Etherege, Shadwell, Cibber, Wycherley, Congreve, Farquhar.
Three credit hours
- ENG 267 The Rise of the Novel** Mr. Reuter
A study of the roots of the novel in English and Continental fiction.
Three credit hours
- ENG 268 The Earlier English Novel** Mr. Bernard
The principal novelists from the beginnings to Sir Walter Scott. Prerequisite: permission of the instructor.
Three credit hours

ENG 271 English Satire and its Classical and Medieval Backgrounds Mr. Weeks

A brief but thorough survey of principal Greek and Roman satirists for the purpose of discovering and defining the origins of this important genre; a reading of at least one medieval satire, probably Erasmus' *Praise of Folly*, all preliminary to a thorough study of the major works of Dryden, Swift and Pope. Three credit hours

ENG 273 The Poetry of Alexander Pope Mr. Weeks

A close study of the most brilliant poet between Milton and Wordsworth, Alexander Pope dominated English poetry for half a century but his most significant works often become lost in anthologies and period courses. Minimum readings will include a sampling of the pastorals, *Essay on Criticism*, *Rape of the Lock*, *Eloisa to Abelard*, selections from *Martin Scriblerus*, the Moral Essays, and the *Dunciad*. Prerequisite: ENG 120 or comparable introductory course. Three credit hours

ENG 275 Poetry in the Age of Sensibility Mr. Carper

Readings in the significant poets of the later Eighteenth Century, with particular attention to Thompson, Gray, Collins, Cowper, and Smart. Three credit hours

ENG 281 Poetry of the Romantic Period Mr. Carper

Characteristic works of the major romantic poets will be studied; particular attention will be given to Wordsworth and Keats. Three credit hours

ENG 282 William Blake Mr. Carner

Examination of Blake's writings and visual art, attempting to develop a comprehensive understanding of Blake's system and intellectual contexts. Prerequisites: Junior class standing and at least 15 hours in literature or permission of instructor. Three credit hours

ENG 283 Coleridge Mr. Carner

Readings in Coleridge's prose and poetry; includes Shakespeare criticism, *Biographia Literaria*, and *Remorse*. Coleridge as poet, critic, psychologist and philosopher. Prerequisite: Junior class standing and at least 15 hours in literature or permission of instructor. Three credit hours

ENG 284 The Lyric in the Romantic Era Mr. Carner

Readings in the shorter poetry of major and minor Romanticists, including Blake, Coleridge, Wordsworth, Byron, Keats, Shelley, Beddoes, Peacock, Hunt, Landor, and others. Attempt to discover varieties of Romantic myth. Prerequisite: completion of Humanities requirement. Three credit hours

ENG 285 The Epic in the Romantic Era Mr. Carner

A continuation of the Romantic Lyric. A study of long poems by major Romantic poets: Blake's *Milton*, Wordsworth's *Prelude*, Coleridge's *Rime of the Ancient Mariner* and *Biographia Literaria*, Keats' *Hyperion* poems, Shelley's *Prometheus Unbound*, Byron's *Don Juan*. Prerequisite: The Romantic Lyric or permission of the instructor. Three credit hours

ENG 286 Fiction in the Time of Jane Austen Mr. Carner

The novels of Jane Austen, readings in Maturin, Peacock, Edgeworth, Lewis, Godwin, Mary Shelley, Scott. Prerequisite: fulfillment of Humanities requirement. Three credit hours

ENG 291 19th Century Controversialists Mr. Hanna

The critical and controversial writings of Carlyle, Newman, Mill, Arnold, Huxley, Ruskin, Morris, Wilde, and Pater. Background reading in the moral and spiritual dilemmas facing the Victorian respectability and aestheticism. Special projects in Victorian dynamism, the Victorian "temper," and "the Victorian compromise." Oral reports and short critical papers. Three credit hours

ENG 293 From Pre-Raphaelitism to the Bloomsbury Group Mr. Wilson

This course will study the poetry, novels, paintings, and criticism of the Pre-Raphaelites, John Ruskin, William Morris, Art Nouveau, the Beardsley period, and the Bloomsbury Group. Three credit hours

ENG 296 Tennyson and Browning Mr. Hanna

A wide-ranging investigation of the poetry of two major Victorian figures, Tennyson and Browning, who contrast dramatically as spokesmen for the nineteenth-century Englishman's inner and outer world. A paradox closely examined: despite the universal appeal of both poets, they share little in technique, "voice," and philosophy. Answers may be sought in a close reading of the poems chronologically arranged, and in the various cultural conflicts of the Industrial Revolution: Utilitarianism, the science-religion debate, artistic alienation. Special projects will be assigned on such topics as the poets' uses of myth and symbol, the decline of tragedy in an age of disbelief, and the "Victorian compromise." Oral reports and short critiques. No prerequisites. Three credit hours

ENG 297 The Later English Novel

Section A

Mr. Bernard

The principal novelists from Jane Austen to Thomas Hardy. Prerequisite: permission of instructor. Three credit hours

Section B

Mr. Hanna

The monumental works of those novelists largely responsible for England's high-water mark in 19th century world literature: Thackeray, Dickens, the Brontës, George Eliot, Meredith, Hardy, and James. Close structural analysis of the novels and artifacts; thematic analysis of the novels as dramatizations of Victorian dilemma, moral and spiritual. Oral reports and short written critiques. Three credit hours

ENG 301 Irish Renaissance

Mr. Slavick

The late 19th and 20th century renewal in Irish literature including Yeats, Synge, Lady Gregory, Joyce, O'Donnell, O'Connor, O'Faolain, O'Casey, and O'Flaherty.

Three credit hours

ENG 302 20th Century Poetry in English to 1945

Mr. Lewisohn

The major poets writing in English in this period, including Yeats, Eliot, and Stevens. Three credit hours

ENG 303 20th Century Poetry in English, since 1945

Mr. Lewisohn

A study of recent poetry, with particular emphasis given to current American writing.

ENG 304 20th Century British and American Poetry

Mr. O'Reilly

A close study of the major poets of the 20th century. Pound, Eliot, Yeats, and Hopkins will be studied. In addition to class study in selected poets, students will read in other major poets not included above and will give class reports on them. Three credit hours

ENG 305 20th Century British and American Poetry

Mr. O'Reilly

A continuation of ENG 304. Stevens, Crane, Williams, Lowell, Thomas, and Auden will be studied. Three credit hours

ENG 306 Joyce's *Dubliners*, *Portrait*, and *Ulysses*

Mr. Hanna

A first trip, unencumbered by scholarly and critical baggage, into the immense Joycean world. Movement through the three major works will be empirical and inductive. Sights, smells, sounds — all modes of perception will be heightened and clarified through class discussion of Joyce's ends and his seemingly inexhaustible means. Except for a side trip now and then into the abstruse or arcane, guidelines will be simple. To satisfy intellectual curiosity and enrich class discussion, each participant will be solely responsible for only one critical commentary selected from among Joyce's twenty leading expositors. Regular oral reports; six short critiques. Prerequisite: previous reading of *Dubliners* or *Portrait of the Artist as a Young Man*. Three credit hours

ENG 307 Modern Short Story

Mr. Rosen

Detailed consideration of from six to ten short story collections reflecting contemporary themes and narrative methods. Although selections will vary, the recent reading list has included Jorge Luis Borges, Franz Kafka, Anton Chekhov, James Joyce, Thomas Mann, and Isaac Babel. A necessarily wide range of themes are confronted: the corruption of reality by dream; personal inadequacy, alienation, and paranoia; self-deceit; varieties of ignorance and cowardice; the moral insight afforded the artist; violence as a mode of self-discovery. Students are responsible for a term paper, a classroom report, and a weekly review of some critical article. Prerequisite: Junior class standing or permission of the instructor. Three credit hours

ENG 308 Modern Novel

Mr. Rosen

Works by six or more distinguished novelists expressing contemporary subject matter and technique. Among representative themes students will consider those of dream and illusion, revolution and personal revolt, alienation and anxiety, crime and self-assertion; among narrative techniques, ellipsis and adaptations of stream-of-consciousness. The list of novelists will vary, but recent assignments include Knut Hamsun, Franz Kafka, Thomas Mann, Hermann Hesse, Andre Malraux, D. H. Lawrence, and James Joyce. Students are responsible for a term paper, a classroom report, and a weekly review of some critical article. Prerequisite: Junior class standing or permission of the instructor. Three credit hours

ENG 309 The Southern Renaissance

Mr. Slavick

The post-World War I flowering in Southern letters: The Fugitive poets and the fiction of Heyward, Wolfe, Faulkner, Elizabeth Madox Roberts, Tate, Gordon, Porter, Agee, Warren, Welty, McCullers, Richard Wright, Peter Taylor, Flannery O'Connor, and Walker Percy.

Three credit hours

ENG 310 The Fugitive Poets

Mr. Burke

Studies in the poetry of the Southern Renaissance.

Three credit hours

ENG 311 Twentieth Century British Literature

Mr. Wilson

Selected novels, plays, poetry from the late 19th century to the present. The course will study naturalism, impressionism, and symbolism, as well as the political and existential implications of British literature of the twentieth century. No prerequisites.

Three credit hours

ENG 312 The Image of the Black Man in American Literature

Mr. Slavick

A study of the developing image of the black man in American prose and poetry in the context of American culture from stereotype to victim, outsider, masked man, and Everyman. Douglass, Stowe, Melville, Twain, Whitman, Cable, Chesnut, DuBois, Heyward, McKay, Cullen, Hughes, James Weldon Johnson, Faulkner, Toomer, Wright, Ellison, Warren, Welty, Tolson, Styron, Baldwin, Leroi Jones, Martin Luther King, Malcolm X, and Cleaver.

Three credit hours

ENG 326 Fitzgerald, Hemingway and Faulkner

Mr. Slavick

Studies in the fiction of three 20th century American writers.

Three credit hours

ENG 342 American Literature

Mr. Jaques

American literature through the 18th and 19th centuries, with emphasis on the principal writers.

Three credit hours

ENG 343 American Literature

Mr. Jaques

A continuation of ENG 342.

Three credit hours

ENG 344 American Renaissance

Mr. O'Reilly, Mr. Jaques

Major American writers of the mid-19th century. Includes critical study of major works of Emerson, Thoreau, Hawthorne, Melville, and Whitman, and some attention to the social and literary backgrounds.

Three credit hours

ENG 348 The American Novel

Mr. Burke

The novel from Brown to James.

Three credit hours

ENG 349 The American Novel

Mr. Burke

A continuation of ENG 348. From Crane to the present.

Three credit hours

ENG 351 Backgrounds of American Thought

Mr. Burke

Readings in the ideas and lives of those figures who were philosophically influential in American life. No prerequisites.

Three credit hours

ENG 355 Major Figures in American Literature

Mr. O'Reilly, Mr. Jaques, Mr. Milliken

In-depth study of one or two major authors at the discretion of department and instructor. Specific authors and topics will be announced.

Three credit hours

ENG 358 Melville, Twain, and James

Mr. Slavick

Short stories and novels of the major American fiction writers of the last half of the 19th century, all of whom reflect, variously, the cultural crises of the time.

Three credit hours

ENG 360 Autobiography

Mr. Carper

The course traces the development of writing about oneself, with special attention to the autobiographies of the romantic period.

Three credit hours

ENG 362 Poetry in English: A Survey

Mr. Carper

A study of representative English and American poets in major periods from Chaucer's to our own.

Three credit hours

ENG 364 Critical Approaches to Literature

Mr. Wilson

This course will provide a basic introduction to the major critical interpretive perspectives indispensable for the sensitive reader (i.e., moral-philosophical, formalistic, psychological, mythological, archetypal, and exponential). It will be structured around a close reading of specific works from several genres. It will also study literary terms, prosody, prose style and the relation of literature to the other arts.

Three credit hours

ENG 366 Literature and the Visual Arts

Mr. Wilson

This course will examine in chronological sequence the relationship between leading English writers or schools and the movements in European painting, architecture, and sculpture to which they most closely correspond.

Three credit hours

ENG 367 Modern Literary Criticism

Mr. Carner

S. T. Coleridge, Northrop Frye's *Anatomy of Criticism*, selections from Kenneth Burke and other modern critics. Prerequisite: Junior class standing and at least 15 hours in literature or permission of instructor.

Three credit hours

ENG 368 Literary Criticism: Aims and Methods

Mr. Carner

Discussion of the ends of literary study and appropriate methods for reaching those ends. Study in historical criticism; new criticism; psychological political, and archetypal criticism. Prerequisite: Junior class standing and at least 15 hours in literature or permission of instructor.

Three credit hours

ENG 369 Introduction to Literary Criticism

Mr. Carner

The major methods of modern criticism, problems in aesthetics — intention, expression, relation of literature to other areas of study. Readings in ancient through modern critics, concentrating on the 20th century. Prerequisite: Junior standing and five courses in literature or permission of instructor.

Three credit hours

ENG 373 Poetry and the Religious Experience

Mrs. Wolf

Analysis of the process of literary creativity, with special emphasis on the relationships among literary forms and philosophy, religion, and criticism. Intensive reading of selected texts.

Three credit hours

ENG 374 Writers of Maine

Mr. Jaques

Historical and literary analysis of writers in and about Maine. The emphasis will be on the literary quality of the best-known writers and the place in history both past and present of the lesser-known writers. Extra credit in the course will be given for a report about any off-campus project related to an author, especially a study of an author and a particular locality in Maine. No prerequisite for non-majors; majors should have already taken a survey of American literature; prospective teachers will prepare an annotated bibliography of one author of their choice.

Three credit hours

ENG 376 Chaucer, e. e. cumings, Swift

Mr. Selkin

A study of three poets of different eras who share much, including wit, clarity, mastery of language, and the combination of abounding love and fierce indignation. Some subsidiary readings may be done in such writers as Skelton, Marvell, Herrick, Gay, and Graves.

Three credit hours

ENG 380 History of the English Language**Section A**

Mr. Rutherford

This course includes a survey of the pre-history of the language as well as a detailed study of the Old, Middle, and Modern English and the forces which shaped these stages. Some methods of modern linguistic science are utilized in examining current usage. Change and development of the language are emphasized.

Three credit hours

Section B

Mr. Bernard

Main aspects of the development of Modern English from Old and Middle English; words and their backgrounds; changes in sound, form, and meaning. Prerequisite: permission of the instructor.

Three credit hours

ENG 381 Modern Grammars

Mr. Rutherford

Designed to acquaint students with the three most common forms of English grammatical analysis: traditional, structural, and transformational. The mechanics of the various analyses will be examined, and comparisons will be made to determine what tentative combination best explains the structure of English. Students in secondary education will focus on practical classroom applications.

Three credit hours

ENG 382 Introduction to Linguistics

Mr. Rutherford

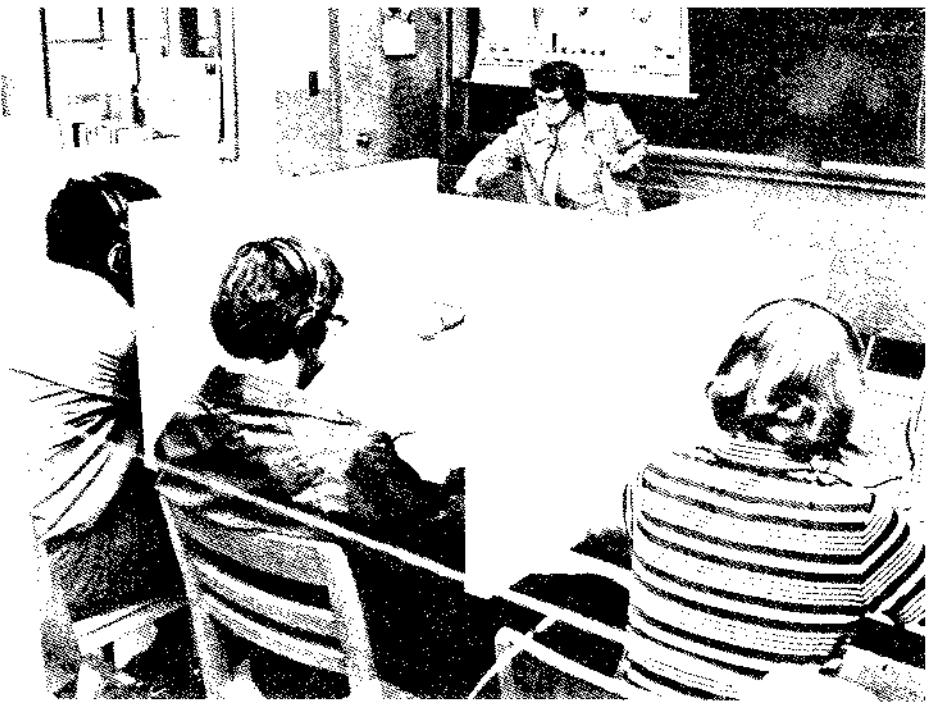
A general introduction to modern linguistic science, including studies in the development of language, phonology, morphology, the dictionary, and varieties of English and usage. Also examined are the various grammatical philosophies and their methods — traditional, structural, and transformational.

Three credit hours

- ENG 384 Structural Linguistics and Culture** Mr. Coffin
The course starts with the analysis of the structure of many languages. Knowledge of structure is then used to analyze art, religion, poetry. American Indian language and cultures constitute part of the course. Recommended for English and language teachers. Prerequisite: sophomores and above. Three credit hours
- ENG 385 Structural Linguistics and Culture** Mr. Coffin
A continuation of ENG 384. Three credit hours
- ENG 386 General Semantics** Mr. Rutherford
An investigation of some of the linguistic forces which shape contemporary life. Attention will be paid to advertising, political and national propaganda. Three credit hours
- ENG 387 Semantics** Mr. Coffin
Interpretation of literature by means of analysis of the language used. Recommended for prospective teachers of literature and English. Prerequisite: sophomore and above. Three credit hours
- ENG 388 Seminar in Linguistics** Mr. Bernard
Three credit hours
- ENG 400 Senior Study** Staff
Guided individual study leading to completion of the senior project. Prerequisite: Senior standing. Three credit hours
- ENG 410 Independent Study in English** Staff
Individual study programs as arranged with an instructor. Prerequisite: Senior standing or permission of instructor. One to three credit hours
- ENG 550 Milton** Mr. Baier
A detailed study of Milton's major poetry in the light of modern scholarship. Readings, discussions, papers. Prerequisite: ENG 336 or equivalent. Three credit hours
- ENG 584 Structural Linguistics and Culture** Mr. Coffin
The course starts with the analysis of the structure of many languages. Knowledge of structure is then used to analyze art, religion, poetry. American Indian languages and cultures constitute part of the course. Recommended for English and language teachers. Prerequisite: Seniors and graduate students only. Three credit hours
- ENG 587 Semantics** Mr. Coffin
Interpretation of literature by means of analysis of the language used. Recommended for prospective teachers of literature and English. Prerequisite: Seniors and graduate students only. Three credit hours

COMPARATIVE LITERATURE

- CPEN 298 Great Continental Novelists** Mr. Hanna
A study and interpretation of eight representative works of European fiction and of underlying literary and historical trends. Students will read four French and four Russian novels: Stendhal, *The Red and the Black*; Balzac, *Pere Goriot*; Gogol, *Dead Souls*; Flaubert, *Madame Bovary*; Turgenev, *Fathers and Sons*; Dostoevsky, *Crime and Punishment*; Tolstoy, *Anna Karenina*; and Zola, *L'Assommoir*. Oral reports, class discussion, short critical papers. Three credit hours
- CPEN 316 Early 20th Century Drama of the Western World** Mr. Duclos
A study of such major dramatists as Ibsen, Strindberg, Chekov, Pirandello, Shaw, and O'Casey. Three credit hours
- CPEN 317 Later 20th Century Drama of the Western World** Mr. Duclos
A study of such major dramatists as Brecht, Anouilh, Girardoux, Williams, Miller, and Albee; and the Theatre of the Absurd, with Beckett, Ionesco, Genet, Pinter, etc. No prerequisites. Three credit hours
- CPEN 372 Greek Epic, Tragedy, and Comedy** Mr. Hanna
Homer's *Iliad* and *Odyssey*; heroic poetry as a reflection of Aegean civilization, of arms and the man, of myth and legend, of social, economic, and literary values. Fifteen tragedies by Aeschylus, Sophocles, and Euripides — their origin, and development, staging and production, structure and technique. Aristotle's *Poetics* and components of tragedy. Three comedies by Aristophanes — their structure, thought, tone, and style. Virgil's *Aeneid* and its indebtedness to the Homeric tradition. Oral reports, class discussions, short critical papers. Three credit hours



Foreign Language and Classics

Associate Professors Clark, Dalvet (Chairman), Duclos, Lepelley; Assistant Professors Crochet, Rolfe, Ubans; Instructors DiBenedetto, Hernandez.

I. COURSES IN ENGLISH TRANSLATION

The Foreign Language and Classics Department offers a number of courses in English translation requiring no previous knowledge of a foreign language and open to any student interested in foreign or classical literature and civilization. These courses are numbered 251-300.

II. BILINGUAL STUDENTS

Franco-American students and other bilingual students will find two French courses especially devised for them (although not exclusively). They are numbered FRE 181 and FRE 381.

III. LANGUAGE PROGRAMS

The department offers programs in French, German, Classical Greek, Latin, and Spanish. Elementary courses (101-102) are for students who have never studied the language. Intermediate level courses (131-132 for modern languages; 201-202 for the ancient languages) are for students with two successful years of high school language study. Students who do not feel prepared to enter the intermediate course in a modern language must begin with the review course numbered 103. Students whose aim is exclusively the ability to read a modern language should enroll in courses numbered 111-112, which are also a preparation for language tests required by graduate schools.

IV. CONVERSATION

Besides the oral practice in the classroom, any student interested in acquiring the ability to speak fluently is invited to use the language laboratory located on the Portland campus in Payson Smith Hall, Room 203, and open every weekday from 9 a.m. to 3 p.m. Students enrolled in language courses (101-132) may register for a supervised language practice twice a week in the laboratory; they will receive an extra credit for regular and active attendance. Students who have already reached the level of literature courses may enroll in conversation courses meeting once a week (204-205) which may be repeated at one credit each semester).

V. FRENCH MAJOR

At the present time the department offers a major only in French. French majors must take a minimum of thirty credit hours on the 200 level and above, of which twenty-one hours must be in literature courses on the 300 level. They are advised to take as early as possible FRE 231, FRE 251, FRE 252, and FRE 203. Summer and junior year studies in France or French Canada are encouraged and acknowledged by transfer of credits.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

VI. FUTURE TEACHERS OF FRENCH

Any student may obtain certification to teach a foreign language by taking eighteen credit hours (above 200 level) of elective courses in a given language. They are advised to take FRE 201, FRE 252, FRE 401, FRE 402, and literature courses selected preferably in the twentieth century (FRE 301, FRE 302, FRE 303). FRE 181 and FRE 203 are also recommended. Prospective teachers must take FLED 301. (See page 75.)

All French Literature courses for majors and future teachers are numbered 300-399. The only prerequisite is previous completion of FRE 132.



COURSE DESCRIPTIONS

LITERATURE AND CIVILIZATION IN ENGLISH TRANSLATION

- CLS 251** The Epic Hero in Ancient Literature Mrs. Duclos
Intensive readings in English translations of Gilgamesh, Iliad, Odyssey, Argonautica, Aeneid; discussion, papers. Three credit hours
- CLS 252** The Tragic Hero in Ancient Literature Mrs. Duclos
Intensive reading of selected plays in English translation by Aeschylus, Sophocles, Euripides, Seneca; discussion; papers. Three credit hours
- CLS 255** The Golden Age of Greece Mrs. Duclos
The literature, history, politics, philosophy, art, and architecture of the fifth century B.C. with particular attention to the achievements of Athens. Lectures, discussion, papers, museum trip. Three credit hours
- CLS 256** Rome, from Republic to Empire Mrs. Duclos
The literature, history, politics, philosophy, art, and architecture of Rome in the first century B.C. Lectures, discussion, papers, museum trip. Three credit hours
- FRE 251** French Civilization: An Historical Approach Staff
Aspects of the society, institutions, arts, literature, and religion of France, from the origins to the end of the XIXth century. Three credit hours
- FRE 252** French Civilization: Contemporary France Miss Lepelley
Institutions, education, society, economy, politics of France. Requires reading knowledge of French, but no French is spoken in the classroom. Prerequisite: FRE 112. Three credit hours
- FRE 261** Masterpieces of French Literature in English Translation I Staff
Novels and plays representative of French Literature from the beginning of the XIXth century to the present. Three credit hours
- FRE 262** Masterpieces of French Literature in English Translation II Staff
Novels and plays representative of French Literature from the Middle Ages to the end of the 18th century. No knowledge of French is necessary. Three credit hours
- FRE 263** Contemporary French Thinkers (in English Translation) Mr. Dalvet
Readings and discussion of recent works of French literature selected for their philosophical and ethical importance: Saint-Exupery, Sartre, Camus, de Beauvoir, Teilhard de Chardin and others. No knowledge of French is necessary. Three credit hours
- FRE 264** Avant Garde Theatre in France (in English Translation) Staff
Study of plays and theoretical texts in English translation from Jarry to Beckett. No knowledge of French is necessary. Three credit hours

CLASSICS: GREEK AND LATIN

- GRK 101** Elementary Greek I Mrs. Duclos
Fundamentals of classical Greek. Emphasis upon acquisition of reading knowledge. Three credit hours
- GRK 102** Elementary Greek II Mrs. Duclos
Selections from Euripides' *Alcestis*. Prerequisite: GRK 101. Three credit hours
- GRK 201** Intermediate Greek I Mrs. Duclos
A study of Plato's *Apology*, *Crito* and selections from the *Phaedo*. Prerequisite: GRK 101 or equivalent. Three credit hours
- GRK 202** Intermediate Greek II Mrs. Duclos
A study of selected books from Homer's *Odyssey*. Three credit hours
- LAT 201** Intermediate Latin I Mrs. Duclos
Selected readings from masters of Latin prose and poetry. Prerequisite: LAT 101 or equivalent. Three credit hours
- LAT 202** Intermediate Latin II Mrs. Duclos
Continuation of LAT 201. Three credit hours
- LAT 231** Readings in Latin Literature I Mrs. Duclos
Readings in the prose and poetry of the late Republic and Early Empire, with emphasis upon literary values. Three credit hours
- LAT 232** Readings in Latin Literature II Mrs. Duclos
Continuation of LAT 231. Three credit hours

FRENCH

- FRE 101 Elementary French I** Miss Di Benedetto, Miss Crochet
 Beginners course in French. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- FRE 102 Elementary French II** Miss Di Benedetto, Miss Crochet
 Continuation of FRE 101. Three credit hours. (With lab, four credit hours.)
- FRE 103 Review of Elementary French** Miss Di Benedetto, Miss Crochet
 Elementary French for students with some previous study of the language who feel the need for a refresher course before entering FRE 131. If possible, register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- FRE 111 Reading French** Miss Lepelley, Mr. Rolfe
 Beginner's course in French aiming exclusively at a reading knowledge of the language. No French spoken. Recommended also as preparation for language tests required by graduate schools. Three credit hours
- FRE 112 Readings in French** Mr. Dalvet
 Further practice of the skill acquired in FRE 111 through an accelerated reading of books on various topics (fiction, history, science, etc). Prerequisite: FRE 111. Three credit hours
- FRE 131 Intermediate French I** Staff
 Development of the language skills through an analysis of contemporary texts: Camus, Sartre, Anouilh, or others. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: FRE 101, FRE 103 or equivalent. Three credit hours. (With lab, four credit hours.)
- FRE 132 Intermediate French II** Miss Lepelley, Mr. Rolfe
 Continuation of FRE 131. Three credit hours. (With lab, four credit hours.)
- FRE 181 French for Franco-Americans** Mr. Rolfe
 An analysis of the French language (grammar, vocabulary, pronunciation) spoken in French communities of New England. The course is also recommended for French majors who plan to teach in such communities. Three credit hours
- FRE 201 Composition and Conversation in French** Miss Di Benedetto, Miss Crochet
 Advanced study of the French language. Frequent practice of composition. Conversation and oral reports. Prerequisite: FRE 132. Three credit hours
- FRE 202 Advanced Composition and Conversation in French** Miss Di Benedetto, Miss Crochet
 Practice of translation; free composition; stylistic analysis; advanced conversation. Prerequisite: FRE 132. Three credit hours
- FRE 203 French Phonetics** Mr. Rolfe
 A formal study of the French sound system and an initiation into phonetic transcription with practical and remedial work in pronunciation. Prerequisite: FRE 132 or equivalent. Three credit hours
- FRE 204 French Conversation I** Miss Lepelley
 For advanced students needing oral practice. This course, which meets once a week, is especially recommended for French majors who may take it repeatedly for credit. Prerequisite: FRE 202 or equivalent. One credit hour per semester
- FRE 205 French Conversation II** Miss Lepelley
 Continuation of FRE 204. One credit hour per semester
- FRE 231 Introduction to French Literature** Mr. Dalvet
 Reading and discussion of representative literary works in the major genres (novel, drama, poetry). Techniques of close reading and *explication de texte* are studied. Designed to give a general background for the major as well as to provide a representative sampling for the non-major. Prerequisite: FRE 202 or equivalent. Three credit hours

- FRE 301 The French Novel Between the World Wars** Miss Crochet
Study of important novels by Gide, Proust, Mauriac, Malraux, Giono, and others. Student participation through group discussion and individual oral reports. Prerequisite: FRE 231.
Three credit hours
- FRE 302 The French Novel from World War II to the Present** Staff
Contemporary trends in the novel, with some attention to the short story. The post-war works of Camus and Sartre; novels by Robbe-Grillet, Beckett, Butor, Claude Simon, Marguerite Duras, and others. Prerequisite: FRE 231.
Three credit hours
- FRE 303 French Theatre in the Twentieth Century** Staff
Plays by Giraudoux, Cocteau, Anouilh, Sartre, Cezair, Ionesco, and others. Prerequisite: FRE 231.
Three credit hours
- FRE 321 Drama and Poetry from Romanticism to Symbolism** Mr. Dalvet
Lectures, readings, and discussion of plays and poetry by Hugo, Musset, Vigny, Baudelaire, Verlaine, Mallarmé, Rimbaud, and other representative authors. Prerequisite: FRE 231.
Three credit hours
- FRE 325 The XIXth Century Novel: Balzac and Stendhal** Mr. Dalvet
Representative novels and short stories of Balzac, Stendhal, and contemporaries. Prerequisite: FRE 231.
Three credit hours
- FRE 326 The Nineteenth Century French Novel: Flaubert and Zola** Staff
Representative novels of Flaubert, Zola, and contemporaries. Prerequisite: FRE 231.
Three credit hours
- FRE 331 The Enlightenment in French Literature** Miss Di Benedetto
The use of literature for propagation of ideas in XVIIIth century France. Readings from Fontenelle, Montesquieu, Voltaire, Diderot, Rousseau. Prerequisite: FRE 231.
Three credit hours
- FRE 335 French Literature of the 17th Century until 1660** Staff
Readings from Malherbe, Scarron, Descartes, Pascal, Corneille. Prerequisite: FRE 231.
Three credit hours
- FRE 332 The XVIIIth Century French Novel** Miss Di Benedetto
Readings from Prevost, Marivaux, Rousseau, Laclos, and others. Prerequisite: FRE 231.
Three credit hours
- FRE 336 French Literature of the 17th Century: the Apogee of the Classical Age** Staff
Readings from Mme. de la Fayette, Moliere, Racine, La Fontaine, La Bruyere, Boileau. Prerequisite: FRE 231.
Three credit hours
- FRE 345 French Literature of the Medieval Period** Staff
Chansons de Geste, Romans courtois; theater; lyric poetry. In modern French translation. Prerequisite: FRE 231.
Three credit hours
- FRE 381 Franco-Canadian Literature** Miss Crochet
Readings from the younger generations of French Canadian novelists Gabrielle Roy, Jean-Guy Pilon, Rejean Ducharme, Marie-Claire Blais, Jacques Godbout. Selections of French Canadian poetry. Prerequisite: FRE 231.
Three credit hours
- FRE 401 Advanced French Grammar I** Mr. Clark
Designed to provide prospective teachers with an adequate foundation in French grammar. Prerequisite: FRE 202.
Three credit hours
- FRE 402 Advanced French Grammar II** Mr. Clark
Continuation of FRE 401.
Three credit hours

FOREIGN LANGUAGE EDUCATION

- FLED 301 The Teaching of Foreign Languages** Mr. Rolfe
Principles and practices of teaching foreign languages at different learning levels. Survey of current trends and methods. Application of language learning principles to classroom procedures. For seniors seeking certification in teaching foreign languages.
Three credit hours

GERMAN

- GMN 101 Elementary German I** Mrs. Ubans
 Beginner's course in German. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- GMN 102 Elementary German II** Mrs. Ubans
 Continuation of GMN 101. Three credit hours. (With lab, four credit hours.)
- GMN 103 Review of Elementary German** Mrs. Ubans
 Elementary German for students with some previous study of the language who feel the need for a refresher course before entering GMN 131. If possible, register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- GMN 111 Reading German I** Mrs. Schwanauer
 Beginner's course in German aiming exclusively at a reading knowledge of the language. No German spoken. Recommended also as preparation for language tests required by graduate schools. Three credit hours
- GMN 112 Reading German II** Mrs. Schwanauer
 Continuation of GMN 111. Three credit hours
- GMN 131 Intermediate German I** Mrs. Schwanauer
 For students who have completed GMN 102 or 103 or the equivalent. Review of grammar. Classroom practice aiming at fluency in speaking and reading. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: GMN 102 or 103. Three credit hours. (With lab, four credit hours.)
- GMN 132 Intermediate German II** Mrs. Schwanauer
 Continuation of GMN 131. Three credit hours. (With lab, four credit hours.)
- GMN 201 Composition and Conversation in German I** Staff
 Systematic training in correct pronunciation and usage, and in vocabulary building, with written and oral practice and work in the laboratory. Prerequisite: GMN 104 or equivalent. Three credit hours
- GMN 202 Composition and Conversation in German II** Staff
 Continuation of GMN 201. Three credit hours
- GMN 231 Readings in German Literature I** Mrs. Ubans
 Readings in 19th and 20th century German literature with special emphasis on the novella. Prerequisite: GMN 132 or equivalent. Three credit hours
- GMN 232 Readings in German Literature II** Mrs. Ubans
 Continuation of GMN 231. Three credit hours

SPANISH

- SPN 101 Elementary Spanish I** Mr. Clark
 Beginner's course in Spanish. Initiation in the four skills of language learning: listening comprehension, speaking, reading, and writing. Students are encouraged to register at the same time for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- SPN 102 Elementary Spanish II** Mr. Clark
 Continuation of SPN 101. Three credit hours. (With lab, four credit hours.)
- SPN 103 Review of Elementary Spanish** Mr. Clark
 Elementary Spanish for students with some previous study of the language who feel the need for a refresher course before entering SPN 131. If possible, register also for laboratory practice (one more credit). Three credit hours. (With lab, four credit hours.)
- SPN 131 Intermediate Spanish I** Mrs. Hernandez
 For students who have completed SPN 101 or the equivalent. Review of grammar. Classroom practice aiming at fluency in reading and speaking. Students are encouraged to register also for laboratory practice (one more credit). Prerequisite: SPN 102 or equivalent. Three credit hours. (With lab, four credit hours.)
- SPN 132 Intermediate Spanish II** Mrs. Hernandez
 Continuation of SPN 131. Three credit hours. (With lab, four credit hours.)
- SPN 231 Readings in Spanish Literature I** Mrs. Hernandez
 A survey of the important periods and trends in Spanish literature with reading of representative works. Prerequisite: SPN 132. Three credit hours
- SPN 232 Readings in Spanish Literature II** Mrs. Hernandez
 Continuation of SPN 231. Three credit hours

Geography-Anthropology

Assistant Professors French, Hodges (Chairman); Instructor Grossinger.

The Department of Geography-Anthropology does not offer a major program leading to a degree in the College of Liberal Arts. It does, however, offer both a 30-hour major and an 18-hour minor in the Social Sciences Area for students in the School of Education. Principles of Geography (GEOG 101) is the only prerequisite for the Geography Minor in the Elementary and Kindergarten-Primary programs of the School of Education.

Secondary Education students with majors or minors in the Social Sciences Area must achieve at least six credits with grades of B or better in such major or minor requirements. No grades of D will count toward fulfillment of the major or minor requirements. No required course may be repeated more than once.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

SOCIAL SCIENCES AREA MAJOR FOR STUDENTS IN THE SCHOOL OF EDUCATION

	<i>Credit hours</i>
HIST 101 and 102 Western Civilization I and II (3 credits each semester) to be taken as a two-semester sequence	6
Choice of one of the two-semester sequences in U.S. History listed below (each offering 3 credits each semester)	6
HIST 131 and 132 U.S. History to 1877 and U.S. History from 1877	
or	
HIST 133 and 134 U.S. History to 1900 and U.S. History since 1900	
GEOG 101 Principles of Geography	3
SOC 101 Introduction to Sociology	3
POL 101 Introduction to Government	3
ECON 101 Principles of Economics I	3
ECON 201 Current Economic Problems	3
GEOG 201 World Geography	3
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	30

Also required for students in Secondary Education but not included in the total credits for the major:

EDU 317 Teaching Social Studies in the Secondary School	3
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COURSE DESCRIPTIONS

Anthropology

ANY 101 Introduction to Anthropology

Mr. Grossinger

The development of man as a bio cultural phenomenon. Special emphasis on the fossil record; the development of human technology and culture; the relation between morphological and behavioral evolution; Darwinian law applied to the human species; the Paleolithic, Mesolithic, and Neolithic; a brief history of anthropology. Three credit hours

ANY 102 Introduction to Anthropology

Mr. Grossinger

The nature of culture. A survey of such human institutions as social organization, political organization, economics and exchange, religion, myth, medicine, magic, ethno-science. The study will focus on evolutionary trends and the development from band and tribal society through chiefdoms and states. Three credit hours

ANY 188 American Culture and Anthropology

Mr. Grossinger

Early American ethnography and archaeology, literature pertaining to the American Indian; an examination of the differences between American Indian and Colonial views of the American environment, and the different uses to which particular regions have been put; ethnogeography and concepts of land and space; study of fishing cultures and their characteristics. Prerequisite: ANY 101 or permission. Three credit hours

ANY 189 American Culture and Anthropology

Mr. Grossinger

Development of American anthropology in the Twentieth Century; re-evaluated views of American culture and American Indians, their origins in traditional culture and their current directions; an analysis of the attempt to integrate American Indian (and non-Western) concepts and values into the mainstream of American life; a discussion of the role of anthropology in current American ecological problems.



ANY 311 North and South American Indian Mythology

Mr. Grossinger

An intensive study of the meaning of the word "myth." Particular emphasis will be placed on current interpretations of myth-formation and the relation between myth and the other aspects of culture, relying heavily on the work of Levi-Strauss and structural anthropology. The four levels of myth — techno-economic, sociological, geographical, and cosmological — will be examined in terms of their dynamic interrelationship. Two cultures will be studied, one in North America and one in South America, and an attempt will be made to correlate myth and overall cosmology with economic and political conditions, magic, etiology, legends, rituals, healing, dream-quests, etc. Prerequisite: ANY 101 or 102 or permission. Three credit hours

ANY 312 Culture and Personality

Mr. Grossinger

A study of the relation between cultural institutions and the individual; concentration on the writings of the Freudians, including Jung and Reich; study of psychosomatic aspects of cultural training; focus also on current problems in parapsychology, the Whorf hypothesis, and totemism. Prerequisite: ANY 101 and 102 or permission. Three credit hours

Geography

GEOG 101 Principles of Geography

Mr. Hodges, Mr. French

Surveys the field of geography and presents an introduction to the several approaches to the discipline. Geographic theory, methods of investigation, and concepts are examined. Physical and cultural factors are interrelated to present the man and environment relationship from the point of view of the geographer. The course is a prerequisite for all advanced courses in geography. Three credit hours

GEOG 201 World Geography

Mr. French

A concept-oriented approach to human geography that explores both natural and cultural influences upon man's use of the land and the varied spatial patterns that reflect his manner of occupation. Environmental quality, perception of environment, the dynamics of process, and new methods in the teaching of geography are among the areas receiving special emphasis. Prerequisite: GEOG 101. Three credit hours

GEOG 302 Urban Geography

Mr. Hodges

Deals with the American city as a type. Urban centers are dealt with at two levels — as whole entities in which location, characteristics, growth, and relations with the countryside are explored, and as complex nodal regions in which the internal variations of the city are examined. Prerequisite: GEOG 101. Three credit hours

GEOG 303 Economic Geography

Mr. Hodges

Economic Geography presents a topical approach to economic activities in the world. Primary, secondary, and tertiary economic activities are examined. The major objectives are (1) to present the pattern of economic activities on a world scale and (2) to present explanations for the location of economic activities. Prerequisite: GEOG 101. Three credit hours

GEOG 304 Political Geography

Mr. Hodges

Political Geography is an examination of political conditions in selected areas of the world with emphasis upon theory, process, and results of political decisions. Physical, economic, and cultural factors are considered as explanations for political problem areas. Prerequisite: GEOG 101. Three credit hours

GEOG 310 Geography of Asia

Mr. Hodges

The course examines the regions of South Asia, Southeast Asia, and East Asia. Monsoon Asia is regional in approach and all aspects of the environment are presented. Physical, cultural, economic, and political factors are examined in an integrative analysis to allow an understanding of some of the reasons for conditions in this part of the world. Prerequisite: GEOG 101. Three credit hours

GEOG 311 Geography of North America

Mr. French

An open-ended approach, ranging from theory to the empirical, that deals with progress and problems in North America as seen from the spatial point of view. Prerequisite: GEOG 101. Three credit hours

GEOG 401 The Local Environment

Mr. French

A course emphasizing the use of tangible artifactual and contemporary "outdoor" evidence in the interpretation of areal development. The local community serves as the laboratory with special attention afforded its relation to the regional and larger scene. Prerequisites: GEOG 101 plus one other Geography course. Three credit hours



History

Professors Cole (Chairman), Emerson, Young, York; Associate Professors Albee, Bibber, Cannon, Connick, Dickey, Schleh, Wood; Assistant Professors Dietrich, Eastman, Ventresco, Whitmore.

The courses offered by the history department are intended to provide broad acquaintance with the past experience of human society. The history curriculum offers the student an opportunity to participate in and investigate the procedures and methods of historical study through lectures, discussion, research, and the writing of history; or, combined with the necessary academic credits in education, the program will provide certification for teaching at the secondary level.

It is hoped that students from many departments, schools, and colleges will take history courses in which they are interested. For students wishing to major in history, as part of the B.A. program or as part of a Secondary Education program, the following minimum program has been structured. Students will probably take more elective courses than the minimum, and should distribute them among the three areas (American, European, and non-Western).

A history major or minor must achieve at least six credits of "B" or better grades in history courses. No grade of "D" will count toward fulfillment of a history major or minor. No required course may be repeated more than once.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

LIBERAL ARTS OR SECONDARY EDUCATION

REQUIREMENTS FOR HISTORY MAJORS

Credit hours

HIST 101 and 102	Western Civilization I and II (3 credits each semester) to be taken as a two-semester sequence	6
Choice of one of the two-semester sequences in U.S. History listed below, each offering 3 credits each semester		6
HIST 131 and 132	U.S. History to 1877 and U.S. History from 1877	
or		
HIST 133 and 134	U.S. History to 1900 and U.S. History since 1900	
Choice of at least one of the two-semester sequences in non-western history listed below, each offering 3 credits each semester		6
HIST 161 and 162	Introduction to African History to Partition and Introduction to African History since Partition	
or		
HIST 171 and 172	Traditional East Asia and Modern East Asia	
or		
HIST 181 and 182	Hispanic America I and II	
or		
HIST 191 and 192	The Middle East I and II	
HIST 200	Methodology in History (To be taken in the sophomore year or during the first semester after declaring a history major.)	3
Other History Courses		18
Minimum Total to Meet Major Requirements		<hr/> 39

NOTE: A student may elect two introductory courses in traditional or in modern non-western history if he prefers.

Unusually well-prepared entering students may, upon passing an examination, gain exemption from any of the required courses. Up to six hours of credit may be granted for superior achievement on such examinations. Otherwise, students will take advanced elective courses to complete the minimum number of credit hours for the major.

It is strongly recommended that history majors, especially those expecting to do graduate study, acquire proficiency in a foreign language.

MINOR IN HISTORY FOR STUDENTS IN SECONDARY EDUCATION

A student in Secondary Education may elect to minor in History. A minimum of 18 credit hours, including both required and elective history courses, is needed for this minor. Details of this program may be obtained from the student's faculty advisor.

ACADEMIC MAJORS AND MINORS IN KINDERGARTEN-PRIMARY AND ELEMENTARY EDUCATION

Students in Elementary Education or Kindergarten-Primary Education in the School of Education may complete 30 hours of History in an approved program for an academic major or 18 approved hours for an academic minor. Details of such programs may be obtained from the appropriate faculty advisors in the School of Education.



COURSE DESCRIPTIONS

HIST 101 Western Civilization I

Staff

An introduction to the intellectual and political heritage of Western man from prehistoric times to the late 17th century. Divergent concepts of the theories and writing of history as a systematic explanation of past events form an integral part of the course.

Three credit hours

HIST 102 Western Civilization II

Staff

A survey of the experiences, ideas, and major creative works of Western man from the 17th century to recent times. The course interweaves political, intellectual, social, and economic developments. It considers international relations, the changing power balance among leading states, and contacts with non-Western civilizations.

Three credit hours

HIST 131 United States History to 1877

Staff

A basic survey and introduction to the field of American history, covering the political, social, and economic development of the United States through Reconstruction.

Three credit hours

HIST 132 United States History Since 1877

Staff

The course is a continuation of HIST 131. A survey of American political, social, and economic development since about 1877.

Three credit hours

HIST 133 United States History to 1900

Staff

The origin and development of American institutions from colonization to the present. Institutional models (e.g. — the family, business, education, etc.) will be presented and their development traced to 1900.

Three credit hours

HIST 134 United States History Since 1900

Staff

A continuation of HIST 133.

Three credit hours

HIST 161 Introduction to African History to Partition

Mr. Schleh

Survey of African history from early migrations to the beginning of the Colonial era. Approach is both regional, stressing selected countries representative of their regions, and topical, cutting across political boundaries (e.g. — states of the Sudan, city states of East Africa), role of Islam, conduct and impact of the slave trade, exploration, and partition.

Three credit hours

HIST 162 Introduction to African History Since Partition

Mr. Schleh

Survey of the Colonial era, the transformation of African societies, the rise of nationalist movements, wars of liberation, and early years of the new era of independence.

Three credit hours

HIST 171 Traditional East Asia

Miss Bibber

The history and culture of China and Japan from earliest times to about 1700, with emphasis on the composition of the "traditional" societies.

Three credit hours

HIST 172 Modern East Asia

Mr. Bibber

China and Japan since about 1700, emphasizing contrasting moves toward modernization in two traditional societies.

Three credit hours

HIST 181 Hispanic America I

Mr. Connick

The Spanish and Portuguese colonial empires in America from their establishment to their achievement of independence in the early 19th century. Prerequisite: no freshmen.

Three credit hours

HIST 182 Hispanic America II

Mr. Connick

The national period of Hispanic America and an analysis of the contemporary problems and tensions of the area. Prerequisite: no freshmen.

Three credit hours

HIST 191 The Middle East I

Staff

A survey of the political, economic, social, and religious history from earliest times to 1453, the fall of Constantinople. Prerequisite: six hours of history.

Two credit hours

HIST 192 The Middle East II

Staff

A continuation of HIST 191 concentrating on the period from the rise of the Ottoman Empire to modern times. Prerequisite: six hours of history.

Two credit hours

HIST 200 Methodology in History**Mr. Connick, Mr. Eastman**

An introduction to research and writing, designed to prepare undergraduates for the requirements of upper level courses in history and the social sciences with emphasis on practical methods of utilizing a library, locating materials, making and organizing notes, and writing and rewriting research papers and reports. Prerequisite: six hours of history.

Three credit hours

HIST 231 Ancient History**Mrs. Duclos**

The political, social, and economic history of the civilizations of the ancient Mediterranean world with Egypt, the Near East, and Greece being studied.

Three credit hours

HIST 232 Ancient History**Mrs. Duclos**

A continuation of HIST 231 concentrating upon an examination of ancient Rome.

Three credit hours

HIST 233 The Bible I**Miss Dickey**

An introductory survey of the Old Testament as the history and literature of the Hebrews — an exploration of the background, authorship and literary qualities of the history books, the prophets and the writings. Prerequisite: Not open to freshmen.

Three credit hours

HIST 234 The Bible II**Miss Dickey**

An introductory survey of the New Testament — the biographies of Jesus, the formation of the early church and its history with the impact of Paul on Christian thought are stressed. Not open to freshmen.

Three credit hours

HIST 241 Early Modern Europe**Mr. Ventresco**

A political, social, and intellectual study of Europe from the era of Martin Luther to the age of Sir Isaac Newton. One of the major themes of this course is the development of the state, and the rise of the great powers within the broader context of international struggles. Prerequisite: six hours of history.

Three credit hours

HIST 242 French Revolution and Napoleon**Mr. Young**

The course takes the French Revolution as a climax of major intellectual, political, and social trends in eighteenth-century Europe. Thorough coverage is given to the Old Regime, the Enlightenment, the influence of the American Revolution, the French Revolution itself, and its impact outside France. The Napoleonic era is handled as the culminating phase of the Revolution and as a major influence on nineteenth-century Europe. Prerequisite: HIST 102.

Three credit hours

HIST 243 Europe in the Nineteenth Century**Miss Dickey**

An intensive survey of the history of Europe's major powers and their international relations. Major topics also included are liberalism, nationalism, socialism, and imperialism. Intellectual and cultural developments are stressed. Prerequisite: HIST 102.

Three credit hours

HIST 244 Twentieth Century Europe I**Staff**

A study of European society from the turn of the century through the aftermath of World War I. Particular attention will be given to industrialization, urbanization, imperialism, and nationalism, as well as to the approach of world war and the war's consequences. Prerequisite: HIST 102.

Three credit hours

HIST 245 Twentieth Century Europe II**Staff**

An intensive survey of European developments in the twentieth century stressing intellectual, economic, psychological, social, and political factors. Europe's changing role; the impact of World Wars I and II; the meaning of Facism, Nazism, and Soviet Communism; and problems facing Europe in today's world are considered. Prerequisite: HIST 102.

Three credit hours

HIST 261 History of England**Mr. Cole, Mr. Ventresco**

A survey of England from Anglo-Saxon times to the beginning of the twentieth century, with emphasis on the nature of English monarchy, the development of political institutions, and evolving constitutionalism. Particular attention is given to broad movements such as the Reformation, the Industrial Revolution, and Imperialism. Prerequisite: Hist 101, 102.

Three credit hours

HIST 265 Italy Since 1815

Mr. Ventresco

A political, intellectual, diplomatic, and social history of Italy from the Risorgimento to the Totalitarian state, and to the post-war era. Considerable emphasis will be placed upon the role of the Papacy in Italian affairs, and the forces which have altered this relationship. The problems of contemporary Italy will be analyzed within the broad framework of European history. Prerequisite: six hours of history. Three credit hours

HIST 267 History of France

Staff

A survey of French history treating the political, social, economic, and cultural development of the nation from the formation of the French monarchy through the French Revolution and Napoleon. Prerequisite: HIST 101 and 102 or permission. Three credit hours

HIST 268 History of France

Staff

A continuation of HIST 267 covering the period from 1815 to the present. Prerequisite: HIST 101 and 102 or permission. Three credit hours

HIST 271 German History, 1648-1900

Mr. Albee

A study of the German people from the Thirty Years' War until the twentieth century. Particular attention will be given to the rise of Prussia as a rival to Austria, to life in the Germanies during the Enlightenment, and to the romanticism, liberalism, and nationalism of the nineteenth century. Prerequisite: HIST 102. Three credit hours

HIST 272 Germany in the 20th Century

Mr. Albee, Mrs. Young

A study of the German Empire, its dissolution in 1918, the Weimar Republic, Hitler's Third Reich, Germany in World War II, and divided Germany since 1945. Includes a study of cultural and social factors which help explain Germany's role in the modern world. Prerequisite: HIST 102 or permission. Three credit hours

HIST 275 History of Russia I

Mrs. Young

Political, social, cultural, and economic history of the Russian people to 1801. Surveys geographic backgrounds, the influence of Byzantine civilization, the impact of invasions, and the development of Russia's unique social, cultural, and political institutions through the reign of Catherine the Great. Prerequisite: one survey or permission. Three credit hours

HIST 276 History of Russia II

Mrs. Young

A continuation of Russian history from 1801 to today. The course deals with pressures for reform and weaknesses in imperial Russia, role of the intelligentsia, and revolutionary parties, the Bolshevik Revolution, and the history of Communist Russia since 1917. Prerequisite: one survey or permission. Three credit hours

HIST 291 The British Commonwealth

Mr. Albion

A survey of the modern British Commonwealth. The first semester will concentrate on the history, contemporary position, problems of Canada, the West Indies, and British Africa. Three credit hours

HIST 295 History of Canada I

Mr. Whitten

Canada's history from the earliest settlements in New France to 1867. Emphasis on the evolution of Canada within the British Empire-Commonwealth, relations with the United States, and on the background of contemporary constitutional, economic, and cultural problems. Prerequisite: HIST 131, 133. Three credit hours

HIST 296 History of Canada II

Mr. Whitten

Canada's history since 1867. Continuation of HIST 295. Three credit hours

HIST 297 Canadian-American Relations

Mr. Whitten

A seminar-type course designed to explore relationships with the nation most involved with the economy, security, and geography of the United States. Limited enrollment. Prerequisite: HIST 131 and 132 or HIST 133 and 134. Three credit hours

HIST 298 Naval History

Staff

The influence of sea power on history with major emphasis on the Anglo-American naval tradition since 1750. Naval strategy, tactics, operations, and administration will be evaluated during the period of naval growth (1775-1900) and in the subsequent era of the battleship and the fast carrier attack force. Anglo-American naval operations in World War I, World War II, Korea, and Vietnam will be specially considered. Prerequisite: HIST 131 and 132 or HIST 133 and 134. Three credit hours

HIST 301 American Colonial History

Mr. Cannon, Miss Wood

Half the semester is devoted to discovery, exploration and colonization. New Spain, New France, New Netherland, and New Sweden are compared with the English settlements (13 colonies), each of which is considered in detail. Second half of semester emphasizes social and intellectual topics (e.g. - religion, law, medicine, painting, literature and music). Prerequisite: HIST 131, or 133.

Three credit hours

HIST 302 The American Revolution

Mr. Cannon, Miss Wood

The Anglo-French conflict, the series of inter-colonial wars, and the "Old Imperial System" are considered as background to the American Revolution. Subsequently, the period 1763-1789 is treated in detail, including leading personalities, military campaigns, social aspects of the war, and the Constitution (origins, constitutional convention and ratification). Historiography of the period is emphasized. Prerequisite: HIST 131, 132 or 133, 134.

Three credit hours

HIST 305 Hamilton and Jefferson

Special emphasis on Hamilton and Jefferson to include: biographical information, the Jefferson-Hamilton political dichotomy, and its subsequent influence. Following this, a general analysis of social, intellectual, political, economic, and diplomatic problems facing the "New Nation" between 1789-1815 is presented. HIST 131 and 132 or HIST 133 and 134 or permission.

Three credit hours

HIST 306 The Age of Jackson, 1815-1850

Mr. Hunt

A consideration of American political, cultural, social, and economic development in the first half of the 19th century. Specific topics will include the controversies surrounding Jacksonian democracy, the Bank of the United States, internal improvements, the tariff, "Manifest Destiny", and the sectional-slavery issue. Prerequisite: HIST 131 or permission.

Three credit hours

HIST 307 Civil War and Reconstruction

Mr. Emerson, Mr. Hunt

An examination of the period 1850-1877, dealing with the background and causation of the war; Lincoln and the secession crisis; the military, political, diplomatic, and economic aspects of the Civil War; and the challenges and ultimate failure of reconstruction after 1865. Prerequisite: HIST 131 and 133.

Three credit hours

HIST 308 The Gilded Age in America, 1869-1898

Mr. Hunt

The United States in the age of enterprise with emphasis on the development of political and economic radicalism, the commercialization of agriculture, the rise of the American city, new directions in social thought, concentration of industrial wealth and financial power, and American foreign policy. Prerequisite: HIST 132 or 134 or permission.

Three credit hours

HIST 309 Early 20th Century America, 1898-1938

Mr. Emerson

The United States in the first four decades of the twentieth century with coverage of the Spanish-American War, the progressive movement, American entry into World War I, the Roaring Twenties, the Great Depression, and the domestic programs of the New Deal. Prerequisite: HIST 132 or 134.

Three credit hours

HIST 310 America Since 1938

Mr. Emerson

The United States since the Great Depression with coverage of the foreign policy of the New Deal, the background to Pearl Harbor, World War II, the Fair Deal, the Cold War, the Eisenhower years, the New Frontier, and the Great Society. Prerequisite: HIST 132 or 134 or permission.

Three credit hours

HIST 321 History of Maine

Mr. York

A survey of Maine's social, economic, and political life from primitive times to the present.

Three credit hours

HIST 323 History of the South

Mr. Whitmore

A survey of the social, political, economic, intellectual, cultural, and racial elements of the American South from the colonial period to the present. Prerequisite: HIST 131 and 132 or HIST 133 and 134.

Three credit hours

HIST 325 History of the American Frontier

Mr. Cannon, Mr. Wood

The Turner thesis, historiography, and adaptations to the challenges of the environment are considered. Various frontiers from the Atlantic seaboard to the last frontier on the Great Plains are studied. Prerequisite: HIST 131, or 133. Three credit hours

HIST 327 U.S. Maritime History

Staff

Ships and trade from colonial days to the present, emphasis on famous ships and ship builders, the evolution of ships from sail and wood to steam and steel, the effect of the Civil War and two world wars on American Merchant marine, and the relationship between the United States Navy and the merchant service. Prerequisite: HIST 131 and 132 or HIST 133 and 134 or permission. Three credit hours

HIST 331 History of Black Americans

Mr. Emerson, Mr. Whitmore

The experience of black people within American society from the colonial period to the present is treated through their interaction with the nation's social, political, cultural, and economic institutions. Major topics include the African heritage, components of slavery, abolitionism, segregation, programs of race advancement, and the modern search for identity. Prerequisite: HIST 131, or 133, or permission. Three credit hours

HIST 335 American Urban History

Mr. Whitmore

The American city is surveyed in regard to the history of its social, political, intellectual, and cultural components; the changing nature of "community"; the course of urban development; and the emergence of urban life styles. Special attention is focused on the population movement to the city; the development of slums, ghettos, and suburbs, the growth of municipal institutions and services; the relationship of city dwellers and government; and the emergence of "Megalopolis." Three credit hours

HIST 337 American Economic and Business History, 1607-1860

Mr. Eastman

Economic and business developments in the United States from the first settlements to the Civil War with coverage of the British mercantile system, the colonial economy, the Transportation Revolution, the Southern plantation system, and the beginnings of American industrialization; and with in-depth analysis of selected topics of special interest. Prerequisite: HIST 131, or 133, or permission. Three credit hours

HIST 338 American Economic and Business History Since 1860

Mr. Eastman

Economic and business developments in the United States from the Civil War to the present with coverage of the growth of a national market and distribution system, the revolution in agriculture, the rise of big business, the organization of labor, and the growing involvement of the federal government in business and the economy; and with in-depth analysis of selected topics of special interest. Prerequisite: HIST 131, 132 or 133, 134 or permission. Three credit hours

HIST 339 American Labor in the Twentieth Century

Mr. Emerson

A chronological examination of the efforts of American corporate society. Topics will include the emergence of the AFL, labor radicalism, labor and immigration, the nature and role of labor leadership, racketeering labor and the New Deal, and the rise of Big Labor. The focus will be on organized labor but attention will also be given to white collar workers, blacks, migrants, and other fringe groups. Emphasis will be placed on labor theory. Prerequisite: HIST 132 or 134 or permission. Three credit hours

HIST 341 American Social and Intellectual History

Mr. Emerson, Mr. Whitmore

An analysis of the evolution of American religious, political, economic, social, and scientific thought from the colonial period to 1865 emphasizes major principles, assumptions, and values; the relation of American thought to class structure, ethnic and racial associations, mobility, and immigration; and its relation to contemporary intellectual patterns in the western world. Three credit hours

HIST 342 American Social and Intellectual History

Mr. Emerson, Mr. Whitmore

A continuation of HIST 341 from 1865 to the present. Three credit hours

HIST 343 Diplomatic History of the United States I

Miss Wood

This course covers the development of key United States foreign policies from the Revolution to the Spanish-American War. Prerequisite: HIST 131. Three credit hours

HIST 344 Diplomatic History of the United States II

Miss Wood

The chief emphasis is placed on the causes and results of World Wars I and II, the nature of the Cold War, and the character of our present commitments. Prerequisite: HIST 132.

Three credit hours

HIST 345 Seminar in American Character

Mr. Emerson

A course focusing on a particular problem of historical analysis; the interpretation of the national character as revealed in sources ranging from the earliest accounts of foreign travellers to the most recent works of social psychologists. Authors to be considered in discussions, reports, and papers include Tocqueville, Bryce, Adams, Turner, Siegfried, Mead, Potter, Riesman, and others. Prerequisite: HIST 131, or 133, or permission.

Three credit hours

HIST 347 Viewpoints in American History

Miss Bibber

A seminar involving discussions of selected topics in United States history, with emphasis on varying interpretations of trends and events. Students will read and analyze both traditional and more recent views, noting changes in frames of reference, methodology, and general approach. Prerequisite: 12 hours of U.S. history.

Three credit hours

HIST 361 The United States and Africa

Mr. Schleh

A history of United States' interests in and relations with Africa from the early seventeenth century to the present. Areas covered include commerce, social and humanitarian contacts, America's role in the exploration of Africa, and diplomacy. Prerequisite: 9 hours of history or permission.

Three credit hours

HIST 362 Contemporary Africa

Mr. Schleh

Seminar to examine major interdisciplinary elements in today's Africa including: literature and the arts, social change, development and adaption in African politics, economic development, race relations, and international politics.

Three credit hours

HIST 371 The United States and Asia

Miss Bibber

A history of the United States' interests in the Far East from 1789 to the 1960's, considering economic and social contacts as well as diplomatic. Prerequisites: HIST 131 or 133; HIST 172 strongly recommended.

Three credit hours

HIST 373 History of Late Traditional China

Mr. Dietrich

Before the nineteenth century no Chinese doubted — and few outsiders who saw it disagreed — that the "Middle Kingdom" was the greatest of the world's civilizations. No society was larger, had stronger ties to its past, or had contributed more to the development of human culture. This course will explore the institutions and values of China in the period from 800 to 1800, and its relationships with other societies. Prerequisites: HIST 171 recommended.

Three credit hours

HIST 374 History of Modern China

Mr. Dietrich

After dealing with the nature of Chinese society and institutions as they existed around 1800, the course will take up problems of modernization, imperialism, revolution, warlordism, Japanese aggression, civil war, and the present communist regime. Prerequisite: HIST 172 recommended.

Three credit hours

HIST 376 History of Modern Japan

Mr. Dietrich

This course will explore what Japan was like when Perry "opened" it in 1854 and will deal with the rapid social changes which made Japan the outstanding of modernization among non-western nations. The problems which this development has created will also be considered. Prerequisite: HIST 172 recommended.

Three credit hours

HIST 377 Chinese Intellectual History

Mr. Dietrich

Prior to the modern era, the Chinese interpreted their world through traditional idea systems, the most prominent of which were Confucianism, Taoism, and Buddhism. This course will explore these traditions: their assumptions and values, their varieties and internal tensions, and their relationships to the larger social system. Prerequisite: HIST 171 recommended.

Three credit hours

HIST 381 Latin America and the United States

Mr. Connick

A survey of United States participation in Latin American affairs from the recognition of independence and the enunciation of the Monroe Doctrine to the Good Neighbor policy and the present day. Prerequisite: HIST 182 recommended.

Three credit hours

HIST 382 Problems of Latin America

Mr. Connick

An analysis and evaluation of contemporary Latin American problems. The internal tensions and international relations of the several countries. Prerequisite: HIST 182 recommended.

Three credit hours

HIST 392 Problems in Contemporary History

Staff

An analysis in depth of a selected controversial and contemporary problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission of the instructor.

Three credit hours

HIST 394 Selected Topics in History

Staff

An analysis in depth of a selected controversial historical problem. The topic to be studied and the method of approaching it will be chosen jointly by interested students and the staff. Prerequisite: permission.

Three credit hours

HIST 415 Recent Literature in European History

Staff

A survey of the most important recent literature in the field of European history. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis on reading and discussing books and articles with applicability to secondary education programs. Prerequisite: HIST 101, 102 and six hours of European history or permission.

Three credit hours

HIST 445 Recent Literature in United States History

Staff

A survey of the most important recent literature in the field of U.S. History. Designed to inform the public school teacher and advanced undergraduate of the newest publications and historical controversies. Annotated bibliographies will be prepared. Emphasis on reading and discussing books and articles with applicability to secondary education programs. Prerequisite: twelve hours of U.S. history or permission.

Three credit hours

HIST 495 Historiography

Staff

A survey of the principal schools of historical writing and of their products, with a detailed analysis of the philosophical principles, specific purposes, and research and writing techniques of selected major historians. Prerequisite: Senior history majors only.

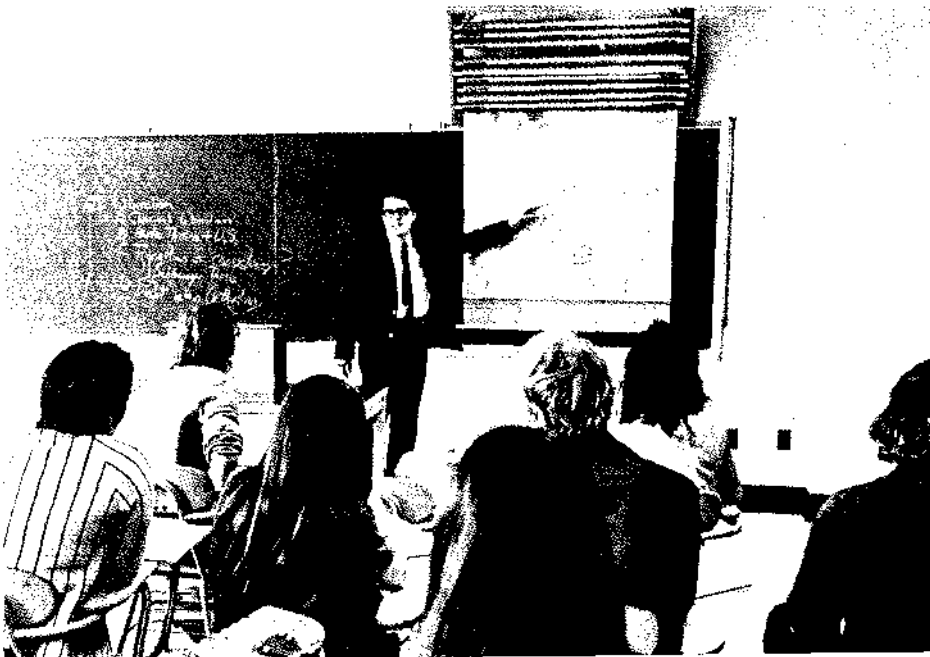
Three credit hours

HIST 498 Independent Study in History

Staff

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis reflecting a high caliber of performance. Prerequisite: permission.

One to three credit hours





Mathematics

Professors Estes, Fish, P. Rogers; Associate Professors Brown, Canty, Guay; Assistant Professors Chabot, Foster, Kratzer, MacDonald, Mainville, Moulton, Soyachak; Instructors Bradbard, Irish.

A four-year program leading to a baccalaureate degree in mathematics is offered, as well as offerings to meet the requirements of a number of undergraduate and graduate programs.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

I. REQUIREMENTS FOR THE MATHEMATICS MAJOR

- A. Successful completion of the Calculus sequence (MS 150, 151, 250, 251) and Foundations (MS 290).
- B. Successful completion of one of the courses listed in each of the following four areas:
 1. Algebra: MS 382 Abstract Algebra
MS 380 Linear Algebra
 2. Analysis: MS 355 Complex Analysis
MS 352 Real Analysis
MS 354 Topics in Advanced Calculus
 3. Applied Mathematics: MS 360 (or GEE 207) Computer Programming
MS 362 Mathematical Statistics I
MS 368 Numerical Analysis
 4. Geometry: MS 370 Euclidean Geometry
MS 372 Non-Euclidean Geometry
MS 371 Projective Geometry

Any changes in the above categories must be approved by the department.

- C. Successful completion of at least 39 hours of approved mathematics courses. Approved courses are generally considered to be ones in which the second digit is 5 or greater.

II. RECOMMENDATIONS FOR MATHEMATICS MAJORS

- A. Students who are considering majoring in mathematics should complete MS 150 and MS 151 in their freshman year and MS 290 by the end of their sophomore year.
- B. Mathematics majors intending to pursue graduate work are strongly urged to take Real Analysis I, Abstract Algebra, Topology, and one year of French, German, or Russian.
- C. Mathematics majors intending to enter industry are advised to take Computer Programming, Statistics, Differential Equations, and Numerical Analysis. It is also suggested that such majors consider minoring in a quantitative field such as Physics, Economics, Engineering, etc.
- D. Mathematics majors intending to teach at the secondary level are strongly urged to take Abstract Algebra, Euclidean Geometry, Mathematical Statistics I, Teaching of Mathematics in the Secondary School, Student Teaching, The American School, The Teaching Process, and Growth-Learning Process.

For certification to teach at the secondary level two options are available:

- (1) a major in mathematics and a minor in another field.
- (2) a 50 hour area major in mathematics (39 hours of which must fulfill the requirements stated in I).

Students electing the latter option are urged to consult with their advisors before or during freshman registration.

III. REQUIREMENTS FOR MATHEMATICS MINORS AND EDUCATION MAJORS

- A. A minor in mathematics may be obtained by the successful completion of 18 hours of mathematics courses in which the second digit is 5 or greater (with the possible exception of an MS course whose code number ends in the double digit "99").
- B. Kindergarten-Primary or Elementary majors may fulfill an area concentration requirement by successfully completing 30 credit hours of mathematics courses.
- C. Kindergarten-Primary or Elementary majors may obtain an academic minor in mathematics by successfully completing 18 credit hours of mathematics courses.



COURSE DESCRIPTIONS

MS 10 Mathematical Analysis for Business Decisions

Staff

The traditional topics of elementary mathematics are included to acquaint the student with their uses as tools which can be applied to solving problems of a business decision-making nature. Topics covered include integers, real numbers, number systems, set theory and complex numbers. Three credit hours

MS 100 Elements of Mathematics I

Staff

This is the first course in a basic two-course sequence of special interest to prospective primary and elementary teachers. The course places major emphasis on an intuitive approach to the structure of the real number system. Topics covered: sets and logic, system of whole numbers, integers, rationals, numeration systems, elementary number theory. Restricted to students majoring in elementary or primary education. Prerequisites: one year of high-school algebra and geometry; and/or interest in mathematics. Three credit hours

MS 101 Elements of Mathematics II

Staff

Continuation of MS 100. Topics covered: decimals and real numbers, mathematical systems of modern mathematics, probability, elementary statistics, informal geometry, algebra concepts. Prerequisite: MS 100 or permission of instructor. Three credit hours

MS 102 Basic Technical Mathematics with Calculus, Part I

Mr. Soychak

This course includes the traditional topics of college freshman mathematics: slide rule, functions, graphs, equations, systems of linear equations, determinants, trigonometry. Prerequisites: one year of high-school algebra and geometry, or permission of instructor. Three credit hours

MS 103 Basic Technical Mathematics with Calculus, Part II

Mr. Soychak

A continuation of MS 102 including more trigonometry, vectors, complex numbers, logarithms, analytic geometry, derivatives with applications, and integrals with applications. Prerequisite: MS 102 or permission of instructor. Three credit hours

MS 104 Mathematical Concepts I

Staff

The first course of a two-course sequence designed for students not majoring in mathematics. Topics are selected to show the content, method and meaning of mathematics. Selections from the following topics: sets, logic, probability, analysis, geometry, linear algebra, computer programming. Prerequisites: two years of high-school algebra and one year of geometry. Three credit hours

MS 105 Mathematical Concepts II

Staff

A continuation of Mathematical Concepts I. Prerequisite: MS 104 or permission of instructor. Three credit hours

MS 110 Elementary Mathematical Analysis

Staff

A unified treatment of the elementary functions of analysis; their analytical properties including derivatives, integrals and series; applications. Prerequisites: three years of high-school college-preparatory mathematics. Three credit hours

MS 111 Analysis and Probability

Staff

Some calculus of functions of more than one variable; partial differentiation; optimization; multiple integration; discrete and continuous sample spaces; common probability laws; expected values. Prerequisites: MS 110 or MS 150. Three credit hours

MS 115 Introduction to Computers

Staff

An introduction to the University's computer system. The programming language used will be BASIC, COUPLE, or FORTRAN. One credit hour

MS 116 An Introduction to Computer Systems

Staff

An introductory study of the role of the computer in modern life; computer systems, languages, programming, techniques, and applications. Extensive use will be made of the University's computer system. This course is designed especially for non-mathematics majors. Prerequisites: Familiarity with the content of three years of high school college preparatory mathematics. Three credit hours



MS 120 Statistical Inference

Staff

An introductory course including basic probability, random variables, and their distributions; estimation and hypothesis testing; regression and correlation: Prerequisite: two years of high-school algebra. Three credit hours

MS 140 Pre-Calculus Mathematics

Staff

A brief review of elementary algebra followed by a study of the algebraic, exponential, logarithmic, and trigonometric functions. Prerequisite: two years of high-school algebra. Three credit hours

MS 150 Calculus I

Staff

This is the first course in a sequence of four basic calculus courses (MS 150, 151, 250, and 251) which cover the study of functions of one or more variables, and their graphs, limits, derivatives, integrals, optimization, infinite series, vector valued functions, and various applications. Calculus I provides an introduction to the calculus of functions of a single variable. (Please compare description of Calculus A—MS 152.) Prerequisites: two years of high-school algebra, plus geometry and trigonometry; or MS 140.

Three credit hours

MS 151 Calculus II

Staff

A continuation of MS 150. Prerequisite: MS 150.

Three credit hours

MS 152 Calculus A

Mr. Rogers

For students in the engineering program, a sequence of three basic calculus courses (MS 152, 153, 252) is offered. Topics in this course sequence cover: calculus of functions of one or more variables, graphs, limits, derivatives, integrals, optimization, infinite series, vectors, and applications in physical sciences. Calculus A provides an introduction to the calculus of functions of one variable. Restricted to engineering students. Prerequisites: two years of high-school algebra, plus geometry and trigonometry; or MS 140.

Four credit hours

MS 153 Calculus B

Mr. Rogers

A continuation of Calculus A. Course will usually include infinite series and an introduction to vectors. Prerequisite: MS 152.

Four credit hours

MS 212 Statistics

Staff

Sampling distributions; estimation; hypothesis testing; introduction to regression analysis and analysis of variance. Prerequisite: MS 111.

Three credit hours

MS 213 Linear Systems

Staff

An introduction to vectors, matrices, and linear systems of algebraic equations; linear programming; Markov processes. Prerequisite: MS 212.

Three credit hours

- MS 230 History of Elementary Mathematics** Mr. Estes
A history of certain topics in number theory, geometry, and elementary algebra. Prerequisite: MS 101 or permission of instructor. Three credit hours
- MS 231 Basic Concepts of Algebra** Staff
A course as recommended by the Committee on the Undergraduate Program, Mathematical Association of America, to follow the two-course sequence on number systems; emphasis on generalization and abstraction, algebraic properties, linear equations and inequalities in two variables, quadratics, systems of equations and inequalities, modular arithmetic, group, field, complex numbers, functions. Prerequisites: MS 100 and MS 101. Three credit hours
- MS 232 Informal Geometry** Staff
To provide the prospective elementary teacher with the common core of geometric knowledge; congruence, measurement, parallelism, and similarity; presented at first intuitively, then as part of a deductive system; applications. Follows recommendations of CUPM, Mathematical Association of America. Prerequisite: MS 101. Three credit hours
- MS 250 Calculus III** Mr. MacDonald, Mr. Fish
A continuation of the developments of Calculus I and II: solid analytic geometry, infinite series, partial differentiation, applications. Prerequisite: MS 151. Three credit hours
- MS 251 Calculus IV** Mr. MacDonald, Mr. Fish
Multiple integrals and an introduction to ordinary differential equations, applications. Prerequisite: MS 250. Three credit hours
- MS 252 Calculus C** Mr. Rogers
Multivariate calculus and vector calculus. Prerequisite: MS 153. Four credit hours
- MS 290 Foundations of Mathematics** Mr. Bradbard, Mr. Chabot
Selected topics in set theory, symbolic logic, and methods of proofs needed in more advanced mathematics courses. Prerequisite: consent of the department. Three credit hours
- MS 291 The Real Numbers** Mr. Bradbard, Mr. Chabot
An axiomatic construction of the real number system. Prerequisite: MS 290 or permission of instructor. Three credit hours
- MS 292 Theory of Numbers** Mr. Brown, Mr. Estes
Basic course in number theory, including such topics as divisibility properties of integers, prime numbers, congruences, multiplicative number theoretic functions, and continued fractions. Prerequisite: two years of high-school algebra. Three credit hours
- MS 350 Differential Equations** Mr. Rogers
A study of various methods for solving ordinary differential equations and initial value problems including transform, numerical, and series methods. Three credit hours
- MS 352 Real Analysis I** Mr. MacDonald
Limits, continuity, differentiation and integration of functions of one or more real variables, infinite series, uniform convergence, and other selected topics. Prerequisites: MS 251 (or 252), and MS 290. Three credit hours
- MS 353 Real Analysis II** Mr. MacDonald
A continuation of Real Analysis I. Prerequisite: MS 352. Three credit hours
- MS 354 Topics in Advanced Calculus** Mr. Brown
Selected topics on multivariate functions, vectors, transformations, line integrals, and surface integrals. Prerequisites: MS 251 and MS 290. Three credit hours
- MS 355 Complex Analysis** Mr. Guay
A study of the complex number system and its applications: differentiation and integration of complex-valued functions, the Cauchy integral theorem and formula, Taylor and Laurent series, singularities and residues, conformal mappings. Prerequisite: MS 251 or permission of instructor. Three credit hours
- MS 360 Computer Programming** Mr. Estes
Programming techniques using the FORTRAN language. Applications will be primarily from mathematics/statistics. Prerequisite: one year of calculus. Three credit hours

- MS 361 Numerical Analysis** Mr. Rogers
A study of the theory and application of computational algorithms for interpolation, equation solving, matrix methods, integration; error analysis. Prerequisites: MS 350 and MS 360.
Three credit hours
- MS 362 Mathematical Statistics I** Staff
Probability laws, random vectors and their distributions, generating functions, expected values, sampling, distributions. Prerequisite: MS 251 or MS 252. Three credit hours
- MS 363 Mathematical Statistics II** Staff
A study of estimators, their generation and properties, classical hypothesis testing, selected topics from regression, correlation, analysis of variance, non-parametric methods, and Bayesian techniques. Prerequisite: MS 362. Three credit hours
- MS 364 Statistical Methods for Research** Staff
An applied methods course. Selected topics from analysis of variance and covariance, regression, correlation, non-parametric methods; factor analysis. The computer system is utilized, but programming is not necessary. Prerequisite: MS 120. Three credit hours
- MS 365 Design of Experiments** Staff
The study and application of the various factors used in conducting a statistical study; including block, split-plot, factorial designs; replication; some sampling methods. Applications. Three credit hours
- MS 366 Linear Programming** Mrs. Foster
A study of matrix algebra applied to the problem of optimizing a linear function subject to linear inequality constraints, utilizing the simplex procedure. Prerequisite: MS 290.
Three credit hours
- MS 370 Euclidean Geometry** Mr. Moulton
Selected topics from Euclidean geometry. Prerequisite: MS 290. Three credit hours
- MS 371 Projective Geometry** Mr. Moulton
Synthetic and analytic projective geometry, including finite projective planes. Prerequisite: MS 290. Three credit hours
- MS 372 Non-Euclidean Geometry** Mr. Moulton
A development of one or more of the non-Euclidean geometries. Prerequisite: MS 290.
- MS 373 Differential Geometry** Staff
A first course in the metric differential geometry of curves and surfaces in Euclidean space. Prerequisite: MS 251. Three credit hours
- MS 375 Coordinate Geometry** Staff
The choice and role of coordinate systems in various geometries. Three credit hours
- MS 380 Linear Algebra** Mr. Bradbard, Mrs. Foster
An introduction to the theory of vector spaces and linear transformations. Prerequisite: MS 290 and consent of instructor. Three credit hours
- MS 382 Abstract Algebra** Mr. Bradbard, Mr. Chabot
Algebraic structures, such as groups, rings, integral domains, and fields. Prerequisite: MS 290. Three credit hours
- MS 390 History of Mathematics** Staff
The development of mathematics from ancient to modern times. Prerequisites: MS 151 and MS 290. Three credit hours
- MS 450 Partial Differential Equations** Staff
An introduction to the general properties of partial differential equations followed by solutions of specific equations. The techniques include eigenfunction, expansions, operational methods, and conformal mapping. Prerequisite: MS 350. Three credit hours
- MS 480 Galois Theory** Staff
Theory of finite and infinite extensions of fields with application to the solution of equations by radicals. Prerequisites: MS 382 and permission of instructor. Three credit hours
- MS 490 Topology** Mr. MacDonald
An introduction to fundamental concepts in topology, including topological spaces, mappings, convergence, separation and countability, compactness, connectedness, metrization, and other selected topics. Prerequisites: MS 252 and MS 290. Three credit hours

MS 492 Graph Theory and Finite Combinatorics Staff
 An introduction to the structures, concepts, and theorems of graph theory and a survey of finite combinatorial structures that can be viewed in a graphtheoretic framework. Prerequisite: MS 290. Three credit hours

MS 495 Mathematical Problem Solving Techniques Mr. Estes
 Study of a variety of techniques used in the solution of verbal problems from algebra and calculus, geometric problems, non-verbal problems, and the use of analogies. Special emphasis will be given to Polya's Method. Prerequisite: Calculus or the permission of the instructor. Three credit hours

MS 496 Problem Solving Research Mr. Estes
 Study of research concerning various approaches to problem solving in mathematics with emphasis on research. Study of research designs and construction of a design for a research project. Prerequisites: MS 495 and Statistics or permission of the instructor. Three credit hours

MS 497 Independent Study in Mathematics Staff
 An opportunity for juniors and seniors who have demonstrated critical and analytical capability to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis. Prerequisite: junior or senior standing. One to three credit hours

MS 498 Topics Staff
 Selected topics in advanced mathematics. Prerequisite: permission of instructor. Three credit hours

COURSES IN MATHEMATICS EDUCATION

MSED 445 Teaching Mathematics in the Secondary School Mr. Mainville, Mr. Moulton
 Critical study of programs and techniques for teaching and learning mathematics in grades 7-12 for the slow, average, and advanced pupil. Prerequisite: senior standing. Three credit hours

MSED 455 Analysis for High School Teachers I Staff
 The first of a two-semester sequence designed to give the experienced high school teacher a thorough background in elementary analysis. Topics included: properties of the real numbers, continuity, differentiation, and integration. Prerequisites: MS 251 and teaching experience. Three credit hours

MSED 456 Analysis for High School Teachers II Staff
 A continuation of MS 455. Prerequisite: MS 455. Three credit hours

MSED 475 Geometry for High School Teachers Staff
 A careful development of Euclidean geometry and an introduction to various other geometries such as projective and non-Euclidean. Prerequisites: MS 290 and teaching experience. Three credit hours

MSED 485 Abstract Algebra for Teachers Staff
 Algebraic properties of number systems; introduction to groups, rings, integral domains, polynomial rings, and fields. Prerequisites: MS 290 and teaching experience. Three credit hours

MSED 486 Linear Algebra for Teachers Mr. Brown
 A course covering the fundamental ideas of vectors, matrices, and linear transformations with special emphasis on applications and interpretations of relevance to the secondary curriculum. Three credit hours



Music

Professor J. Bowder; Associate Professor G. Chamberland; Assistant Professors R. Cole, Heel, Puopolo.

APPLIED MUSIC INSTRUCTORS

Piano: Majorie Arnold
Nina B. Bailey
Naydene Bowder
Ronald Cole
Ocy Downs
Richard Roberts
George Whitney

Voice: Gerard Chamberland
Jeannette Chamberland
Stewart Shuster
Johanna von Tiling
Arlene Winger

Organ: John Fay

Violin: Rebecca Garland
Ronald Lantz

Flute: Frances Drinker

Oboe: Roberta Barker

Clarinet: Burchard Tainter

Saxophone: Joseph LaFlamme

Burchard Tainter

Bassoon: Donald Curry

Trumpet: Vito Puopolo

Calvin Torrey

French Horn: Robert Miller

Trombone: Charles Anderson

The Department of Music offers a number of music groups open to all students and several two-semester courses primarily for non-majors, as well as providing for concentrated study in the areas of music history and theory, performance, and music education. Although the College of Liberal Arts does not currently have a four-year major program, a major is available in Music Education.

CURRICULUM FOR MUSIC EDUCATION MAJORS

General Education

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog. In addition to the General Education Requirements, Music Education majors will be required to take (a) either General Psychology or Human Growth and Development and (b) Philosophy of Education.

In addition to the regular curriculum, all music majors will meet the following requirements:

1. Participation in at least two recitals a year, and presentation of a solo recital in the junior or senior year.
2. Fulfillment of minimum requirements in both voice and piano, regardless of major instrument.
3. Participation in at least two musical organizations each semester. Where possible, a student will participate in both a vocal and instrumental ensemble.

Professional Education

In addition to the basic 18 credit hours in professional education Music Education majors will complete the following:

MUED 220	Woodwind Class
MUED 221	Brass and Percussion Class
MUED 320 and 321	String Class
MUED 322 and 323	Music Education Methods
MUED 420	Music Administration and Supervision

Student teaching is the culmination of a comprehensive pre-professional sequence of activities which includes the following:

1. One day of directed observation of music education in cooperating schools in surrounding areas. Freshman music education students are accompanied by senior music student teachers.
2. Five hours of assisting classroom teachers in music during the Sophomore year. Music education students serve in a capacity similar to teacher aides.
3. Elementary and secondary methods courses during Junior year wherein students observe, plan and teach using actual classroom situations.
4. Student-teaching in senior year which encompasses both elementary and secondary as well as instrumental and vocal areas.

Area Specialization

The music content program consists of the following courses:

MUS 120, 121, 220, 221	History of Music
MUS 130, 131, 230, 231	Theory
MUS 140, 141, 240, 241, 340, 341, 440, 441	Instrumental and Vocal Conducting Ensembles
MUS 142, 143, 242, 243, 342, 343, 442, 443	Recital Class
MUS 150, 151, 250, 251, 350, 351, 450, 451	Applied Music
MUS 344	Instrumental Conducting
MUS 345	Vocal Conducting

MUSIC EDUCATION CURRICULUM

<i>Freshman Year</i>		<i>Credit hours</i>
MUS 120 and 121	History of Music I and II	6
MUS 130 and 131	Theory I and II	6
MUS 140 and 141	Instrumental and Vocal Conducting Ensemble	1
MUS 142 and 143	Recital Class	1
MUS 150 and 151	Applied Music	8
	Ensembles	2
	General Education Requirements	9
	Physical Education	1
		<hr/> 34
<i>Sophomore Year</i>		
MUS 220 and 221	History of Music III and IV	6
MUS 230 and 231	Theory III and IV	6
MUS 240 and 241	Instrumental and Vocal Conducting Ensemble	1
MUS 242 and 243	Recital Class	1
MUS 250 and 251	Applied Music	8
MUED 220	Woodwind Class	2
MUED 221	Brass and Percussion Class	3
	Ensembles	2
	General Education Requirements	6
		<hr/> 35
<i>Junior Year</i>		
MUS 344	Instrumental Conducting	2
MUS 345	Vocal Conducting	2
MUS 340 and 341	Instrumental and Vocal Conducting Ensemble	1
MUS 342 and 343	Recital Class	1
MUS 350 and 351	Applied Music	8
MUED 320 and 321	String Class	4
MUED 322 and 323	Music Education Methods	6
	Ensembles	2
	General Education Requirements	9
		<hr/> 35
<i>Senior Year</i>		
MUS	Orchestration	3
MUS 440 and 441	Instrumental and Vocal Conducting Ensemble	$\frac{1}{2}$
MUS 442 and 443	Recital Class	$\frac{1}{2}$
MUED 420	Music Administration and Supervision	3
	Ensembles	1
	General Education Requirements	12
EDU 324	Student Teaching	12
		<hr/> 32

The Music Education Curriculum requires a total of 136 hours.



COURSE DESCRIPTIONS

Music Courses Primarily for Non-Majors

MUS 100 Music Appreciation and History

Staff

A survey of music from the Gregorian Chant to the modern times, covering musical practices of the Renaissance, Baroque, Classical, Romantic, and Contemporary periods. Representative works by the outstanding composers of each period. Open to all students.

Three credit hours

MUS 200 Music History I

Mr. Puopolo

The first in a sequence of two courses providing a study of music from antiquity to the present day. MUS 200 deals with the history of music prior to 1750.

Three credit hours

MUS 201 Music History II

Mr. Puopolo

The second in a sequence of two courses providing a study of music from antiquity to the present day. MUS 201 deals with the history of music from 1750 to the present.

Three credit hours

MUS 202 Music in America

Mr. Cole

A survey of the important trends in music from Colonial days to the present. Emphasis will be placed on the role of the native American composer in the development of sacred music, concert music, jazz, musical comedy, and pop music.

Three credit hours

MUS 210 Fundamentals of Music

Staff

A background study of concepts and skills essential to an intelligent reading of music. The development of natural musical abilities through participating in singing, rhythmic activities, and instrumental work. An appreciation of music through awareness of basic structures. Open to all students.

Two credit hours

MUS 211 Class Piano

Mr. Cole

Practical class piano for the elementary teacher with little or no piano background. Course covers note reading, scales, accompaniment of simple songs, transposition, and sight reading. Open to all students.

Two credit hours

Music Groups Open to All Students

- MUS 400 Chamber Orchestra** Mr. Bowder
One-half credit hour
- MUS 401 The Gorham Chorale** Mr. Chamberland
A choral group of a hundred students from all departments; specializes in larger choral works with orchestral accompaniment; several campus performances and occasional tours.
One-half credit hour
- MUS 402 University Concert Band** Staff
One-half credit hour
- MUS 403 A Cappella Choir** Mr. Cole
A chorus of twenty-five to thirty-five members open to all students, specializing in literature intended for small choral ensembles; at least one performance is given each semester.
One-half credit hour
- MUS 404 Brass Ensemble** Mr. Bowder
One-half credit hour
- MUS 405 The Chamber Singers** Mr. Chamberland
A select group of twenty-five singers specializing in music from the Renaissance to the Contemporary. Extensive touring throughout the state.
One-half credit hour
- MUS 406 Chorus** Mr. Puopolo
Open to all qualified students. Two meetings per week. Attendance at all rehearsals and public performances is required. May be repeated for credit each semester.
One-half credit hour each semester

Music History and Theory

- MUS 120 History of Music** Mr. Chamberland
Medieval and Renaissance Periods: historical development and musical practices from the Gregorian chant and early polyphony through the culmination of the madrigal in England. Musical examples of outstanding composers are played, analyzed and discussed.
Three credit hours
- MUS 121 History of Music II** Mr. Chamberland
Baroque Period; continuation of MUS 100, from the establishment of opera in Italy and the rise of instrumental music, to the culmination of polyphony in the works of J. S. Bach.
Three credit hours
- MUS 130 Music Theory I** Mr. Bowder
Major and minor scales; intervals, triads, and chord connection; cadences; harmonization of soprano and bass lines utilizing primary triads; related dictation and keyboard application.
Three credit hours
- MUS 131 Theory II** Mr. Bowder
Triads in first and second inversion; modulation; non-harmonic tones (passing, auxiliary, appoggiature, suspension, and anticipation); dominant seventh chord (root position inversion, regular and irregular resolutions); related dictation and keyboard application.
Three credit hours
- MUS 220 History of Music III** Mr. Cole
Classical and Romantic periods; historical development and musical practices from the establishment of the sonata, string quartet, and symphony, through program music, music-drama, and the rise of nationalism in music. Representative works of outstanding composers are played, analyzed, and discussed.
Three credit hours
- MUS 221 History of Music IV** Mr. Cole
Contemporary Period; continuation of MUS 200, from Impressionism to recent tendencies, Melodic, harmonic, rhythmic, and structural features of the twentieth century American and European music and their relationship to tradition.
Three credit hours

- MUS 230 Music Theory III** Mr. Bowder
 Diatonic seventh chords; modulation; expansion of non-harmonic tones; altered chords; Neapolitan sixth; augmented sixth chords; chromatic alterations; chorales and their harmonizations; related dictation and keyboard application. Three credit hours
- MUS 231 Theory IV** Mr. Bowder
 Contemporary techniques of composition; modern harmony, theory, and related studies. Two part counterpoint and related forms of the eighteenth century. Three credit hours
- MUS 460 Independent Study in Music** Staff
 To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field. One to three credit hours

Music Performance Courses

- MUS 140 Instrumental Ensemble for Freshmen, Part I** Mr. Bowder
 Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to freshmen. One-half credit hour
- MUS 141 Vocal Ensemble I** Mr. Chamberland
 Emphasizing singing technique and interpretation and exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. One-half credit hour
- MUS 142 Recital Class for Freshmen, Part I** Mr. Chamberland
 Performance in major field, stage deportment, and evaluation of performances. Restricted to freshmen. One-half credit hour
- MUS 143 Recital Class for Freshmen, Part II** Mr. Chamberland
 A continuation of MUS 142. One-half credit hour
- MUS 150 Applied Music for Freshmen, Part I** Staff
 May be taken in piano, voice, or any orchestra or band instrument. One lesson per week in the major performance area (3 credits). Also one half-hour lesson in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to freshmen. Four credit hours
- MUS 151 Applied Music for Freshmen, Part II** Staff
 A continuation of MUS 150. Four credit hours
- MUS 240 Instrumental Ensemble for Sophomores, Part I** Mr. Bowder
 Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to sophomores. One-half credit hour
- MUS 241 Vocal Ensemble II** Mr. Chamberland
 Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. One-half credit hour
- MUS 242 Recital Class for Sophomores, Part I** Mr. Chamberland
 Performance in major field, stage deportment, and evaluation of performances. Restricted to sophomores. One-half credit hour
- MUS 243 Recital Class for Sophomores, Part II** Mr. Chamberland
 A continuation of MUS 242. One-half credit hour

- MUS 250 Applied Music for Sophomores, Part I** Staff
May be taken in piano, voice, or any orchestra or band instrument. One lesson per week in the major performance area (3 credits). Also one half-hour lesson in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to sophomores. Four credit hours
- MUS 251 Applied Music for Sophomores, Part II** Staff
A continuation of MUS 250. Four credit hours
- MUS 340 Instrumental Ensemble for Juniors, Part I** Mr. Bowder
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to juniors. One-half credit hour
- MUS 341 Vocal Ensemble III** Mr. Chamberland
Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. One-half credit hour
- MUS 342 Recital Class for Juniors, Part I** Mr. Chamberland
Performance in major field, stage deportment, and evaluation of performances. Restricted to juniors. One-half credit hour
- MUS 343 Recital Class for Juniors, Part II** Mr. Chamberland
A continuation of MUS 342. One-half credit hour
- MUS 344 Instrumental Conducting** Mr. Bowder
Practical conducting experiences; score reading, basic beat patterns, and interpretation. Two credit hours
- MUS 345 Vocal Conducting** Mr. Chamberland
Organization, training, and directing of choruses and glee clubs in high schools and junior high schools. Study and practice in rehearsal techniques, problems of diction, and emphasis on textual delivery. Two credit hours
- MUS 350 Applied Music for Juniors, Part I** Staff
May be taken in piano, voice, or any orchestra or band instrument. One lesson per week in the major performance area (3 credits). Also one half-hour lesson in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to juniors. Four credit hours
- MUS 351 Applied Music for Juniors, Part II** Staff
A continuation of MUS 350. Four credit hours
- MUS 420 Orchestration** Mr. Bowder
A study of the nature of the various instruments. Practice in scoring for instrumental combinations, orchestra, and band. Three credit hours
- MUS 440 Instrumental Ensemble for Seniors, Part I** Mr. Bowder
Performance techniques on instruments of primary and/or secondary interest to each student. Principles of ensemble training are exemplified. The repertoire consists of selections from various periods and styles and is varied from year to year in order to cover a considerable range during the student's attendance. Restricted to seniors. One-half credit hour
- MUS 441 Vocal Ensemble IV** Mr. Chamberland
Emphasizing singing technique and interpretation and an exploration of choral literature of various periods and styles. Principles of choral training are exemplified. The repertoire is varied from year to year so that the course covers a considerable range during a given student's attendance. One-half credit hour
- MUS 442 Recital Class for Seniors, Part I** Mr. Chamberland
Performance in major field, stage deportment, and evaluation of performances. Restricted to seniors. One-half credit hour

MUS 443 Recital Class for Seniors, Part I
A continuation of MUS 442.

Mr. Chamberland
One-half credit hour

MUS 450 Applied Music for Seniors, Part I

Staff

May be taken in piano, voice, or any orchestra or band instrument. One lesson per week in the major performance area (3 credits). Also one half-hour lesson in the minor performance area (1 credit) in fulfillment of applied music requirements. Restricted to seniors.
Four credit hours

MUS 451 Applied Music for Seniors, Part II

Staff

A continuation of MUS 450.

Four credit hours

MUS 460 Independent Study in Music

Staff

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field.
One to three credit hours

Music Education

MU ED 200 Music for the Classroom Teacher

Staff

An activities course combining the study of music fundamentals with the teaching of music skills through sequential grade-to-grade development. This course has no prerequisites and is designed primarily for the non-music major.
Three credit hours

MU ED 220 Woodwind Class

Mr. Tainter

Methods of teaching woodwind instruments; practical experience on various woodwinds; and elements of transposition.
Two credit hours

MU ED 221 Brass and Percussion Class

Mr. Campbell

Methods of teaching brass and percussion instruments including practical experience on the various instruments; elements of transposition.
Three credit hours

MU ED 320 String Class

Mrs. Garland

Class methods and materials in teaching violin. Fundamentals of violin, including bowing, tone production, intonation, and fingering techniques extended into third position.
Two credit hours

MU ED 321 String Class

Miss Heel

String ensemble methods and materials for beginning strings. Fundamentals of violin, cello, and string bass. Rudiments of fingering, bowing, and tone production.
Two credit hours

MU ED 322 Elementary Music Methods and Materials

Miss Heel

Study of methods and materials in present elementary school music education, including those of Kodaly and Orff.
Three credit hours

MU ED 323 Secondary Music Methods and Materials

Miss Heel

Study of approved methods and materials of music education in junior and senior high schools. Continuation of MUS ED 300.
Three credit hours

MU ED 420 Music Administration and Supervision

Miss Heel, Mr. Campbell

Designed to present an integrated picture of philosophies of administration, and to resolve problems encountered in student teaching.
Three credit hours



Philosophy

Professor MacLeod; Associate Professor F. Schwanauer; Assistant Professors Gavin (Chairman), Grange.

Courses in philosophy are designed primarily to provide the student with sound principles of critical thinking, to help him acquire a knowledge of the development and problems of philosophic thought, and to lead him to formulate an intelligent view of the meaning and value of life in terms of his own experience.

The study of philosophy has traditionally been one which endeavors to give the broadest understanding possible of a true liberal education and has placed little emphasis on the vocational utility of such a study. However, students have found a philosophical background useful for all vocations.

The major in philosophy is designed to meet the following requirements: (1) Those who wish to derive the broadest liberal education through the study of philosophy, but have no professional interest in the field; (2) those who desire a broadly-based liberal education preparatory to graduate study in a field other than philosophy; for example, medicine, law, theology, or government; (3) those who, by reason of professional interest in philosophy, plan to do graduate work and teach in the field.

Each major in philosophy will arrange his program of courses in conference with the discipline head. The program will be designed in terms of the student's interests, needs, vocational plans, and the year in which he declares his major. The major will require 24 hours of courses beyond a PLY 100-level course.

Every major intending to pursue graduate study and teach in philosophy will be expected to take German or French through the intermediate level. German is preferred to French, although ideally both sets of courses should be taken.

In the senior year, the following are required: (1) A senior paper to be written in connection with participation in the Senior Tutorial. This paper is to deal with an area of philosophy not covered by courses taken by the student. (2) A comprehensive oral examination based on the Senior Tutorial paper. (3) The Graduate Record Examination in philosophy.

Any introductory Philosophy course is a prerequisite to all other courses in philosophy.

COURSE DESCRIPTIONS

PLY 101 Introduction to Philosophy: Man and His Will Mr. Schwanauer

Is there a human will at all? This course will concentrate on the issue of freedom vs. determinism. The importance of the human will insofar as it influences views of experience, politics, society, etc., will also be considered. Three credit hours

PLY 102 Introduction to Philosophy: Counter Culture Mr. Gavin

An examination of the supposed connection between technocracy, impartiality and objectivity. The history of philosophy will be utilized to trace the identification of true knowledge with "certainty." An analysis of twentieth century alternatives, including existentialism, pragmatism, and various views of the counter culture, will be undertaken. Three credit hours

PLY 103 Introduction to Philosophy: The Alienation of Man Mr. Grange

Why does modern man picture himself as alienated from nature and his fellow man? How did the problem of alienation come about? What possibilities exist for overcoming it? This course will deal with these issues and attempt to suggest viable alternatives. Three credit hours

PLY 104 Introduction to Philosophy: Ways of Knowing Staff

How much can we really know? Consideration will be given to some theories of knowledge and how they may be applied to science and human relations. The writings of some philosophers will be critically examined by way of illustration. Three credit hours

PLY 200 Symbolic Logic Mr. Schwanauer

Techniques of modern deductive logic; properties of formal systems; logical implications and paradoxes of language. Prerequisite: any PLY 100-level course. Three credit hours

PLY 210 Ethical Theories Mr. Schwanauer

Critical evaluation of major ethical theories and systems. Extensive reading in original texts. Analysis of contemporary ethical issues. Prerequisite: any PLY 100-level course. Three credit hours

PLY 220 Aesthetics Mr. Gavin

Inquiry into the question of whether aesthetic experience is intelligible, or emotional, or both; examination of various theories and interpretations, classic and contemporary. Prerequisite: any PLY 100-level course. Three credit hours

PLY 230 Philosophy of Religion Staff

Analysis of the nature of religious experience, knowledge, and language. Special attention given to problems, classical and contemporary, exhibited in religious experience, and relevant to areas of common concern in the sciences, humanities, and philosophy. Prerequisite: any PLY 100-level course. Three credit hours

PLY 240 Political Philosophy Mr. Grange

Critical evaluation of political philosophies, classical and contemporary; extensive reading in original texts; analysis of contemporary political issues. Prerequisite: any PLY 100-level course. Three credit hours

PLY 250 Philosophy of Science

Mr. Gavin

Nature of scientific explanation; relationship among facts, laws, and theories; clarification of methods and concepts in science, such as cause, determinism, theology, theory, law, probability. Prerequisite: any PLY 100-level course. Three credit hours

PLY 290 Problems of Philosophy

Staff

Consideration of selected problems or systems of philosophical significance, including general problems of metaphysics, epistemology, axiology, specialized areas, etc. Prerequisite: any PLY 100-level course. Three credit hours

PLY 299 (see HIST 377)

This course meets the requirements for a major either in history or philosophy.

PLY 310 History of Ancient Philosophy

Mr. Gavin

Philosophic thought from the pre-Socrates to the late Hellenistic period, with major emphasis on Plato and Aristotle. Prerequisite: any PLY 100-level course. Three credit hours

PLY 320 History of Medieval Philosophy

Mr. Grange

The merger of the philosophic with the religious stream; ideas of Augustine, Thomas Aquinas, Duns Scotus, and others critically examined; determining cultural factors explored. Prerequisite: a PLY 100 course, PLY 310. Three credit hours

PLY 340 History of Late Modern Philosophy

Mr. Schwanauer

Development of German idealism; emergence of social and scientific philosophies; contributions of Kant, Hegel, Schopenhauer, Nietzsche, Feuerbach, and others. Prerequisite: PLY 310. Three credit hours

PLY 350 American Philosophy

Mr. Gavin

History and background of the origin of philosophical ideas in America; particular emphasis given to Peirce, James, Royce, Dewey, Whitehead. Prerequisite: any PLY 100-level course. Three credit hours

PLY 360 Existentialism

Mr. Grange

An examination of the historical development and basic themes of existentialism as found in the writings of its major representatives: Kierkegaard, Nietzsche, Heidegger, Jaspers, Buber, Marcel, and others. Prerequisite: any PLY 100-level course. Three credit hours

PLY 400 Seminar: Heidegger

Mr. Grange

An inquiry into Heidegger's attempt to rethink the "being question." Emphasis will be placed on the continuity of Heidegger's effort from *Being and Time* to his more recent writings. Prerequisite: two 300-level courses and permission of instructor. Three credit hours

PLY 401 Seminar: John Dewey

Mr. Gavin

An analysis of Dewey's writings on politics, education, ethics, art, science, metaphysics, and epistemology; extensive reading from original texts; emphasis placed upon the underlying continuity common to these various aspects of Dewey's thought. Prerequisites: two PLY 300-level courses (PLY 350 is recommended as one of the courses) and permission of the instructor. Three credit hours

PLY 402 Seminar: Hegel

Mr. Schwanauer

A discussion of the various aspects of Hegelian metaphysics. Topics will include dialectical logic, the identity of thought and being, and others. Extensive reading in original texts. Prerequisites: two PLY 300-level courses (PLY 330 is recommended as one of the courses) and permission of the instructor. Three credit hours

PLY 410 Senior Tutorial

Staff

Designed to furnish senior philosophy majors with extensive training, under tutorial supervision, in analysis of a philosophical problem or system not generally covered by regular department offerings, with a view to producing and presenting a senior paper for oral defense. Prerequisites: senior standing, advanced standing, and permission of the department. Credit hours to be arranged



Physical Sciences and Engineering

Professors Kirwin, M. Whitten (Chairman); Associate Professors Grass, Hare, Hopkinson, Miller, A. Smith, Sottery, Walkling; Assistant Professors Armentrout, Ayers, Novak, Pendleton, Un.

Courses offered by the Department of Physical Sciences and Engineering are grouped under the following headings:

ASTRONOMY

CHEMISTRY

EARTH SCIENCE

ENGINEERING (including the
Master of Engineering program)

GENERAL SCIENCE (including
Geology, Meteorology, and
Oceanography)

PHYSICAL SCIENCE

PHYSICS

A Science Area Major in Secondary Education, including a selection of both biological and physical sciences, and intended primarily for students planning to teach in grades seven through nine, is coordinated by this department and requires completion of a minimum of 50 credit hours, as outlined below.

Students in the Kindergarten-Primary or Elementary programs of the School of Education may obtain an academic major requiring 30 credit hours of approved biological and physical science courses in the Science Area, but the Science Area Minor of 18 credit hours is more commonly selected by such students. The latter program is outlined below, immediately after the outline for the Secondary Education major program.

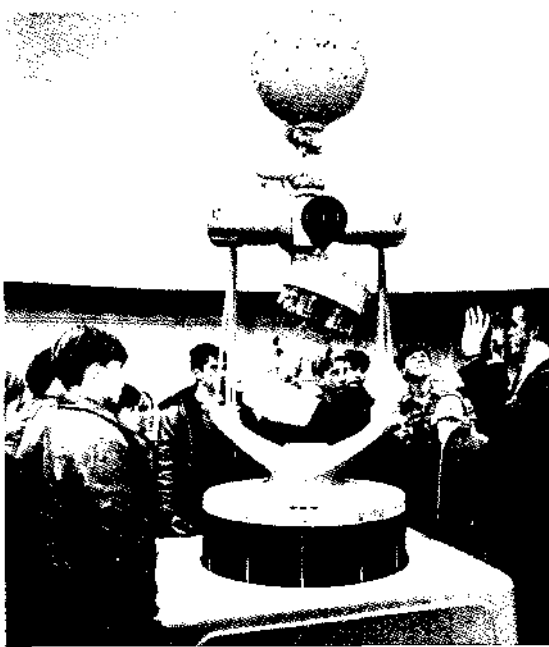
No major is currently offered in this area for students in the College of Liberal Arts. For students who ultimately desire to major in either Chemistry, Engineering, or Physics, the first two years of work are available at the University of Maine at Portland-Gorham, but the third and fourth years of such work are currently available only at the Orono campus of the University of Maine.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIREMENTS FOR A SCIENCE AREA MAJOR IN SECONDARY EDUCATION

The Science Area Major in Secondary Education requires completion of a minimum of 50 credit hours and provides for a broad preparation in several fields. This major is intended primarily for those students planning to teach in grades seven through nine. Completion of this program and required courses in education, including those needed to meet the UMPG general requirements, enables one to receive the State of Maine Secondary Science Area Certificate.

A UMPG senior gives a simplified explanation of the workings of the planetarium projector to a visiting group of pupils from one of the public schools in the commuting area.



Freshman Year

Freshmen should take one of the following sequences, together with a selection of other courses needed to meet the General Education Requirements and Physical Education Requirements of UMPC, together with appropriate courses from those required by the School of Education. Any electives in the Science area should be chosen to meet the requirements of Groups A, B, C, and the other electives listed below. A student should plan to take 8 hours of chemistry and 8 hours of physics by the end of the sophomore year.

One Sequence to Be Chosen:

	<i>Credits</i>
CHEM 111 and 112 General Chemistry (4 credits each semester) or to be taken as a two-semester sequence	8
CHEM 113 and 114 Chemical Principles (4 credits each semester) or to be taken as a two-semester sequence	8
PHYS 111 and 112 Elements of Physics (4 credits each semester) or to be taken as a two-semester sequence	8
PHYS 121 and 122 General Physics (4 credits each semester) to be taken as a two-semester sequence	8

Sophomore Year

BIO 101 and 102 Biological Principles (3 credits) plus Biological Experiences (1 credit) to be taken together	4
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Freshman, Sophomore, Junior, or Senior Years

Group A — 28 Credit Hours Required

CHEM 111 and 112 or CHEM 113 and 114 General Chemistry (4 credits each semester) or Chemical Principles (4 credits each semester)	8
PHYS 111 and 112 or PHYS 121 and 122 Elements of Physics (4 credits each semester) or General Physics (4 credits each semester)	8
GEOL 111 Physical Geology	3
GEOL 112 Historical Geology	3
ASTR 100 Astronomy	3
MET 100 Meteorology	3

Group B — 8 Credit Hours Required

BIO 215 and 216 Vascular Botany (3 credits) plus Vascular or Field Botany (1 credit) to be taken together	4
BIO 225 and 226 Non-vascular Botany (3 credits) plus Non- vascular Field Botany (1 credit) to be taken together	4
BIO 351 and 352 Invertebrate Zoology (3 credits) plus Survey of Invertebrates (1 credit) to be taken together	4
Or other course(s) in Biology acceptable to the adviser	4

Group C — 3 Credit Hours Required

ESCI 202	Conservation	3
GSCI 310	History of Science	3
BIO 251	History of Biology	3

Electives

To complete the required 50 hours for the major, the student may choose from courses listed above which have not been taken previously and from the following electives:

BIO 103 and 104	Biological Diversity (3 credits) plus Survey of Animals and plants (1 credit) to be taken together	4
BIO 111 and 112	Human Anatomy and Physiology (3 credits) plus Practical Anatomy and Physiology (1 credit) to be taken together	4
BIO 201	Principles of Genetics	3
BIO 292	Ornithology	2
BIO 311 and 312	Microbiology (3 credits) plus Microbiological Laboratory (2 credits) to be taken together	5
BIO 331 and 332	Ecological Principles (2 credits) plus Field Ecology (1 credit) to be taken together	3
BIO 372	Biological Techniques	2
BIO 381 and 382	Ichthyology (2 credits) plus Field Ichthyology (2 credits) to be taken together	4
BIO 461	Cell Mechanisms	3
BIO 481	Cellular Biology	3
BIO	Evolution	3
CHEM 201	Organic Chemistry	4
CHEM 202	Introduction to Biochemistry	4
CHEM 251 and 261	Organic Chemistry (3 credits) plus Organic Chemistry Laboratory (2 credits) to be taken together	5
ESCI 101 and 102	Earth Science (3 credits each semester) to be taken as a two-semester sequence	6
ESCI 200	Environmental Science	3
ESCI 201	Natural Science	3
GEOL 201	Structural Geology	3
GEOL 203	Mineralogy	3
OCN 100	Oceanography	3
PHYS 210	Introductory Modern Physics	4
PHYS 221	Intermediate Physics	4
PHYS 390	Independent Physics Laboratory	3

NOTE: In addition to the 50 hours of course work selected above, SCED 300, Teaching Science in the Secondary School, is required of all Science Area Majors in Secondary Education.

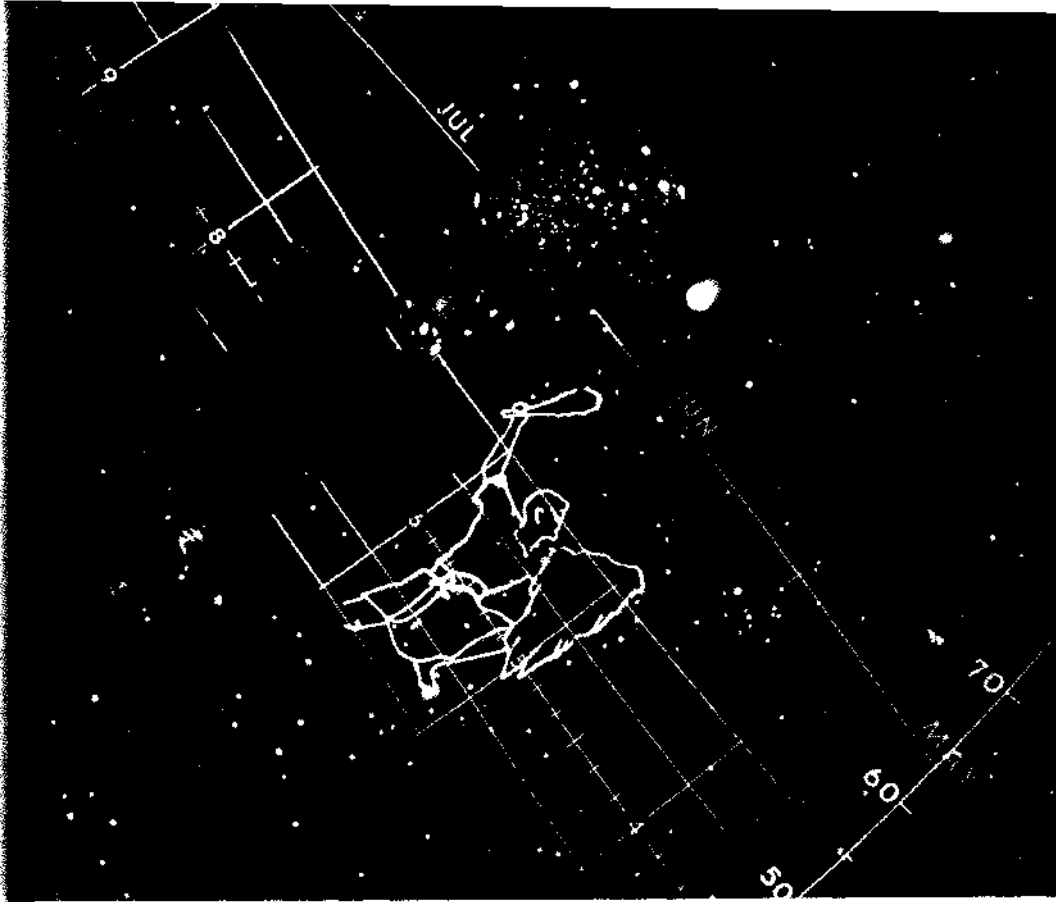
REQUIREMENTS FOR A SCIENCE AREA MINOR **FOR STUDENTS IN THE KINDERGARTEN-PRIMARY** **OR ELEMENTARY EDUCATION PROGRAMS**

Required Courses — 6 Credit Hours

PSCI 110	Elements of Physical Science	3
BIO 101	Biological Principles	3

Elective Courses — 12 Credit Hours Required from the Following

ASTR 100	Astronomy	3
BIO 103 and 104	Biological Diversity (3 credits) plus Survey of Animals and Plants (1 credit) to be taken together	4
BIO 111 and 112	Human Anatomy and Physiology (3 credits) plus Practical Anatomy and Physiology (1 credit) to be taken together	4
BIO 201 and 202	Principles of Genetics (3 credits) plus Experimental Genetics (2 credits) to be taken together	5
BIO 215 and 216	Vascular Botany (3 credits) plus Vascular Field Botany (1 credit) to be taken together	4
BIO 225 and 226	Non-vascular Botany (3 credits) plus Non-vascular Field Botany (1 credit) to be taken together	4
BIO 351 and 352	Invertebrate Zoology (3 credits) and Survey of Invertebrates (1 credit) to be taken together	4
CHEM 101 and 102	Modern Chemistry (4 credits each semester) to be taken as a two-semester sequence	8
CHEM 111 and 112	General Chemistry (4 credits each semester) to be taken as a two-semester sequence	8
ESCI 101 and 102	Earth Science (3 credits each semester) to be taken as a two-semester sequence	6
ESCI 200	Environmental Science	3
ESCI 201	Natural Science	3
ESCI 202	Conservation	3
GEOL 111	Physical Geology	3
GEOL 112	Historical Geology	3
GEOL 201	Structural Geology	3
MET 100	Meteorology	3
OCN 100	Oceanography	3
PHYS 111 and 112	Elements of Physics (4 credits each semester) to be taken as a two-semester sequence	8
PHYS 121 and 122	General Physics (4 credits each semester) to be taken as a two-semester sequence	8



Sky Projection in the Southworth Planetarium.

ASTRONOMY

COURSES IN ASTRONOMY

ASTR 100 Astronomy

Mr. Ayers

A course largely descriptive and non-mathematical in nature, with emphasis on practical work. A survey of the solar system with emphasis on recent observational procedures and data. Stellar astronomy including composition, distribution, and evolution of stars. Theories of the universe. Open to all students.

Three credit hours

ASTR 109 Introduction to Astronomy

Staff

A non-mathematical survey of modern astronomy. Among the topics covered are observing instruments and techniques, origin and characteristics of the planetary system, properties and evolution of stars, galaxies, cosmology, and the possibility of other life in the Universe. Unsolved problems and areas of current research are emphasized. Planetarium sessions and optional observatory field trips supplement the lecture materials.

Three credit hours



CHEMISTRY

The field of chemistry is concerned with the structure of matter and its transformations. The chemistry curriculum is intended to prepare the student eventually to be a professional chemist. In order to accomplish this purpose the program must have sufficient breadth so that the graduate will be able to go into industrial chemistry, teaching, research or graduate study.

Presently, a standard four year major program is not available at UMPG. Students who wish to enter a standard chemistry major program should plan to transfer to the Orono branch of the university for the junior and senior years. (Such students should contact the chairman of the chemistry department at UMO concerning current departmental major requirements.) Courses in analytical and physical chemistry will be offered as soon as physical facilities become available. The inclusion of these courses in the chemistry offering would allow students with primary interest in chemistry to pursue innovative major programs in the department of physical sciences and engineering. Since chemistry is fundamental to so many areas, the department intends to offer a wide choice of electives so that such students with interest in the fields of mathematics, physics, ecology, geology or biological chemistry may have special programs tailored to help them attain their educational goals.

A variety of career opportunities in the industrial field are open to students who complete a major program in chemistry. Some examples are process development, production, quality control, and sales. The opportunities to

engage in research and college level teaching are in general available only to the student who has pursued successful graduate study.

Instruction in chemistry is given by lectures, recitations, and supervised laboratory work which is an indispensable part of the training of professional chemists. While much laboratory work is individual in nature, students are encouraged to consult with one another regarding observations and conclusions.

COURSES IN CHEMISTRY

CHEM 101 Modern Chemistry

Mr. Sottery

An introduction to some modern chemical theories and concepts. Topics selected for study emphasize the relationship of chemistry to life systems and the environment. Recommended for students of life sciences and environmental studies who require a foundation for further consideration of the chemistry of living systems, and for non-science majors who wish to enhance their understanding of chemistry and its role in survival of life. Prerequisite: previous study of chemistry is helpful but not required. Four credit hours

CHEM 102 Modern Chemistry

Mr. Sottery

A continuation of the studies initiated in CHEM 101. Recommended as a prerequisite for CHEM 201. Prerequisite: CHEM 101. Four credit hours

CHEM 111 General Chemistry

Mr. Whitten

A study of selected fundamental concepts and theories of chemistry. Atomic structure, periodic classification, chemical bonding, molecular structure, chemical reactions, and equilibria are discussed. Four credit hours

CHEM 112 General Chemistry

Mr. Whitten

A continuation of the topics presented in CHEM 111. Prerequisite: CHEM 111.

Four credit hours

CHEM 113 Chemical Principles

Mr. Smith

An intensive examination of modern chemistry, comprising structural theory (atomic and molecular levels), stoichiometry, chemical kinetics and equilibrium, colligative properties, elementary thermodynamics, ionic equilibria, and electrochemistry. A sound preparation in mathematics (logarithms, exponents, linear and quadratic equations) is essential for mastery of this course. The laboratory work includes qualitative and quantitative experiments intended to illustrate lecture presentations. Recommended for students who plan further study in science or engineering. Prerequisite: at least three years of high school mathematics, and high school chemistry or equivalent. Four credit hours

CHEM 114 Chemical Principles

Mr. Smith

A continuation of the topics presented in CHEM 113. Prerequisite: CHEM 113.

Four credit hours

CHEM 201 Organic Chemistry

Mr. Sottery or Mr. Whitten

A brief introduction to nomenclature and reactions of those functional groups of organic compounds which are important to life systems. Models are employed to enhance the student's comprehension of molecular shapes and conformations and the laboratory work includes training in some of the basic techniques of chromatography and spectroscopic methods. Recommended as a prerequisite for CHEM 202. Prerequisite: a C grade or better in CHEM 102 or 112 or 114. Not to be offered in 1971-1972. Four credit hours

CHEM 202 Biochemistry

Miss Schwinck

Chemistry of biologically important molecules, including carbohydrates, proteins, lipids, and nucleic acids, and the principles of the main metabolic pathways in living systems. Prerequisites: A grade of C or better in CHEM 201 or CHEM 252, and BIO 101 and 103 or with instructor's permission. Four credit hours

CHEM 251 Organic Chemistry

Mr. Smith

A survey of the chemistry of carbon compounds, with extensive use of modern theories of structure and reaction mechanisms. Considerable emphasis will be placed on nomenclature; on the use of spectroscopic methods for structure determination, and on molecular geometry. Required for chemistry majors; recommended for premedical and pre dental students, and for majors in the biological sciences who will require subsequent course work in biochemistry. Prerequisites: a grade of C or better in CHEM 114 or 112. Three credit hours

CHEM 252 Organic Chemistry

Mr. Smith

A continuation of the topics considered in CHEM 251. Prerequisite: CHEM 251.

Three credit hours

CHEM 261 Organic Chemistry Laboratory

Mr. Sottery

An initiation to modern laboratory techniques used for the synthesis and study of organic compounds. The laboratory exercises introduce common syntheses, chemical spectroscopy, chromatographic methods, simple reaction kinetics, and organic qualitative analysis. Prerequisite: credit or concurrent registration in CHEM 251.

Two credit hours

CHEM 262 Organic Chemistry Laboratory

Mr. Sottery

A continuation of the studies initiated in CHEM 261. Prerequisites: credit or concurrent registration in CHEM 252 and a grade of C or better in CHEM 261.

Two credit hours





EARTH SCIENCE

COURSES IN EARTH SCIENCE

ESCI 101 Earth Science

Mr. Hare

A survey course which includes topics selected from the areas of astronomy, geology, meteorology, and oceanography. The laboratory sessions involve a study of the solar system, latitude and longitude, minerals, rocks, soils, air and water pollution, topographic maps, and weather maps. Not to be offered in 1971-1972.

Three credit hours

ESCI 102 Earth Science

Mr. Hare

A continuation of ESCI 101. Not to be offered in 1971-1972. Prerequisite: ESCI 101.

Three credit hours

ESCI 200 Environmental Science

Mr. Miller

A study of basic relationships of plants, animals, and men to their physical and biotic environment. This includes a study of biomes, habitats, and communities interpreted in varying stages of succession or stratification as influenced by the limiting factors of their environment. Some emphasis is placed on species dynamics and population changes. Weekly field trips when weather permits.

Three credit hours

ESCI 202 Conservation

Mr. Miller

A study of man's use of his environment. Topics include the resources of mineral, soil, forests, water, air, wildlife, and man himself. Consideration is given to the issues and problems developing from the interaction of management of these resources. Weekly field trips when weather permits.

Three credit hours



ENGINEERING

The University of Maine at Portland-Gorham offers the first year of the program common to all Engineering majors, and the first and second years in Electrical Engineering. These offerings are identical in all respects to corresponding programs at the University of Maine at Orono. Students who complete either one or two years at UMPG continue their studies at UMO.

The Master of Engineering Degree is available at UMPG. This program is intended for employed engineers and scientists desiring to maintain and improve their professional competence. Students may complete all degree requirements at UMPG as the program is fully administered here.

ENGINEERING FRESHMAN YEAR

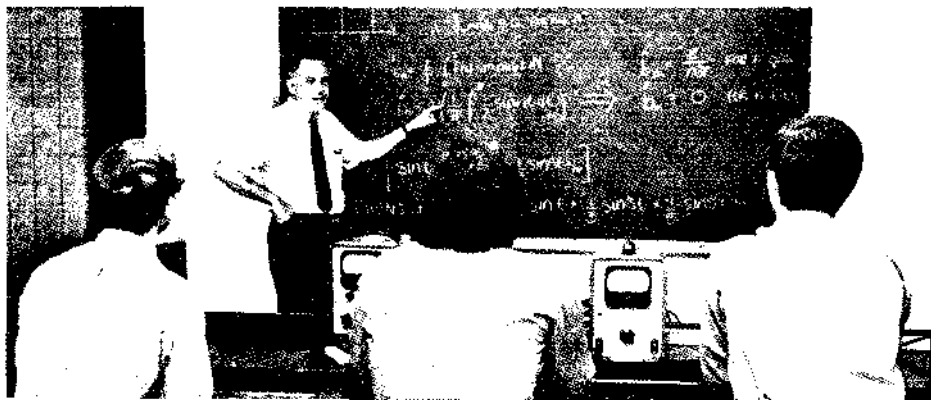
Fall Semester			Spring Semester		
<i>Subject</i>		<i>Credit hours</i>	<i>Subject</i>		<i>Credit hours</i>
CHEM 113	Chemical Princ.	4	CHEM 114	Chemical Princ.	4
GEE 101	Intro. to Design	2		Intro. to Literature	3
MS 152	Calculus A	4	GEE 102	Intro. to Design	2
PE 100	Physical Education	1	MS 153	Calculus B	4
PHYS 121	General Physics	4	PE 100	Physical Education	1
GEE 005	Orientation	0	PHYS 122	General Physics	4
		15	GEE 006	Orientation	0
					18

ELECTRICAL ENGINEERING SOPHOMORE YEAR

Fall Semester			Spring Semester		
<i>Subject</i>		<i>Credit hours</i>	<i>Subject</i>		<i>Credit hours</i>
ELE 201	Circuit Analysis I	5	ELE 202	Circuit Analysis II	3
	Literature	3	ELE 212	Basic Elect. Lab	2
GEE 207	Computer Programming	2	MS 350	Diff. Equations	3
MS 252	Calculus C	4	MEE 252	Applied Mechanics	3
MEE 255	Statics & Strength	3	ELE 209	Ele. Engrg. Materials	3
		17		Humanities Elective	3
					17

COURSES IN ENGINEERING

- GEE 005 Technology Orientation I** Staff
A series of meetings involving lectures and discussions, with frequent use of audiovisual material to acquaint engineering freshmen with the nature of engineering and science. No credit
- GEE 006 Technology Orientation II** Staff
A continuation of GEE 005. No credit
- GEE 101 Introduction to Engineering Design I** Staff
Creative exercises in multiview drawing using freehand and instrumental techniques. Two credit hours
- GEE 102 Introduction to Engineering Design II** Staff
A continuation of GEE 101. Two credit hours
- GEE 207 Computer Programming** Staff
Numerical analysis and digital computer programming using FORTRAN. Theory and implementation of algorithms for zero-searching, solution of linear systems, interpolation, integration, differentiation and the solution of differential equations. Prerequisite: MS 252 (may be taken concurrently). Two credit hours
- MEE 211 Introductory Engineering Metallurgy** Staff
Methods of defining the microstructure of metals, phase diagrams, and mechanical properties. Thermal, mechanical, and chemical manipulation of microstructure. Not for mechanical engineering degree credit. Three credit hours
- MEE 212 Elementary Heat Power** Staff
Elementary thermodynamics, mechanical apparatus, power plant equipment; engineering calculations relative to heat, power, work, and mechanical and electrical energy. Not for mechanical engineering degree credit. Three credit hours
- MEE 255 Statics and Strength of Materials** Staff
The basic principles of statics and their applications in strength of materials. Equilibrium of various systems. Stresses and deformations of axially loaded members, connections, circular shafts, beams, and columns. Three credit hours
- MEE 252 Applied Mechanics, Dynamics** Staff
A study of motion of particles and rigid bodies; force, mass and acceleration; work and energy and simple harmonic motion. Prerequisite: MS 252. Three credit hours
- ELE 201 Circuit Analysis I** Staff
Basic laws and theorems of electric circuits; solution of circuits represented by first and second order differential equations. Prerequisite: PHYS 122. Five credit hours
- ELE 202 Circuit Analysis II** Staff
Phasor solution of a-c circuits and coupled circuits; balanced three-phase systems; introduction to complex frequency. Prerequisite: ELE 201. Three credit hours
- ELE 209 Electrical Engineering Materials** Staff
A study of the principles of materials science with emphasis on electrical properties. Diffusion, oxidation, electrochemistry, energy bands, emission, thermal properties, conduction theory, semiconductor junctions, thermoelectricity, magnetic properties, dielectric properties, optical properties. Three credit hours
- ELE 212 Basic Electrical Laboratory** Staff
Use of techniques developed in Ee 1, 2 for the analysis of circuits containing linear, non-linear, passive and active elements; includes analysis of simple electronic circuits and the use of the oscilloscope. Prerequisite: ELE 202 required concurrently. Two credit hours





MASTER OF ENGINEERING PROGRAM

The program of studies leading to the degree of Master of Engineering is based upon a required core sequence of courses in engineering techniques and principles of business management. The technical courses in the core of the program develop analytical and numerical techniques for the solution of problems in all branches of engineering. The management courses are especially designed to acquaint engineers with the major considerations that influence the decision-making process in the conduct of business.

In addition to the 18 credits of core courses, each student selects 12 credits of advanced work in a carefully planned and approved program. Of these 12 credits, at least 9 must be in engineering courses. In appropriate circumstances, a thesis may be submitted in fulfillment of up to 6 credits of the required total of 30 credits. Conferral of the degree is contingent upon passing a comprehensive examination at the conclusion of all course work.

Candidates for admission to the program must hold a baccalaureate degree in a branch of engineering, physics, mathematics, or chemistry. When there is a substantial doubt concerning the qualification of an applicant, a diagnostic entrance examination will be administered. No more than 12 credits, earned before admission as a matriculated student, may be applied toward the 30-credit degree requirement.

Master of Engineering Core Courses

<i>Subject</i>	<i>Credit hours</i>
GEE 501 and 502 Applied Mathematics I and II (3 credits each)	6
GEE 521 Optimal Design	3
GEE 522 Linear Systems	3
GEE 531 and 532 Management and Policy I and II (3 credits each)	6

COURSES IN MASTER OF ENGINEERING

- GEE 501 Applied Mathematics I** Staff
 Topics in applied mathematics. Special functions of Bessel, Legendre, Languerre, Hermite, Gamma, and Beta functions. Analytic functions of complex variables. Calculus of variations. Partial differential equations, the Eigenvalue problem. Three credit hours
- GEE 502 Applied Mathematics II** Staff
 A continuation of GEE 501. Three credit hours
- GEE 521 Optimal Design** Staff
 Analytical and numerical procedures for the optimization of engineering design. Applications of digital and analogue computers in design. Design Project. Three credit hours
- GEE 522 Linear Systems** Staff
 Linear lumped and distributed systems analysis. State variable and transform techniques. Study of discrete and continuous systems including impulse response, controllability, observability, fundamental matrix, and stability. Three credit hours
- GEE 531 Management and Policy I** Staff
 A study of policy formulation and business practices as viewed by the senior executive. This course will include case discussions and critical review of the current literature. Three credit hours
- GEE 532 Management and Policy II** Staff
 A continuation of GEE 531. Three credit hours
- GEE 541 Engineering Statistics** Staff
 Applications of probability and statistics to engineering and scientific problems. Probability, distribution, estimation, hypothesis testing, regression, analysis of variance, applications to decision theory and reliability theory. Three credit hours
- ELE 542 Statistical Communication Theory I** Staff
 Analysis and synthesis of communication systems using statistical techniques. Statistical and spectral representations of random signals and noise, linear optimum systems, modulation theory, detection of signals in noise. Three credit hours
- ELE 543 Statistical Communication Theory II** Staff
 A continuation of ELE 542. Three credit hours
- ELE 561 Electronic Devices and Circuits I** Staff
 Theory of semiconductor devices including diodes, BJTs, MOSFETs, and integrated circuits. Applications in wideband amplifiers, logic circuits, multivibrators, switching circuits, etc. Three credit hours
- ELE 562 Electronic Devices and Circuits II** Staff
 A continuation of ELE 561. Three credit hours
- ELE 565 Electromagnetic Theory I** Staff
 Maxwell's equations, static and dynamic fields, wave propagation, transmission lines and microwave systems, electromagnetic properties of materials and plasmas. Three credit hours
- ELE 566 Electromagnetic Theory II** Staff
 A continuation of ELE 565. Three credit hours
- ELE 571 Control Systems I** Staff
 Topics in classical control system analysis and design, including stability and comprehension. Modern control theory including the state variable formulation and optimization. Computer stimulation of systems. Three credit hours
- ELE 572 Control Systems II** Staff
 A continuation of ELE 571. Three credit hours
- ELE 599 Special Topics in Electrical Engineering** Staff
 Study of selected topics of mutual interest to students and instructor. Three credit hours



GENERAL SCIENCE

COURSES IN GENERAL SCIENCE

GSCI 310 History of Science

Mr. Whitten

A comprehensive survey of the historical development of science from earliest records to the present. Attention is given to the nature of science, methods of scientific discovery, the relation of science to technology, and the implications of both for society. Prerequisite: two years of science.

Three credit hours

GEOL 101 Descriptive Physical Geology

Mr. Novak

A study of earth materials and processes, volcanism, mountain building, the work of seas, streams, ice, and winds. Two afternoon field trips.

Three credit hours

GEOL 102 Descriptive Historical Geology

Mr. Novak

The geologic history of the earth and the development of life upon it. One one-day field trip.

Three credit hours

GEOL 111 Physical Geology

Mr. Miller, Mr. Novak

A study of the ever-changing earth by wind, water, volcanism, crustal movement, and glaciation. The identification of common rocks and minerals is included. Weekly field trips when weather permits.

Three credit hours

GEOL 112 Historical Geology

Mr. Miller

Study of the earth's history in terms of physical, chemical, and biological change, from its origin to the present time. Focus upon the methods of determining chronology and conditions through fossils and structural characteristics.

Three credit hours

GEOL 201 Structural Geology

Mr. Miller

This course is a study and interpretation of rock structure, intrusions, and deformation. Considerable time is spent in field study, geologic mapping, and bed rock interpretation. Some time is devoted to mineral and ore formations. Prerequisite: any one of the following: GEOL 101, GEOL 102, GEOL 111, GEOL 112.

Three credit hours

GEOL 203 Mineralogy

Mr. Miller

An introduction to descriptive crystallography, and a study of the physical properties and chemical structures of common rock-forming minerals. Field trips and laboratory analysis are an important part of the course. A basic course in chemistry is desirable. Prerequisite: GEOL 101, 102, 111, or 112. Not offered in 1971-1972.

Three credit hours

MET 100 Meteorology

Mr. Hare

A basic introduction to meteorological phenomena. The atmosphere; its characteristics, composition, and structure; cloud types; circulation of air; currents and winds; air masses. Analysis of weather reports, weather forecasting, and weather maps.

Three credit hours

OCN 100 Introduction to Oceanography

Mr. Hare

Origin and extent of the oceans; nature of the sea bottom; causes and effects of currents and tides; chemical and physical properties of sea water; animal and plant life in the sea.

Three credit hours

PHYSICAL SCIENCE

COURSES IN PHYSICAL SCIENCE

PSCI 100 Concepts of Physical Science

Mr. Ayers

A one-semester course for art, music, and secondary education majors. Aims at developing the basic content of the major scientific disciplines together with their underlying physical principles: astronomy (concepts of space); geology (concepts of time and change); chemistry (concepts of matter); physics (concepts of energy and its transformations). Consideration also given to the methods of science and to the impact of science on society.

Three credit hours

PSCI 103 Science for Technology

Mr. Pendleton

A practical approach to chemical and physical principles and concepts as they apply to industrial arts.

Three credit hours

PSCI 104 Science for Technology

Mr. Grass

A continuation of topics covered in PSCI 103. Prerequisite: PSCI 103.

Three credit hours

PSCI 110 Elements of Physical Science

Mr. Hare, Mr. Pendleton

A non-mathematical approach to the explanation of scientific principles designed to develop a verbal and intuitive understanding of the world we live in and the natural laws that have been discovered.

Three credit hours

PSCI 111 Physical Science

Mr. Hare, Mr. Pendleton

A two-semester course designed to educate non-scientists in the principles and methods of physical science. Selected topics in physics, chemistry, geology, meteorology, and astronomy. Basic principles and concepts covering conservation of charge, energy, mass and momentum, fields (electrical, gravitational, and magnetic), waves, the molecular structure of matter, and atomic structure. Related fundamentals of chemistry are considered; introduction to organic chemistry, with particular emphasis on the electronic nature of chemical phenomena. Geology, meteorology, and astronomy are also studied as interrelated disciplines. Laboratory experimentation stresses importance of first-hand experience in substantiating physical principles. Not offered in 1971-1972.

Three credit hours

PSCI 112 Physical Science

Mr. Hare, Mr. Pendleton

A continuation of PSCI 111. Prerequisite: PSCI 111. Not offered in 1971-1972.

Three credit hours

PSCI 400 Science and Society

Mr. Sottery

Readings and discussion concerning the relationships between science and society. The "Tactics and Strategy of Science" and the philosophical and social implications of present scientific theories are considered with the aim of promoting understanding of the role of science in modern life. The interaction between scientists and society, and the relationship between research and technology are also examined. Prerequisite: senior students, others by permission. Not offered in 1971-1972.

Three credit hours



PHYSICS

A physics major is not offered at UMPG. A student beginning in PHYS 121 and 122 in the fall semester of 1971 may expect to complete the first two years of a physics major, after which he must transfer to the Orono campus to complete his program.

Students intending to major in physics should normally register to take PHYS 121 and 122, and MS 152 and MS 153 as freshmen. Since the degree program is currently completed at UMO, the degree requirements outlined in the UMO catalog will apply to all physics majors.

Students expecting to major in Physics are advised to begin taking chemistry, mathematics, and physics, as required, in the freshman year to avoid course conflicts in the following three years.

Physics Minor

Credit hours

Group A — 8 credit hours required

PHYS 111 and 112	Elements of Physics (4 credits each semester)	
or	to be taken as a two-semester sequence	8
PHYS 121 and 122	General Physics (4 credits each semester)	
	to be taken as a two-semester sequence	8

Group B — 3 or 4 credit hours required

PHYS 210	Introductory Modern Physics	4
PHYS 221	Intermediate Physics	4
PHYS 390	Independent Physics Laboratory	3

Group C — Elect sufficient courses so total credit hours of Groups A, B, and C is at least 18 hours.

ASTR 100	Astronomy	3
MET 100	Meteorology	3
OCN 100	Oceanography	3

In Group C, substitutions can be made which are acceptable to the departmental advisor.

COURSES IN PHYSICS

PHYS 100 Descriptive Physics

For the non-science student. A treatment in non-mathematical language of the more important topics in physics. Designed to develop an appreciation for the concepts, vocabulary, and methods of the science rather than a false sense of mastery. Three credit hours

Mr. Armentrout

PHYS 111 Elements of Physics

A laboratory course in which selected experiments in physics are used to demonstrate physical principles and make possible a deeper study of physical phenomena. Lectures, demonstrations, problem solving, films and filmstrips are employed to develop an understanding of mechanics, sound, optics, heat, electricity, and modern physics. Prerequisite: a course in high school algebra. Four credit hours

Mr. Grass

PHYS 112 Elements of Physics

A continuation of topics covered in PHYS 111.

Mr. Grass
Four credit hours

PHYS 121 General Physics

An introduction to the fundamental concepts of mechanics, sound and heat, using calculus where necessary. Recommended for students who plan further study in science, mathematics, or engineering. Prerequisite: prior or concurrent registration in MS 150, or equivalent experience. Four credit hours

Mr. Walking

PHYS 122 General Physics

An introduction to the fundamental concepts of electricity, magnetism, light and atomic physics, using calculus where necessary. Recommended for students who plan further study in science, mathematics, or engineering. Prerequisite: PHYS 121 or equivalent. Four credit hours

Mr. Walking

PHYS 210 Introductory Modern Physics

A development of some of the more important concepts of physics required for understanding the properties of the electron and atomic nucleus. Prerequisites: PHYS 112 or PHYS 122, CHEM 112 or CHEM 114, and one year of calculus. Four credit hours

Mr. Armentrout

PHYS 221 Intermediate Physics

A more mathematical treatment of mechanics, heat, sound, electricity and light than provided in PHYS 121, PHYS 122. May be taken without laboratory for 3 credits with special permission of the instructor. Prerequisites: PHYS 122 and CHEM 114 or equivalent and one year of calculus. Four credit hours

Mr. Armentrout

PHYS 222 Intermediate Physics

A continuation of topics covered in PHYS 221. Prerequisite: PHYS 221.

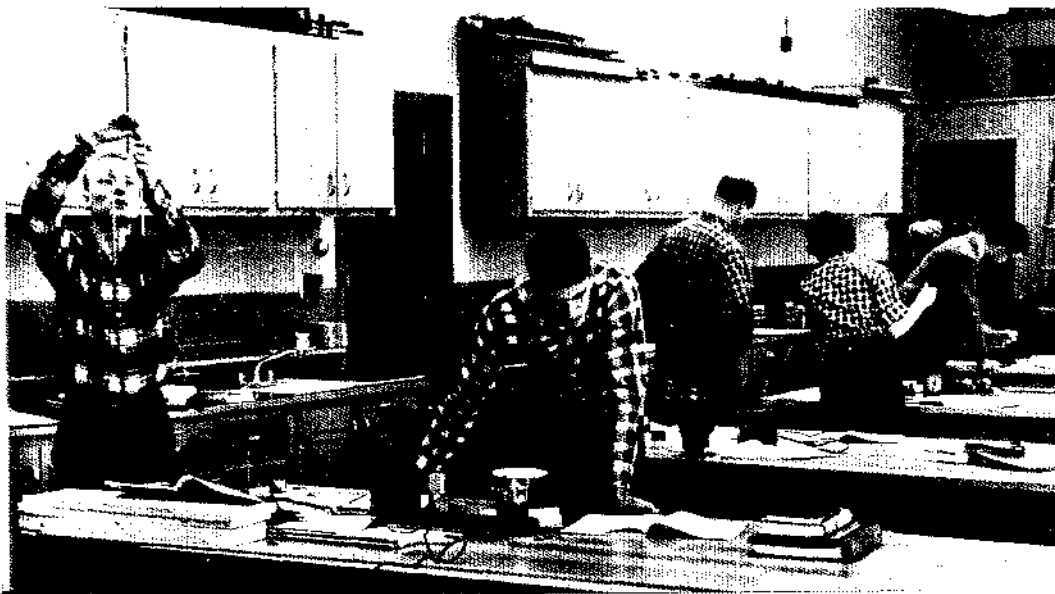
Mr. Armentrout

Four credit hours

PHYS 390 Independent Physics Laboratory

A laboratory research investigation of an approved topic in physics, using the facilities of the University laboratories and/or those of industrial and professional laboratories. Prerequisite: consent of the instructor. Three credit hours

Physics Staff





Political Science

Associate Professors Pease (Chairman), Peirce; Assistant Professors Fisher, Roberts, Woshinsky; Instructor Maiman.

Students majoring in Political Science must complete a minimum of 36 hours in the department including:

	<i>Credit hours</i>
POL 101 and 102 Introduction to Government I and II (3 credits each semester) to be taken as a two-semester sequence	6
POL 283 and 284 Constitutional Law I and II (3 credits each semester) to be taken as a two-semester sequence	6
or	
POL 289 and 290 Political and Social Thought I and II (3 credits each semester) to be taken as a two-semester sequence	6
POL 397 Scope of Political Science	3
Other Courses in Political Science	21
	<hr/> 36 hours minimum

Note: POL 121 and 122, Current World Problems, may not be counted towards any major requirements.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

Upper level political science courses all require either POL 101 and 102 or the permission of the instructor unless otherwise noted.

COURSE DESCRIPTIONS

- POL 101 Introduction to Government I** Staff
 An introduction to the discipline of political science, with emphasis on U.S. government and politics. Political instructions, processes, and problems in the U.S. Three credit hours
- POL 102 Introduction to Government II** Staff
 A continuation of POL 101. Prerequisite: POL 101. Three credit hours
- POL 103 State Government** Mr. Pease
 State constitutions, structure and functions of state government. Relations with federal, state, and local governments. Prerequisite: Sophomore standing. Three credit hours
- POL 121 Current World Problems I** Mr. Peirce, Mr. Roberts
 Contemporary domestic and international affairs with emphasis on events in the Communist world and the underdeveloped areas. Two credit hours
- POL 122 Current World Problems II** Mr. Peirce, Mr. Roberts
 A continuation of POL 121. Prerequisite: POL 121. Two credit hours
- POL 225 Canadian-American Relations** Mr. Woshinsky
 This course is designed to explore the relationships with the nation most involved with the economy, security, and geography of the United States. It is a seminar type course with limited enrollment. Prerequisites: HIST 131 and 132 or HIST 133 and 134. Three credit hours
- POL 233 The American City** Mr. Fisher
 The process of government in urban America including concepts of local self-government, forms, and procedures in urban governing and developments in intergovernmental relations and metropolitan areas. Prerequisites: POL 101 and 102. Three credit hours
- POL 234 Municipal Administration** Mr. Fisher
 The management, financial control, and administration of modern American cities, emphasis on personal and finance administration, the city plan, and line functions: public safety, transportation, health, welfare, and housing. Prerequisite: POL 233. Three credit hours
- POL 235 Democratic Governments of Europe** Mr. Roberts, Mr. Woshinsky
 An introduction to the parliamentary system, through a study of the governmental operations and politics of Britain, France, and the Federal Republic of Germany. Other topics covered: the Common Market and prospects for European integration; relationship of democratic Europe with Communist Europe. Three credit hours
- POL 236 The Soviet Union** Mr. Roberts
 An introduction to the USSR. Russian and Soviet political history; Marxism-Leninism; the party and state structures; the socialist economy; the impact of the regime on the individual Soviet citizen; cultural life. Three credit hours
- POL 239 Soviet Foreign Policy** Mr. Roberts
 A survey of Soviet Foreign policy as a continuation of Tsarist policies; as a world movement; the Comintern and the popular Front. Impact of World War II: the emergence of the USSR as a superpower. Post-Stalin modifications. Case studies in contemporary foreign problems, including relations within the Communist world. Three credit hours
- POL 251 Public Administration** Mr. Pease
 The dynamics of government administration including administrative principles. Decision-making; communications; leadership; organizational models; and technical, political, and personal factors of administration. Three credit hours
- POL 252 Administrative Law** Mr. Maiman
 Primarily case studies of the legal adjustment of administrative authority and individual liberty, including judicial control over administration, personal liability of officers, scope and limits of administrative powers and the due process measurement of administrative procedure. Prerequisite: POL 251. Three credit hours

- POL 256 Political Parties** Mr. Pease
Development and present organization and operation of the American party system. Nature and function of major and minor parties, sectionalism, nominating system, presidential and congressional elections, the electorate, finance, interest groups. Prerequisites: POL 101 and 102. Three credit hours
- POL 258 Public Opinion** Mr. Woshinsky
The role of public opinion in American democracy; definition and measurement; sociological and psychological influences; mass media; linkage to government. Prerequisites: POL 101 and 102. Three credit hours
- POL 273 International Relations I** Mr. Peirce
First semester: the nation-state system, techniques of states in expanding their influence, and restraints imposed on their freedom of action. Three credit hours
- POL 274 International Relations II** Mr. Peirce
Second semester: Continuation of POL 273. Three credit hours
- POL 275 United States Foreign Policy** Mr. Peirce
A detailed evaluation of U.S. foreign policy focusing on such topics as: identification of U.S. policy; governmental agencies and personalities in the formulation and implementation of policy; the role of non-governmental influences. The course is designed to evaluate current policy goals and practices within the context of long-range goals. Three credit hours
- POL 283 American Constitutional Law I** Mr. Maiman
The development and interpretation of the American constitution through Supreme Court decisions. First semester: the nature of the federal judicial process, interstate commerce, taxation, war powers, federal-state relations. Prerequisites: POL 101 and 102 or permission of instructor. Three credit hours
- POL 284 American Constitutional Law II** Mr. Maiman
Second semester: Continuation of POL 283. Three credit hours
- POL 289 Political and Social Thought I** Mr. Fisher
A survey of political theories from ancient Greece to recent times. The basic approach is historical, and seeks to relate theories of politics to the environments in which they developed. Prerequisite: junior or senior standing. Three credit hours
- POL 290 Political and Social Thought II** Mr. Fisher
A continuation of POL 289. Prerequisite: junior or senior standing. Three credit hours
- POL 291 American Political Ideas** Mr. Maiman
The development of political ideas in America from 1620 to the present. Three credit hours
- POL 305 The Supreme Court and Public Education** Mr. Maiman
Contemporary educational topics such as integration, religion in the schools, federal aid to education, student unrest, student and teacher rights as seen through court decisions and other readings. Three credit hours
- POL 331 Introduction to Comparative Politics** Mr. Woshinsky
This course will introduce students to major approaches and concepts in comparative politics. Emphasis will be placed on using theoretical concepts to understand practical politics in a variety of nations (primarily those modern industrial states of Western Europe and North America.) Major topics for study: public opinion, political parties, legislative behavior, bureaucracy. Prerequisite: POL 235. Three credit hours
- POL 355 Congressional Internship** Staff
A first-hand study of the national legislative process and the function of the legislator. The student will be assigned to the staff of a Congressman or Senator in Washington, D.C., from about February 1 until the end of June. Readings and reports are required in addition to the staff work. Open to juniors on a competitive basis. Rules announced publicly each fall semester. Six credit hours

- POL 357 The President and Congress I** Mr. Woshinsky
First semester: the institutionalization of the modern Presidency, its scope in the formulation and implementation of domestic and foreign policy. Three credit hours
- POL 358 The President and Congress II** Mr. Woshinsky
Second semester: Continuation of POL 357. Three credit hours
- POL 359 Problems of American Government** Staff
Analysis of basic problems of United States national government. Case studies in such areas as federalism, civil rights, congressional and presidential relations, judicial functions, taxation, and foreign affairs. Prerequisites: POL 101 and 102. Three credit hours
- POL 360 Problems of State Government** Mr. Pease
A consideration of the theory, organization, and functions of the American states and their present-day problems. Prerequisites: POL 101 and 102. Three credit hours
- POL 387 International Law** Mr. Peirce
An analysis from the political perspective of the sources, limitations, and institutions of international law in the search for effective legal standards to achieve world order. Offered in alternate years beginning in 1971-1972. Three credit hours
- POL 388 International Organization** Mr. Peirce
An analysis of the approaches to the problems of peace, economic and social justice at the international level. Emphasis on the United Nations system and its specialized agencies. Offered in alternate years beginning in the spring semester of 1971-1972. Three credit hours
- POL 392 Special Topics in Political Science** Staff
A concentrated program of reading or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty. Three to six credit hours
- POL 393 Special Topics in Political Science** Staff
A concentrated program of reading or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty. Three to six credit hours
- POL 394 Special Topics in Political Science** Staff
A concentrated program of reading or study on a particular subject of the student's selection. The topic will be chosen with the advice and under the direction of a faculty member. Admission by permission of the political science faculty. Three to six credit hours
- POL 395 Municipal and State Internship** Mr. Fisher, Mr. Pease
Professional experience in either a local government unit or a department or agency of state government. Open to selected students. Reports and readings required. State government option available under the Maine State Government Internship Program; Municipal Government option required for the B.A. or M.A. in Public Management. Three to six credit hours
- POL 397 Scope of Political Science** Mr. Fisher
The scope and nature of the study of politics: power and society; basic descriptive political theory and the role of political institutions. Open to senior political science majors or with the instructor's permission. Prerequisites: POL 101 and 102. Three credit hours

Psychology

Professors Paradise, Saldanha (Chairman); Associate Professors Bishop, Sanborn; Assistant Professors Hearn, Van Hemel.

The Department of Psychology offers a four-year program for students majoring in psychology. It also includes courses for students majoring in allied fields as well as for students wishing an orientation to the field of psychology as part of their general education. Courses are designed to create an awareness of the fundamental principles of psychology, psychological research, and the means by which psychological knowledge is acquired. The emphasis is upon the scientific inquiry into basic phenomena and principles of behavior, not upon the development of professional skills.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

The minimum requirement for a major in psychology is 30 hours (and not to exceed 45 hours), which must include the following:

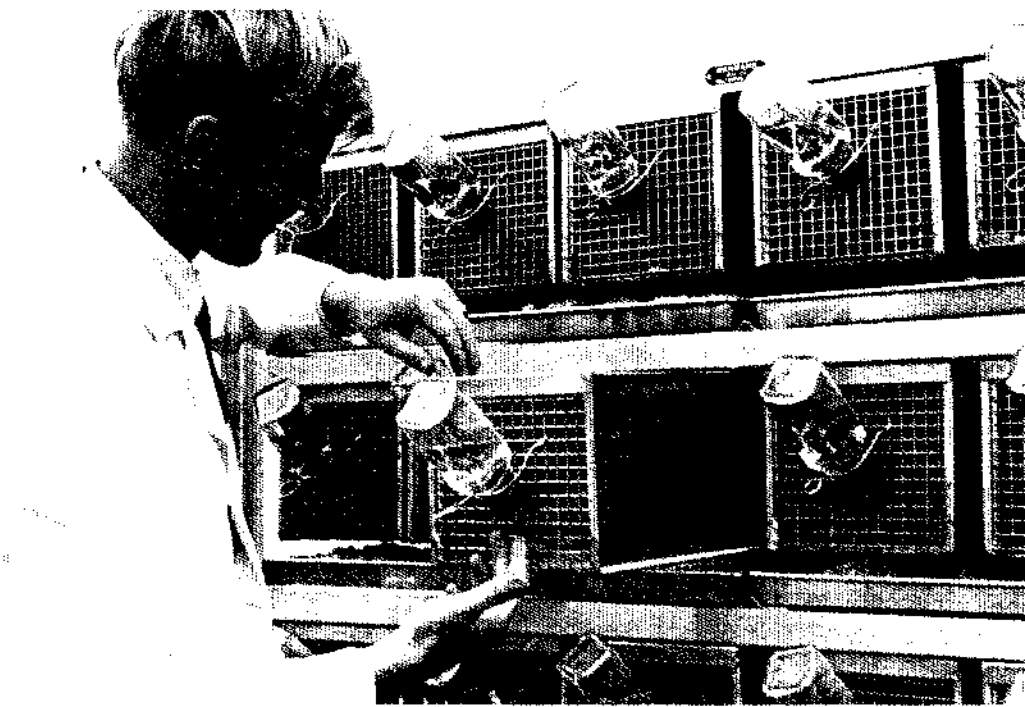
	<i>Credit hours</i>
PSY 101 and 102 General Psychology (3 credits each semester) to be taken as a two-semester sequence	6
PSY 201 Statistics in Psychology	3
PSY 205 Experimental Methodology	4

and at least two courses from each of the following groups:

Group I:	PSY 350 Psychology of Learning	4
	PSY 351 Psychology of Motivation	3
	PSY 361 Sensation and Perception	4
	PSY 365 Physiological Psychology	3
Group II:	PSY 330 Social Psychology	3
	PSY 333 Psychopathology	3
	PSY 338 Theories of Personality	3
	PSY 343 Psychological Test Theory	3

Psychology 101 and 102 should be elected no later than the sophomore year by students who plan to major in psychology. All majors are required to elect PSY 201 and PSY 205 no later than their junior year.

In addition, the department recommends that the students who wish to take a more extensive program or who plan to enter graduate school elect, in consultation with their major advisor, further courses in psychology and also include in their programs study in related fields, such as mathematics, biology, philosophy, sociology, and anthropology.



Animal specimens are kept on hand for certain aspects of psychological study.

COURSE DESCRIPTIONS

PSY 101 General Psychology

Mr. Saldanha, Mr. Paradise

An introduction to the study of behavior as a natural science. Among the topics covered are: methods of inquiry, physiological foundations of behavior, sensation and perception, motivation and emotion, learning and thinking. This course is a prerequisite for all courses in the department.

Three credit hours

PSY 102 General Psychology

Staff

A continuation of Psychology 101. It deals with complex psychological processes such as ability testing, personality, conflict, behavior disorders and therapy, and social and industrial behavior. Prerequisite: PSY 101.

Three credit hours

PSY 201 Statistics in Psychology

Mr. Hearn

A general introduction to the techniques of descriptive, predictive, and inferential statistics. Emphasis is placed on measures of central tendency and variability, correlation, hypothesis testing, and simple analysis of variance. Prerequisite: PSY 101.

Three credit hours

PSY 205 Experimental Methodology

Mr. Hearn

Emphasis on the principles, methods, and techniques of experimental psychology. Applications of general methodology and specific techniques to the design of experiments in behavioral research. Laboratory exercises provide experience in collecting and reporting data. Prerequisite: PSY 201.

Four credit hours

PSY 220 Developmental Psychology

Mr. Bishop

An overview of psychological concepts of significance during the life span of the individual. Selected areas of child, adolescent, adult, and geriatric psychology are included. This course is not open to students who have completed, or who are currently enrolled in, either PSY 223 or PSY 224. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 223 Psychology of Childhood

Mrs. Sanborn

A systematic study of the child's behavior and psychological development. Emphasis upon principles underlying development, methods of child study, and practical implication. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 224 Psychology of Adolescence

Mrs. Sanborn

A systematic study of the behavioral and psychological development of the adolescent. The adolescent personality and problems of adjustment in relation to the family, the school and the community. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 232 Mental Hygiene

Mrs. Sanborn

A consideration of the fundamental factors in human adjustment with emphasis upon the prevention of inadequate adjustments and upon the processes by which maladjusted individuals may be restored to normal living. Family and educational situations will be emphasized. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 311 Human Performance

Mr. Hearn

Emphasis on the interaction of man with his environment. Specific topics include job selection, classification and satisfaction; man-machine systems; human information processes; human motor activities. Prerequisites: PSY 101 and 102

Three credit hours

PSY 320 Psychology of Personality

Mr. Paradise

Consideration of current issues and findings in personality. Personality development. Current research in such areas as socialization, aggression, identification, values, morality, anxiety. Relates basic principles of perception, motivation, and learning to personality theory. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 326 Mental Deficiency

Mr. Bishop

The identification and description of various types and levels of mental retardation. Problems in assessment, treatment, and education of the retarded are also stressed. Prerequisite: PSY 220 or PSY 223. (Not offered in 1971-1972.)

Three credit hours

PSY 330 Social Psychology

Mr. Bishop

The psychological principles which enter into the social behavior of the individual. Areas of consideration include perception, communication, attitude formation, interpersonal attraction and group behavior. Prerequisite: PSY 101 and 102.

Three credit hours

PSY 333 Psychopathology

Mr. Bishop

The etiology, development and manifestation of the major forms of mental illness with particular emphasis upon the neuroses and psychoses. Psychological, social and biological factors which contribute to maladjustment are examined. Prerequisites: PSY 101 and 102 with a grade of C or better.

Three credit hours

PSY 335 Deviations of Childhood

Mr. Bishop

Intensive readings and discussion of the etiology and manifestation of deviant patterns of behavior and functioning in children. Problems relating to the identification and management of such deviations are considered. Prerequisites: PSY 223 or 220 and permission of the instructor. (Not offered in 1971-1972.)

Three credit hours

PSY 338 Theories of Personality

Mr. Bishop

A survey of the major contemporary approaches to the study of personality. Different theories are compared, their impact upon current thinking evaluated, and their research contributions assessed. Prerequisites: PSY 101 and 102 with a grade of C or better.

Three credit hours

PSY 343 Psychological Test Theory

Mr. Bishop

The theoretical and statistical concepts underlying the development of various psychological tests. Individual and group tests of intelligence, personality, aptitude, and interest are examined and evaluated in terms of these concepts. Uses and abuses of psychological tests are considered. Prerequisite: PSY 201.

Three credit hours

PSY 350 Psychology of Learning

Mr. Van Hemel

Experimental findings on the fundamental principles that underlie the acquisition and retention of new behavior. Laboratory experience with techniques in the study of learning in animals and humans. Prerequisite: PSY 205.

Four credit hours

PSY 351 Psychology of Motivation

Mr. Van Hemel

A survey of theory, research methods, and experimental findings related to the search for the determinants of human and animal behavior. The course requires a research paper on a topic of interest to the student, and the planning of an experiment growing out of that interest. Laboratory demonstrations. Prerequisite: PSY 205.

Three credit hours

PSY 360 Human Learning

Mr. Paradise

Basic principles of learning as they relate to human behavior. Consideration of such areas as acquisition of knowledge, retention, forgetting, problem solving, concept formation, thinking, transfer of training. Interrelates learning with perception and motivation. Some consideration of learning theories. Prerequisites: PSY 101 and 102.

Three credit hours

PSY 361 Sensation and Perception

Mr. Hearn

An examination of perceptual processes in selected sensory systems. Emphasis on experimental methodology, research findings, and theoretical interpretations. Prerequisite: PSY 201.

Four credit hours

PSY 365 Physiological Psychology

Mr. Van Hemel

Basic neuroanatomy, neurophysiology, and endocrinology, and the relationships between nervous system functioning and behavior. Physiological analysis of sensory function, motivation, and learning. Prerequisite: BIO 101 or BIO 111.

Three credit hours

PSY 366 Psychobiology

Mr. Van Hemel

A survey of the principles and concepts of biological psychology. Understanding the psychological basis and species-typical behaviors, learning, and motivation, from a comparative approach. Prerequisites: PSY 101 and 102 and BIO 101 or BIO 111.

Three credit hours

PSY 371 History and Systems of Psychology

Mr. Saldanha

A survey of the history of psychological thought from its beginnings in Greek philosophy to modern times. Special attention will be given to the influence of philosophy and natural science on the development of contemporary psychology. The course concludes with a survey of the major systems. Prerequisites: PSY 101 and 102 and permission of the instructor.

Three credit hours

PSY 375 Psychology of Thinking

Mr. Saldanha

An analysis of experimental studies of concept formation, problem solving, reasoning, creativity, and related topics. Prerequisites: PSY 101 and 102 and permission of the instructor.

Three credit hours

PSY 400 Research in Psychology I

Staff

This course is open to qualified majors in psychology who wish to engage in independent readings on selected topics or conduct research projects. With permission of departmental chairman.

Three credit hours

PSY 401 Research in Psychology II

Staff

This course is open to qualified majors in psychology who wish to engage in independent readings on selected topics or conduct research projects. With permission of departmental chairman. (Fall and Spring)

Three credit hours

PSY 521 Individual Psychological Testing

Mr. Bishop

Intensive training in the administration, scoring and interpretation of the Stanford Binet form L-M and the Wechsler Intelligence Scales. Prerequisites: PSY 201 and 343 each with a grade of C or better and permission of the instructor.

Three credit hours



Social Welfare

Professor Romanyshyn (Chairman); Associate Professor Steinman.

The major in social welfare consists of an inter-disciplinary course of study including 29 hours of social welfare courses and a minimum of 15 hours of related advanced courses in social sciences and humanities to be individually planned by the student and his adviser.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIRED COURSES

		<i>Credit hours</i>
SWE 250 and 251	Social Problems and Social Welfare Policy (3 credits) and Human Services and the Consumer (with community laboratory experience) (5 credits) to be taken as a two-semester sequence	8
SWE 252 and 253	Methods of Social Work Practice (3 credits each semester) to be taken as a two-semester sequence	6
SWE 254 and 255	Community Laboratory (6 credits each semester) to be taken as a two-semester sequence	12
SWE 456	Issues in Social Welfare	3
		<hr/> 29

Note: 1971-1972 is the first year in which a social welfare major is to be offered. The above program is a modification of the current "concentration in social welfare" given within the sociology major.

COURSE DESCRIPTIONS

SWE 250 Social Problems and Social Welfare Policy Mr. Romanyshyn

A critical examination of social welfare institutions and the social problems and social needs to which they are addressed. Prerequisite: at least six hours of social science.

Three credit hours

SWE 251 Human Services and the Consumer Mr. Romanyshyn, Mr. Steinman

Study and critical evaluation of the bureaucracies, professions, and consumers of social work and other services, with a Laboratory component directed at a community study of one segment of the social welfare system. Prerequisite: SWE 250.

Five credit hours

SWE 252 Methods of Social Work Practice Mr. Steinman

An introduction to concepts and beginning skills for intervening with individuals, families, groups, neighborhoods, organizations or communities with the goal of producing some level of social change consistent with the aspirations of both the system to be changed and the intervenor. Emphasizes theories of human and community development. Prerequisites: SWE 250 and 251.

Three credit hours

SWE 253 Methods of Social Work Practice Mr. Steinman

A continuation of SWE 252.

Three credit hours

SWE 254 Community Laboratory Staff

For social welfare majors: a required internship in a neighborhood or social-agency setting designed to provide an opportunity to relate social work theory to practice. With permission of the instructor, students from other disciplines may use the laboratory as a means of testing the applicability of knowledge from their discipline to the real world. Prerequisites: For social welfare students: SWE 250 and 251, and SWE 252 and 253 (concurrent). For others: permission of the instructor.

Six credit hours

SWE 255 Community Laboratory Staff

A continuation of SWE 254.

Three credit hours

SWE 397 Department Projects Mr. Romanyshyn, Mr. Steinman

Individual or group projects, requiring independent study of some aspect of social welfare, to be selected by students in consultation with faculty. Prerequisite: department permission.

Three credit hours

SWE 456 Issues in Social Welfare Policy Mr. Romanyshyn

Senior seminar for social welfare majors that seeks to integrate class and field experience. Open to others with permission only. Prerequisites: SWE 250 and 251, SWE 252 and 253, and SWE 254 and 255.

Three credit hours





Sociology

Professor Lacognata; Associate Professors Giguere, Monsen (Chairman); Assistant Professor Anspach; Instructors Fullam, Tremper, Waterhouse.

The Department of Sociology offers a major in Liberal Arts.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIRED COURSES

The minimum requirement for a major in the department is 36 hours of sociology (not to exceed 48 hours), which must include the following:

	<i>Credit hours</i>
SOC 101 Introduction to Sociology	3
SOC 300 Sociological Theory	3
SOC 301 Statistical Methods for Social Research	3
SOC 302 Methods of Social Research	3
SOC 400 Theory Construction	3
SOC 401 Senior Seminar	3

In addition, each major is required to take at least one course from each of the following areas:

SOC 310 - SOC 319	Social Processes	3
SOC 330 - SOC 339	Social Institutions	3
SOC 350 - SOC 359	Units of Social Life	3
SOC 370 - SOC 379	Social Problems	3

The sociology major must also take six hours above the introductory level in one of the following:

Anthropology	Political Science	
Economics	Psychology	
Geography	SCOGIS (Interdisciplinary Studies)	
History	Social Welfare	6
Philosophy		

36 hours minimum

COURSE DESCRIPTIONS

SOC 101 Introduction to Sociology

Staff

The fundamental concepts, principles and methods of sociology; analyzes the influence of social and cultural factors upon human behavior; evaluates effect of group processes, social classes, stratification, and basic institutions on contemporary society.

Three credit hours

SOC 300 Sociological Theory

Mr. Anspach

A critical examination of the sociological theories of such people as Marx, Weber, and Durkheim; and contemporary theorists such as Parsons and Merton. Prerequisite: SOC 101 and two other SOC courses.

Three credit hours

SOC 301 Statistical Methods for Social Research

Mr. Monsen

Emphasis on the uses of statistics in the organization, interpretation, and presentation of research data. Measures of association and correlation; testing of hypotheses; probability and sampling. Prerequisite: SOC 101.

Three credit hours

SOC 302 Methods of Social Research

Miss Giguere

Conceptualization and research design; data collection and data analysis; logic of inquiry and research techniques. Prerequisite: SOC 101 and SOC 301.

Three credit hours

SOC 310 Social Change

Miss Giguere

Analysis of sociocultural factors related to social change and the dynamics of the change process. Prerequisite: SOC 101.

Three credit hours

SOC 311 Sociology of Adolescence

Mr. Anspach

The social behavior of adolescents, the development of adolescent culture and the involvement of adolescents in the various social systems and the class structure of society. Prerequisite: SOC 101.

Three credit hours

SOC 312 Social Stratification

Mr. Anspach

Systematic analysis of social differentiation and evaluation. Theories of and research in the structure and function of class, caste, and ethnic stratification. Prerequisite: SOC 101.

Three credit hours

SOC 313 Human Ecology

Staff

Spatial distribution of human beings and related activities and social processes; contemporary ecological problems. Prerequisite: SOC 101.

Three credit hours

SOC 314 Social Control

Staff

Examination and comparison of major societal control mechanisms. Emphasis on institutions of social control and their role in establishing and maintaining social order. Prerequisite: SOC 101.

Three credit hours

SOC 315 Personality and Social Systems

Mr. Anspach

A sociological examination of theories and research in some major areas relating personality and social systems; attitudes and behavior; socialization; social perception; a bureaucratic structure and personality; etc. Emphasis on issues involved in relating two theoretical levels of analysis. Prerequisite: SOC 101.

Three credit hours

SOC 330 Sociology of the Family

Mr. Anspach, Miss Giguere

A sociological approach to the study of the family, including the structure of social relationships, the modern American family as a social institution, the cultural background of the family, and the impact of social change. Prerequisite: SOC 101.

Three credit hours

SOC 331 Sociology of Education

Staff

A study of theory and research on the educational institution, with emphasis upon the multiple and changing functions of the formal education in industrial societies. Prerequisite: SOC 101. Three credit hours

SOC 332 Industrial Sociology

Staff

Social factors involved in the development of industry; social consequences of technological change; social organization within industry; problems encountered within the social structure(s) of industry. Prerequisite: SOC 101. Three credit hours

SOC 333 Sociology of Medicine

Miss Giguere

Attention is given to the relationship between sociocultural factors and the occurrence of disease and the social systems which are developed in the treatment and prevention thereof. Prerequisite: SOC 101. Three credit hours

SOC 334 Sociology of Religion

Miss Waterhouse

Religion as a social institution. Attention is given to the social correlates of religion and the functions of religion in society. Prerequisite: SOC 101. Three credit hours

SOC 335 Marriage

Miss Waterhouse

The physical, social, psychological, and religious factors pertaining to marital adjustment are analyzed. Slides, lectures, medical school films, symposia, and discussions are utilized. Students are expected to become familiar with a wide variety of marriage literature through library reading. Three credit hours

SOC 350 Sociology of Urban Life

Miss Giguere

A descriptive and analytical approach to the study of city life. Emphasis is placed on environment, social organization, the ecological processes, population, areas, housing, and maladjustment. Prerequisite: SOC 101. Three credit hours

SOC 351 The Individual and the Community

Staff

Analysis of the function and the structure of the community. Emphasis on the ways in which individuals and groups are affected by community dynamics. Group processes, leadership, programmed planning, and development are stressed. Community project. Prerequisite: SOC 101. Three credit hours

SOC 352 Population Dynamics

Miss Giguere, Mr. Lacognata

General demographic theories, especially those concerning population growth. Population distribution and density, age and sex and ethnic composition. Emphasis on fertility, mortality, and migration and their influence on population change. Prerequisite: SOC 101. Three credit hours

SOC 353 Collective Behavior and Social Movements

Mr. Monsen

Unstructured social behavior, e.g. crowds, mobs, riots. The rise and development of social movements emphasizing structuring and institutionalization. Prerequisite: SOC 101. Three credit hours

SOC 354 Small Group Analysis

Staff

Communication and interaction patterns within small groups are identified and analyzed. Course involves observation of and participation in such interaction. Prerequisite: SOC 101. Three credit hours

SOC 355 Social Structure and Politics

Mr. Monsen

The sociological analysis of politics with a cross-national emphasis, including the social basis of mass political behavior. Conceptual focus will be around consensus and conflict, bureaucratization and the institutionalization of interest groups, social movements, and political parties. Prerequisite: SOC 101. Three credit hours

- SOC 356 Social Organization** Staff
 An examination of selected institutions in modern society; analysis of social roles, processes and structures within typical organized groups, such as industrial, military, religious, and fraternal organizations; discussion of bureaucracy, decision-making, social conflict; the implications of cultural and technological change. Prerequisite: SOC 101.
 Three credit hours
- SOC 357 Formal Organization** Staff
 Examination of the nature and types of formal organizations, the relationships between them and the larger social context of which they are a part, and their internal structure. Prerequisite: SOC 101.
 Three credit hours
- SOC 358 Sociology of Rural Life** Staff
 Significance of rural society in American culture. The impact of forces of change, including population movement. The significance of changes in the institutions of family, religion, education, and stratification. Prerequisite: SOC 101.
 Three credit hours
- SOC 370 Social Problems** Staff
 The application of a sociological frame of reference to selected contemporary issues. Emphasis is placed on guiding the student toward a general understanding of why and how problems develop, how particular social groups are affected by them, and what is involved in dealing with them. Prerequisite: SOC 101.
 Three credit hours
- SOC 371 Race and Culture Conflict** Mr. Fullam, Miss Waterhouse
 Analysis of factors involved in group conflict, with emphasis on minority groups in culture-conflict situations. Prerequisite: SOC 101.
 Three credit hours
- SOC 372 Juvenile Delinquency** Staff
 The problem of adolescents in modern society. Discontinuities of teenage roles; influence of various subcultures on patterns of behavior. Prerequisite: SOC 101.
 Three credit hours
- SOC 373 Criminology** Staff
 The social and cultural factors in the causation of crime among adults; organized crime as a social phenomenon in American life; specific types of criminal careers; legal and judicial aspects of crime. Prerequisite: SOC 101.
 Three credit hours
- SOC 374 Sociology of Mental Health and Mental Illness** Mr. Anspach
 An examination of theory and research in the mental health field. Particular attention on the influence of culture on the definition of illnesses, the relationship between social factors and illness, and the social context of treatment. Prerequisite: SOC 101.
 Three credit hours
- SOC 375 Social Disorganization** Mr. Fullam
 The origin and causes of socially disapproved behavior. Ways in which society interprets and copes with the deviant. Study of the major forms of social disorganization; specific social problems are considered, such as suicide, crime, drug addiction, alcoholism, prostitution, mental illness, divorce, group conflict. Prerequisite: SOC 101.
 Three credit hours
- SOC 380 Seminar in Social Thought** Mr. Lacognata
 Analyses of contemporary social issues, ideas, and attitudes characterizing American society. Independent library research projects to be emphasized in concert with seminar dialogues. Prerequisites: juniors and seniors only and permission of instructor.
 Three credit hours
- SOC 397 Department Projects I** Staff
 Independent reading and/or research for juniors and seniors. Apply to department chairman. Prerequisite: 15 hours in sociology.
 Two or three credit hours

SOC 398 Department Projects II

Staff

Continuation of independent reading and/or research for juniors and seniors. Apply to department chairman. Prerequisite: SOC 397.
Two or three credit hours

SOC 400 Theory Construction

Mr. Monsen

The vocabulary and logic of theory construction; from assumptions and isolated propositions to systematized theory. The course aims at enabling the student to understand the utility of theory and its relevance for empirical research. Prerequisite: senior standing in sociology.
Three credit hours

SOC 401 Senior Seminar

Mr. Monsen

Focusing on synthesis, the seminar is meant to provide the sociology major with an overall view of his discipline and its perspective as well as an opportunity to consider current issues and the future of sociology. Prerequisite: senior standing in sociology.
Three credit hours



Theatre-Speech

Professor Hansen; Associate Professors Rootes (Chairman), Stump, Whiting; Assistant Professors Duclos, Pic'l, Power, Steele.

The Department of Theatre-Speech offers a major in both the College of Liberal Arts and in Secondary Education in the School of Education. The Theatre-Speech major in Liberal Arts is required to take a minimum of 30 credit hours in his major, while his counterpart in Education must take a minimum of 39 hours in Theatre-Speech courses.

All students are reminded that, in addition to their meeting departmental requirements for a major leading to a baccalaureate degree, they must also meet the requirements of the school or college involved, as well as the University's General Education Requirements and the Physical Education Requirements. These general requirements are printed inside the front cover of this catalog.

REQUIRED COURSES FOR A MAJOR IN THEATRE-SPEECH IN THE COLLEGE OF LIBERAL ARTS

	<i>Credit hours</i>
TSP 170 Oral Communication	3
or	
TSP 171 Interpersonal Communication	3
TSP 120 Fundamentals of Acting	3
or	
TSP 290 Oral Interpretation	3
TSP 271 Argumentation and Debate	3
or	
TSP 272 Persuasion	3
TSP 110 Introduction to the Theatre	3
Other Theatre-Speech courses	18
	<hr/>
	30 hours minimum

REQUIRED COURSES FOR A MAJOR IN THEATRE-SPEECH IN THE SECONDARY EDUCATION PROGRAM OF THE SCHOOL OF EDUCATION

	<i>Credit hours</i>
TSP 170 Oral Communication	3
or	
TSP 171 Interpersonal Communication	3
TSP 135 Dramatic Production	3
TSP 271 Argumentation and Debate	3
TSP 110 Introduction to the Theatre	3
TSPE 410 Teaching Speech and Theatre in the Secondary School	3
Other Theatre-Speech courses	24
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	39 hours minimum



COURSE DESCRIPTIONS

TSP 11 Oral Communication in Business Staff
 A course in oral composition for business students in the two-year program. Deals with practice in verbalization and in the development of clarity in vocal expression. Also includes practice in the analysis of current issues leading to the organization and delivery of short talks, reports, etc. Three credit hours

TSP 110 Introduction to Theatre Staff
 A basic course in theatre. Designed to familiarize the student with plays of various genre, periods, and styles and the elements of production. Includes the study of the influences of playwrights, production, aesthetics, and dramatic criticism on dramatic art as observed in current theatre. Includes correlation with the other arts. Three credit hours

TSP 120 Fundamentals of Acting Staff
 A course designed to introduce the student to basic skills of acting through the use of mime, improvisation, and role playing. Emphasis made on internal preparation for developing a role and on external techniques for projecting that role. Three credit hours

TSP 130 Theatre Workshop I Staff
 A course designed to give students practical application of theatre practices in the fields of acting, design, scene construction, costuming, properties, lighting, management, and directing. A laboratory course. One credit hour

TSP 131 Theatre Workshop II Staff
 A continuation of TSP 130 — Theatre Workshop I. Prerequisite: TSP 130. One credit hour

TSP 132 Theatre Workshop III Staff
 A continuation of TSP 131 — Theatre Workshop II. Prerequisite: TSP 131. One credit hour

TSP 133 Theatre Workshop IV Staff
 A continuation of TSP 132 — Theatre Workshop III. Prerequisite: TSP 132. One credit hour

TSP 134 Play Production for Non-Majors Staff
 An introduction to the responsibilities of the director and to the basic principles of stage directing, including choosing and analyzing plays, scheduling rehearsals, blocking action, and determining stage business. Backstage work on major and laboratory theatre productions will be required. Three credit hours

TSP 135 Play Production for Majors Mr. Rootes
 A course in dramatic production covering such areas as stagecraft, scene design, lighting, costuming, and properties. Each class will do production work on a play. Laboratory. Three credit hours

TSP 170 Fundamentals of Oral Communication Staff
 A beginning course in speaking, with emphasis on the analysis of significant problems, and the arrangement and delivery of this material. Three credit hours

TSP 171 Interpersonal Communication

Mr. Pic'l

A lecture-discussion course designed to acquaint the student with the elemental components of speech communication, its basic nature and function. The course involves a study of the potential of human speech communication; the phenomenon of communication through a study of communication models and networks; the study of language and psycho-linguistics; the study of logic, dialectic, and critical and creative thinking. These topics are brought to focus upon the problems of misunderstanding and their remedy.

Three credit hours

TSP 175 Intercollegiate Debate I

Mr. Pic'l

Participation in intercollegiate competitive debate. This is essentially a laboratory course in which the student receives individual help in preparation for competition. Emphasis is placed upon analysis, research, case development, presentation, refutation, and rebuttal.

One-half credit hour

TSP 176 Intercollegiate Debate II

Mr. Pic'l

Continuation of TSP 175 — Intercollegiate Debate I. Prerequisite: TSP 175.

One-half credit hour

TSP 177 Intercollegiate Debate III

Mr. Pic'l

Continuation of TSP 176 — Intercollegiate Debate II. Prerequisite: TSP 176.

One-half credit hour

TSP 178 Intercollegiate Debate IV

Mr. Pic'l

Continuation of TSP 177 — Intercollegiate Debate III. Prerequisite: TSP 177.

One-half credit hour

TSP 271 Argumentation and Debate

Mr. Pic'l

A lecture, discussion, and performance course designed to equip the student with the knowledge and skill to make effective use of logic and evidence in oral discourse. Students will learn the principles and techniques of analysis, development, support, defense, and attack in connection with debatable propositions. Practice in argumentative speaking and debating.

Three credit hours

TSP 272 Persuasion

Mr. Pic'l

A lecture-discussion-performance course in art of influencing human behavior by means of speech communication. A study of the art of persuasion as a means of defense against the multitude of persuasive messages to which a member of contemporary American society is subjected. Investigation of the ethics of persuasion; beliefs, attitudes and values; and the persuasive impact of motivational appeals and other psychological factors. Practice in persuasive speaking.

Three credit hours

TSP 290 Oral Interpretation

Staff

A course in the assimilation and analysis of literary material (poetry, prose, drama), with emphasis on the techniques used in reading written material aloud to an audience. Designed to stimulate an understanding and responsiveness to literature and to develop the ability to convey to others, through oral reading, an appreciation of that literature.

Three credit hours

TSP 291 Voice and Diction

Staff

A study of the vocal mechanism, and the mechanics of effective vocal production. Includes the use of the International Phonetic Alphabet.

Three credit hours

TSP 320 Advanced Acting

Mr. Duclos

Designed to broaden the basic skills of the actor in achieving theatrical effectiveness through an individualized examination of the actor's problems, and the actor's techniques in his approach to a role. Emphasis on scene work, plus movements associated with period styles. Prerequisite: TSP 120.

Three credit hours

TSP 330 Stage Lighting

Mr. Rootes

Introduction to stage lighting design, elements of electricity, color, light sources, instrumentation and control systems. Student will participate in lighting projects in practicum. Prerequisites: TSP 134 or 135.

Three credit hours

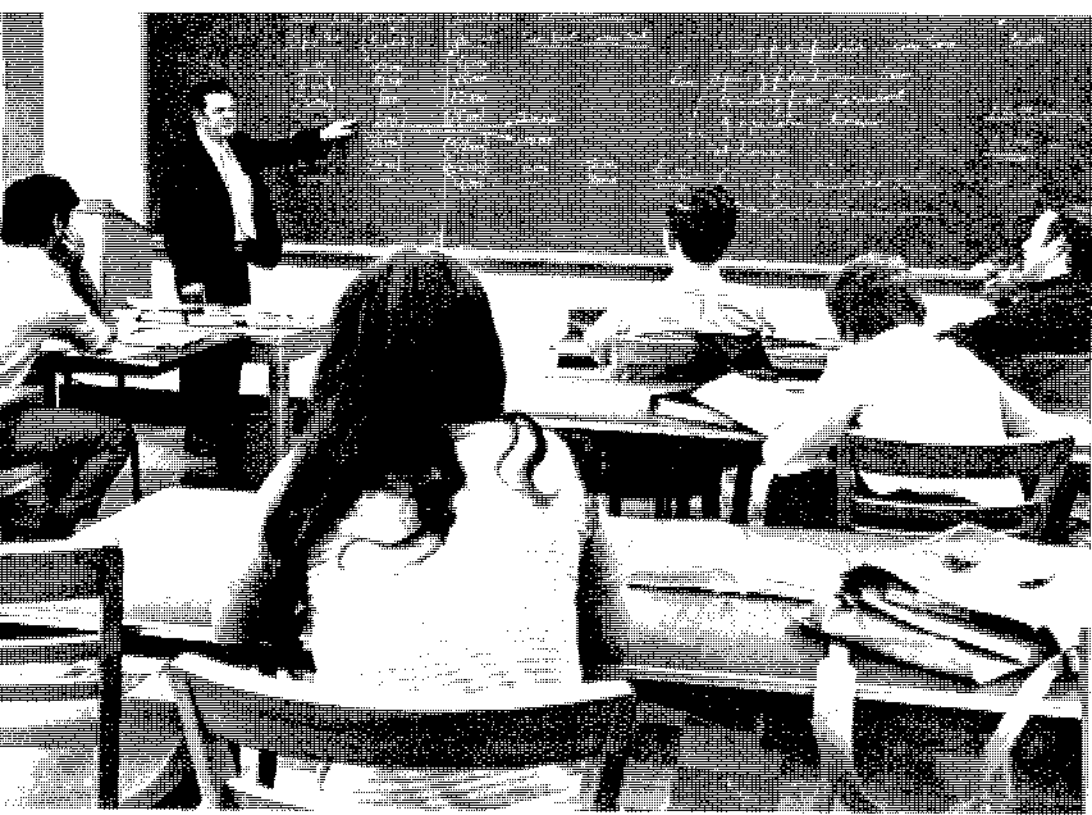
TSP 331 Scene Design

Mr. Rootes

Lecture and practicum in stage scenic design. Emphasis on the visual art and drafting of designs. Prerequisite: TSP 134 or 135.

Three credit hours

- TSP 334 Stage Costuming** Mr. Rootes
Introductory course to stage costume design, construction, and organization. Student will be required to work costumes on a current production as practicum.
Two credit hours
- TSP 335 Playwriting** Mr. Stump
A lecture-practicum course designed to acquaint the student with playwriting principles. Emphasis is placed on the one-act play form. Students will be required to complete a series of creative exercises culminating with the writing of a one-act play. Three credit hours
- TSP 340 History of the Theatre I** Mr. Stump
A study of the development of the drama, the physical theatre, and the modes of production from the ancient Greek period through to 1640. Three credit hours
- TSP 341 History of the Theatre II** Mr. Stump
A study of the development of the drama, the physical theatre, and the modes of production from the Restoration to the present. Three credit hours
- TSP 380 Rhetorical Theory** Mr. Pic'l
A lecture-discussion course designed to investigate the literature in rhetorical theory from Aristotle to Kenneth Burke and I. A. Richards. Emphasis is placed upon the study of rhetoric as the art of discourse adapted to its end. Students will be required to complete a series of short critical research projects and to report the results in class. Final paper required. Prerequisite: any 3-credit speech course. Three credit hours
- TSP 390 Advanced Oral Interpretation** Staff
An intensive study of the theory and techniques involved in the interpretation of prose, poetry and drama. Oral Interpretation will be treated as an art form here and emphasis will be placed upon performance. Prerequisite: TSP 290. Three credit hours
- TSP 399 Shakespeare, The Theatrical View** Mr. Duclos
An approach to the study of Shakespeare through the use of visual and auditory aids including motion pictures, recordings, actual stage performances, and class readings supervised by the instructor. Elizabethan companies, performers, and stage history will also be studied. The aim of the course will be to familiarize the student with Shakespeare as performed, as opposed to Shakespeare as read. Three credit hours
- TSP 410 Teaching Speech and Theatre in the Secondary School** Mr. Rootes
A method course for Speech and Theatre majors and minors. Discussion of problems in teaching speech and dramatics with emphasis on creative methods to approach the subject matter. Three credit hours
- TSP 430 Fundamentals of Directing** Staff
Designed to train directors in theatrical organization and rehearsal techniques. Encompasses composition, picturization, movement, rhythm, and pantomimic dramatization. Course involves both contemporary theory and practical application. Prerequisite: TSP 120, 134, 135 or permission. Three credit hours
- TSP 433 Theatre Project** Staff
Investigation in laboratory work into special divisions of theatre production or research. Prerequisite: permission from the staff. Three credit hours
- TSP 450 Dramatic Theory** Mr. Hansen
A study of the development of comedy and tragedy through readings in classic and modern criticism. Includes melodrama and farce, and the merging of all modes in the modern theatre. Consideration of leading philosophical theories and their bearing on the theatre. Prerequisites: TSP 110, 340, 341. Three credit hours
- TSP 460 American Drama** Mr. Stump
A study of the drama in the United States. A brief history of early American Playwrights followed by a close study of major figures, with O'Neill as the center. Others: Maxwell Anderson, Robert Sherwood, Tennessee Williams, Arthur Miller, and Edward Albee. Three credit hours
- TSP 461 Modern Drama** Staff
Plays by representative authors from the nineteenth century to the present. Centers about the concepts of realism, surrealism, tragedy, and tragi-comedy in the contemporary theatre. Three credit hours



School of Business and Economics

JOHN W. BAY, Dean

Department of Associate Business Administration: Assistant Professors Andrews, Annett, McKeil (Chairman), and Taylor; Lecturer Emanuelson.

Department of Business Administration: Professors Fitzpatrick, Siedlik, Waters; Associate Professors Findlay (Chairman), Hall, Jagolinzer; Assistant Professor Manck; Instructor Chandler; Lecturer Plowman.

Department of Economics: Professor Durgin; Associate Professor Bay; Assistant Professors Bien (Chairman), McMahon, Witherill.

The School of Business and Economics offers a number of different programs to meet student needs. The School offers a two-year program in Business Administration leading to an Associate of Science in Business Administration degree. Four-year undergraduate degree programs are available in two areas of study: Business Administration and Economics. Upon successful completion of one of these fields, the degree of Bachelor of Science is awarded. The School also provides a graduate program leading to the degree of Master of Business Administration.

TWO-YEAR ASSOCIATE OF SCIENCE PROGRAM IN BUSINESS ADMINISTRATION

This program is designed to serve two purposes: to prepare students who wish to complete their education in two years for employment in junior management positions, and to provide a sound foundation for those students who perform well and who wish to transfer to the four-year business administration program here or at another institution.

While the program emphasizes business, it contains some courses in liberal studies such as English composition, literature, speech, human relations, and mathematics. Within the business areas some electives are available for selection by the student according to his interests and desires.

Students admitted to the associate degree program pursue the following curriculum during their two years.

ASSOCIATE DEGREE PROGRAM

The Freshman Year

FALL SEMESTER		SPRING SEMESTER	
<i>Subject</i>	<i>Credit hours</i>	<i>Subject</i>	<i>Credit hours</i>
BUS 11 Principles of Accounting	3	BUS 12 Principles of Accounting	3
ECON 11 Principles of Economics ..	3	ECON 12 Principles of Economics	3
PE 100 Physical Education	1	PE 100 Physical Education	1
Elect one of the following:		Elect one of the following:	
ENG 11 Composition	3	ENG 11 Composition	3
ENG 12 Modern Literature	3	ENG 12 Modern Literature	3
Elect one of the following:		Elect one of the following:	
BUS 95 Business and Society	3	BUS 95 Business and Society	3
TSP 11 Oral Communication in		TSP 11 Oral Communication in	
Business	3	Business	3
Elect one of the following:		Elect one of the following:	
MS 10 Mathematical Analysis		MS 11 Mathematical Analysis for	
for Business Decisions	3	Business Decisions II	3
MS 110 Elementary		MS 111 Analysis and Probability	3
Mathematical Analysis	3		

The Second Year

FALL SEMESTER		SPRING SEMESTER	
BUS 40 Elements of Industrial		BUS 43 Problems of Small Business ..	3
Management	3	BUS 80 Business Law	3
BUS 60 Marketing	3	Elect one of the following:	
BUS 90 Business Data Processing	3	BUS 93 Human Relations in	
Elect one of the following:		Business	3
BUS 93 Human Relations in		ENG 19 Expository Writing	3
Business	3	Elect one of the following:	
ENG 19 Expository Writing	3	BUS 64 Retailing	3
Elect one of the following:		BUS 67 Sales Management	3
BUS 15 Intermediate Accounting ..	3	Students may continue with their	
BUS 20 Business Finance	3	first semester selection:	
		BUS 16 Intermediate Accounting	3
		BUS 21 Business Finance	3
		or	
		BUS 30 Investment Management	3

MS 110 and MS 111 or MS 212 and MS 213 can be substituted for BUS 43 and BUS 64 or BUS 67. In that case the student takes BUS 93 and ENG 19 in the spring.

Upon completion of the 62 hour program with a grade point average of 2.0, a student will be awarded the degree of associate of science in business administration. (Students exempted from physical education take 60 hours.)

Graduates are equipped for employment at the junior management level in many fields of business. Some fields of business that graduates have entered are sales, retailing, banking, finance, management trainee programs, and accounting. Students who have a 3.0 cumulative average at the end of the first year or a 2.4 cumulative average at the end of their second year may transfer to the four-year business administration program.

Any high school graduate may apply for admission to the two-year program. A college preparatory course is not required. Applicants should complete the regular University of Maine application form and specify the Associate in Business Administration program. Candidates must also complete the College Entrance Examination Board's general Scholastic Aptitude Test and the Strong Vocational Interest Test.

FOUR-YEAR UNDERGRADUATE PROGRAMS IN BUSINESS AND ECONOMICS

The primary objective of the undergraduate program in Business Administration is to develop the student's abilities to assume the responsibilities of business management. The program is aimed at providing the broad training necessary for successful business management in a rapidly changing economy. No attempt is made to provide detailed specialized training in particular business tasks. The program aims, rather, at developing skills and attitudes of mind that will enable the student to cope successfully with the changing problems of business management in the years ahead. The program is implemented in three general phases: First, the student acquires broad training in the liberal arts and sciences for the necessary foundation upon which his future education will build. Second, the student pursues a program of study designed to provide him with an understanding of the major functional areas common to most business operations and with a knowledge of certain fields which are particularly relevant to the study of business management. This is referred to as the "core" program and includes basic courses in accounting, business data processing, economics, finance, business law, marketing, and management. Third, the student undertakes to acquire a deeper knowledge of the major field he has selected. This is accomplished by taking 18 credit hours beyond the core program.

The undergraduate program in economics is designed to prepare students broadly for careers such as civil service, law, management, public affairs, and labor relations. Economics is a social science and as such must be studied in the perspective of a broad training in the liberal arts and sciences. Many students who plan to attend graduate and professional schools will find the undergraduate economics program to be valuable training for advanced academic work. Within the economics program, courses are available in such fields as: Microeconomic analysis, money and banking, macroeconomic analysis, international trade, comparative economic systems, public finance, and the social control of business.

GENERAL GRADUATION REQUIREMENTS OF THE SCHOOL OF BUSINESS AND ECONOMICS FOR ALL CANDIDATES FOR A B.S. DEGREE

All students are required to complete 120 hours.

To be eligible for a B.S. degree in the 4-year programs in the School of Business and Economics, the student must have attained a cumulative grade point average of 2.0 or better:

- a. For all courses taken in 4-year programs at the University, and
- b. For all 4-year courses in business and economics.

ADDED REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION

- A. General Foundation Courses 50 credit hours
 - Six hours of interdisciplinary studies
 - Twelve hours of humanities
 - Six hours of fine and applied arts
 - Twelve hours of social sciences
 - Twelve hours of mathematics
 - MS 110 Elementary Analysis
 - MS 111 Analysis and Probability
 - MS 212 Statistics
 - MS 213 Linear Systems
 - Two hours (one year) of physical education (except when exempted)

- B. Core Requirements in Business and Economics 30 credit hours
 - ECON 101 Principles of Economics I
 - ECON 102 Principles of Economics II
 - One 300 level ECON course
 - BUS 101 Introductory Accounting
 - BUS 320 Business Finance
 - BUS 340 Elements of Industrial Management
 - BUS 360 Marketing
 - BUS 380 Business Law
 - BUS 385 Business Economics
 - BUS 390 Business Data Processing

- C. Major Field Requirements 18 credit hours
 - Accounting Major
 - BUS 301 Intermediate Accounting
 - BUS 302 Intermediate Accounting
 - BUS 305 Cost Accounting
 - BUS 310 Advanced Accounting
 - BUS 410 Auditing
 - Elect either:
 - BUS 311 Advanced Accounting
 - BUS 313 Federal Tax Reporting
 - Business Administration Major
 - BUS 102 Financial and Management Accounting
 - BUS 330 Investment Management
 - BUS 370 Managerial Marketing
 - BUS 450 Business Management and Policy
 - Six hours of Business or Economics Electives

- D. Electives

ADDED REQUIREMENTS FOR A BACHELOR OF SCIENCE DEGREE IN ECONOMICS

- A. General Foundation Courses 38 credit hours
 Six hours of interdisciplinary studies
 Six hours of humanities
 Six hours of fine and applied arts
 Six hours of social sciences
 Twelve hours of mathematics
 MS 110 Elementary Analysis
 MS 111 Analysis and Probability
 MS 212 Statistics
 MS 213 Linear Systems
 Two hours (one year) of physical education (except when exempted)
 It is recommended that students who have writing deficiencies take either ENG 001, Writing Laboratory, or ENG 100, College Writing. Students having difficulty in oral communication should take TSP 170, Fundamentals of Oral Communication.
- B. Course Requirements in Economics and Business 33 credit hours
 Fifteen hours of core requirements:
 ECON 101 Principles of Economics I
 ECON 102 Principles of Economics II
 ECON 301 Macroeconomic Analysis
 ECON 302 Microeconomic Analysis
 BUS 101 Introductory Accounting
 Completion of at least eighteen additional hours in economics courses, excluding ECON 201.

MASTER OF BUSINESS ADMINISTRATION

A graduate program leading to the degree of master of business administration is available during the evenings.

All applicants should contact the UMPG School of Business and Economics, 96 Falmouth Street, Portland for information and applications for this program.

All applicants for the M.B.A. program must submit scores obtained on the Admission Test for Graduate Study in Business which is administered by the Educational Testing Service, Princeton, New Jersey.

Candidates for the M.B.A. degree must complete a required core of 21 hours which consists of:

- BUS 510 Operations Research
- BUS 520 Industrial Relations and Personnel Management
- BUS 530 Senior Executive Decision Making
- BUS 540 Managerial Accounting
- BUS 550 Managerial Economics
- BUS 560 Financial Management
- BUS 570 Marketing Management

Nine hours of electives are required and may be selected from the following:

- BUS 523 Collective Bargaining
- BUS 527 Human Relations in Industry
- BUS 533 Production Management
- BUS 537 Organizational Behavior in Business
- BUS 553 Business Cycles and Forecasting
- BUS 563 Investment Management
- BUS 573 Market Research and Management
- BUS 583 Business Logistics

Students who have had little or no undergraduate work in business and related subjects are required to supplement their formal degree program with additional background course work. Such students must earn or have earned the undergraduate credits, or their equivalents, stipulated: 9 semester hours in economics (at least one course beyond a full year in basic economics); 6 semester hours in accounting (at least one full year). The following credits may be either semester hours or quarter hours: 3 credits in management; 3 credits in finance; 3 credits in marketing; 3 credits in business law; 3 credits in statistics; and 3 credits in introductory calculus.



DESCRIPTIONS OF COURSES IN THE ASSOCIATE DEGREE PROGRAM

BUS 11 Principles of Accounting I

Mr. McKeil

An introduction to accounting concepts, principles and practices. Emphasis on the preparation and interpretation of statements for financial and management uses as well as the measurement of assets, liabilities, equity, revenues, and expenses. Three credit hours

BUS 12 Principles of Accounting II

Mr. McKeil

An introduction to the accounting for partnerships, corporations, and manufacturing. Emphasis on analysis and interpretation of accounting data for management planning and control. Prerequisite: BUS 11. Three credit hours

BUS 15 Intermediate Accounting I

Mr. Hall

An intensive study of accounting theory including the accounting for corporate capital, investment in securities, cash, receivables, and liabilities. Prerequisites: BUS 11 and BUS 12. Three credit hours

BUS 16 Intermediate Accounting II

Mr. Hall

The study of accounting theory including inventories, property, plant and equipment, intangible assets, and special problems of income determination. Corporate financial statements, ratio analysis, and analysis of variations in income and costs are studied. Prerequisites: BUS 11, BUS 12, and BUS 15. Three credit hours

BUS 20 Business Finance I

Mr. Andrews

A study of the promotion, organization, and financing of the single proprietorship, partnership, and corporation. Such topics as funds flows, cash budgeting, and capital budgeting are examined. Prerequisites: ECON 11, ECON 12, and BUS 11. Three credit hours

BUS 21 Business Finance II

Mr. Andrews

An in-depth examination of selected topics in finance with advanced cases and problems used to relate these topics to the theories and principles developed. Cost of capital and other tools are developed for use in the decision-making process. Prerequisite: BUS 20. Three credit hours

BUS 30 Investment Management

Mr. Andrews

Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisites: ECON 11, ECON 12, BUS 11, and BUS 12. Three credit hours

BUS 40 Elements of Industrial Management

Mr. Annett, Mr. Taylor

A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ECON 11 and ECON 12. Three credit hours

BUS 43 Problems of Small Business

Mr. Annett

Aspects of management that are uniquely important to small firms, in the interest of developing an understanding of the economic and social environment in which the small concern functions. Practice in decision-making on the same types of problems that small businessmen face. Problems relevant to small business operations in Maine will be stressed. Prerequisite: BUS 11. Three credit hours

BUS 60 Marketing

Mr. Andrews

Problems of distribution for representative industrial and consumer goods, including merchandising policies, selection of distribution channels, price policies, and advertising and sales promotion methods. Prerequisites: ECON 11, ECON 12, and BUS 11. Three credit hours

BUS 64 Retailing

Staff

Study of the retail distribution structure and of the problems involved in successful store operation under current conditions. Prerequisite: BUS 60. Three credit hours

BUS 67 Sales Management

Mr. Taylor

Analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Three credit hours

BUS 80 Business Law

Mr. Emanuelson

This course, an introduction to the study of business law, includes origins of the law, its nature and classification; contract law and the laws of agency and personal property are comprehensively dealt with. Three credit hours

BUS 90 Business Data Processing

Mr. Siedlik

The application of electronic data processing equipment to accounting systems. Basic principles of operation and programming. Selected case problems. Prerequisites: BUS 11 and BUS 12. Three credit hours

BUS 93 Human Relations in Business

Mr. Annett

Introduction to the behavioral sciences, emphasizing typical behavioral problems faced in business by employees and management. The laboratory method of teaching, involving the student in role playing and analyzing collected data, is supplemented with lectures, case analysis, and outside reading. Three credit hours

BUS 95 Business and Society I

Mr. Taylor

An examination of the significant relationships between business and the social, political, and economic environment of our society for the purpose of evaluation of goals, values, ethics, and practices in the business world. Historical development of business and capitalism is covered. The industrial and commercial structures and functions in our society are described. Social relationships internal to the firms are explored. Special problems concerning mass production, automation, and employment are discussed along with other current and future issues and problems related to business and our society. Three credit hours

BUS 96 Business and Society II

Mr. Taylor

A continuation of BUS 95.

Three credit hours

ECON 11 Principles of Economics I

Mr. McKeil

A theoretical analysis of the basic characteristics, institutions, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth.

Three credit hours

ECON 12 Principles of Economics II

Mr. McKeil

A theoretical analysis of the firm, and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing.

Three credit hours

ENG 11 Composition

Staff

Intensive practice in expository writing, with reading of illustrative material.

Three credit hours

ENG 12 Modern Literature

Staff

Readings in significant literature of the last half century.

Three credit hours

ENG 19 Expository Writing

Staff

Training in clear expository writing of formal reports, business communications, and related material.

Three credit hours

MS 10 Mathematical Analysis for Business Decisions I

Staff

The traditional topics of elementary mathematics are included to acquaint the student with their uses as tools which can be applied to solving problems of a business-making nature. Topics covered include integers, real numbers, number systems, set theory, and complex numbers.

Three credit hours

MS 11 Mathematical Analysis for Business Decisions II

Staff

A continuation of MS 10.

Three credit hours

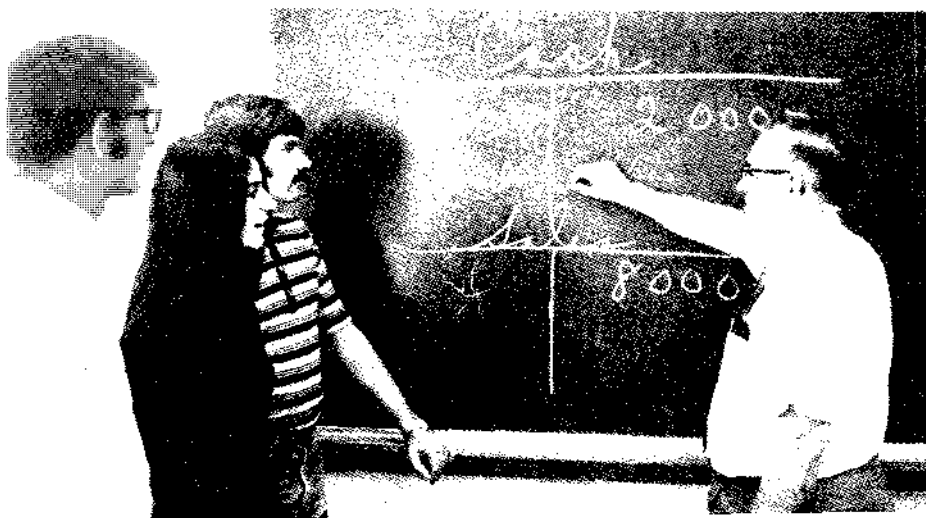
MS 110° Elementary Mathematical Analysis**MS 111° Analysis and Probability****MS 212° Statistics****MS 213° Linear Systems****TSP 11 Oral Communication in Business**

Staff

A course in oral composition for business students in the two-year program. Deals with practice in verbalization and in the development of clarity in vocal expression. Also includes practice in the analysis of current issues leading to the organization and delivery of short talks, reports, etc.

Three credit hours

*See department of mathematics course offerings



UNDERGRADUATE COURSES IN THE FOUR-YEAR PROGRAM IN BUSINESS ADMINISTRATION

BUS 101 Introductory Accounting

Mr. Findlay, Mr. Hall

An introduction to accounting principles and concepts. Emphasis is placed on the preparation of financial statements and the accounting for assets, liabilities, equities, revenue and expenses.

Three credit hours

BUS 102 Financial and Management Accounting

Mr. Jagolinzer

(This course is designed for non-accounting majors.) It deals with the uses of accounting data for financial and management control. Emphasis is placed on the basic concepts associated with the corporate form of organization, manufacturing operations, cost determinations and controls, analysis of financial statements, sources and uses of working capital, consolidated financial statements, and income tax considerations. Prerequisite: BUS 101.

Three credit hours

BUS 301 Intermediate Accounting I

Mr. Findlay

An intensive study of accounting theory including the accounting for corporate capital, investment in securities, cash, receivables, and liabilities. Prerequisite: BUS 101.

Three credit hours

BUS 302 Intermediate Accounting II

Mr. Findlay, Mr. Hall

The study of accounting theory including inventories, property, plant and equipment, intangible assets, and special problems of income determination. Corporative financial statements, ratio analysis, and analysis of variations in income and costs are studied. Prerequisite: BUS 101.

Three credit hours

BUS 305 Cost Accounting

Mr. Jagolinzer

The principles and methods of job order costing and process costing, including analysis and allocation of factory overhead. A study of joint and by-product costs. Methods and management use of standard costs. Management decision-making through the use of direct costing and cost volume-profit analysis. Prerequisite: BUS 101.

Three credit hours

BUS 306 Advanced Cost Accounting

Mr. Jagolinzer

Devoted primarily to a detailed study of management uses of cost data. In addition, budgets, forecasting, and capital budgeting are discussed. Prerequisites: BUS 101 and BUS 102.

Three credit hours

BUS 310 Advanced Accounting I

Mr. Hall

A study of accounting principles and theory related to sources and application of funds; partnerships; consignment and installment sales; and receiverships. Prerequisites: BUS 301 and BUS 302.

Three credit hours

BUS 311 Advanced Accounting II

Mr. Hall

A study of accounting principles and theory related to home office and branch accounting; consolidations, mergers, parent and subsidiary accounting; governmental and institutional accounting; estates and trusts. BUS 301 and BUS 302.

Three credit hours

BUS 313 Federal Tax Reporting

Mr. Jagolinzer

Federal tax laws as they affect individuals, partnerships, corporations, and related topics. Prerequisite: BUS 101.

Three credit hours

BUS 320 Business Finance

Mr. Fitzpatrick

This course deals with the promotion, organization, and financing of the single proprietorship, partnership, and corporation. It also utilizes advanced cases and problems related to the above topics. Prerequisites: ECON 101 and ECON 102; BUS 101 and BUS 102 or BUS 301.

Three credit hours

BUS 330 Investment Management

Mr. Fitzpatrick

Provides the planning and management of investment programs for all types of investors. Evaluates the various media of investments in terms of their risks and profits. The functions of the stock market and its behavior are examined. Prerequisite: BUS 320.

Three credit hours

BUS 340 Elements of Industrial Management

Mr. Taylor

A comprehensive survey of all phases of the management of industrial and business enterprises. The influence of industrial relations is interspersed with the treatment of management's technical problems. Prerequisites: ECON 101 and ECON 102.

Three credit hours

BUS 346 Personnel Management

Mr. Chandler

The selection, training, and management of personnel in private and public business. Designed for the student interested in administration, office management, or personnel work in education, business, engineering, public service, and other fields. Prerequisites: ECON 101 and ECON 102.

Three credit hours

BUS 348 Industrial Relations

Mr. Chandler

A study of industrial relations patterns in the U.S. Major focus is on the relationship between management and organized labor, and the bargaining, administration, and interpretation of contracts. The problem of dispute settlement and a comparison of methods used in the U.S. and abroad. Attention is also given to industrial relations in unorganized firms and in the Civil Service.

Three credit hours

BUS 352 Dynamics of Organization and Behavior

Staff

An analysis of business organization and the problems of administrators in an interpersonal setting. Primary emphasis is on the findings of behavioral sciences which are particularly relevant to human relations and adjustment problems in modern organizations. Motivation, leadership, and organization theory as related to work and productivity, and associated topics are also covered. Prerequisite: BUS 340.

Three credit hours

BUS 360 Marketing

Mr. Manck, Mr. Waters

Problems of distribution for representative industrial and consumer goods, including merchandising policies, selection of distribution channels, price policies, and advertising and sales promotion methods. Prerequisites: ECON 101 and ECON 102.

Three credit hours

BUS 363 Advertising

Mr. Manck

The place of advertising in the marketing program. Business cases are analyzed to determine those situations in which advertising may be profitably employed to stimulate primary and selective demand for industrial and consumer goods and services. Prerequisite: BUS 360.

Three credit hours

BUS 368 Sales Management

Mr. Morin

An analysis of the problems facing marketing management in formulating sales policy and in managing the sales organization. Prerequisite: BUS 360.

Three credit hours

BUS 370 Managerial Marketing

Mr. Manck

A managerial approach emphasizing the integration of marketing, as an organic activity, with other activities of the business firm. Study is directed toward recognition and appreciation of the problems encountered by top marketing executives in modern business, with a consideration of the policies and procedures that may be followed in their solution. By case analysis and consideration of current marketing literature, students are provided opportunities for development of abilities in solving marketing management problems. Prerequisites: BUS 360 and MS 212.

Three credit hours

BUS 373 Marketing Research

Mr. Manck

A consideration of marketing research as a tool in the solution of problems in production and distribution. Emphasis on problem formulation, exploratory research, research design basic observational and sampling requirements, data analysis, interpretation, and sampling. Prerequisites: BUS 360 and MS 212

Three credit hours

BUS 380 Business Law

Mr. Emanuelson

This course, an introduction to the study of business law, includes origins of the law, its nature and classification; contract law and the laws of agency and personal property are comprehensively dealt with.

Three credit hours

BUS 385 Business Economics

Mr. Durgin

Application of economic analysis to concrete business situations. Emphasis on developing the student's ability to apply economic analysis to the solution of problems faced by business management. Prerequisite: BUS 320.

Three credit hours

BUS 390 Business Data Processing I

Mr. Siedlik

The application of electronic data processing equipment to accounting systems. Basic principles of operation and programming. Selected case problems. Prerequisite: BUS 101.

Three credit hours

BUS 391 Business Data Processing II

Mr. Siedlik

Advanced Computer Programming. Implementation of the management by exception concept in data processing. Programming of elementary mathematical models for business problems. Prerequisite: BUS 390.

Three credit hours

BUS 410 Auditing

Mr. Findlay

A study of auditing philosophy and theory relative to the examination of financial and other data. Internal control; auditing standards and procedures; and the legal and ethical responsibilities of the independent auditor. Prerequisites: BUS 301 and BUS 302.

Three credit hours

BUS 421 Financial Research Seminar I

Mr. Fitzpatrick

Techniques of research and analysis are introduced and applied to topical areas in finance, such as money, credit, banking and debt instruments. Prerequisites: BUS 330 and permission.

Three credit hours

BUS 422 Financial Research Seminar II

Mr. Fitzpatrick

Techniques of research and analysis are continued as an extension of BUS 421. This involves in-depth studies through the use of directed readings and discussion of the major topical areas in investments. Prerequisites: BUS 421 and permission.

Three credit hours

BUS 450 Business Management and Policy

Mr. Waters

Administrative practice at the higher levels of business management through case analysis and discussion. The course attempts to coordinate the background of business majors in the formulation and administration of sound business policy. Prerequisites: BUS 101 and BUS 102 or BUS 301, BUS 340, and BUS 360.

Three credit hours

BUS 490 Independent Readings and Research in Business

Staff

Selected topics in the various areas of accounting, finance, management, and marketing may be studied and researched on an independent basis. (Not for graduate credit.) Prerequisites: Senior standing and permission of the instructor.

Three credit hours

UNDERGRADUATE COURSES IN THE FOUR-YEAR PROGRAM IN ECONOMICS

ECON 101 Principles of Economics I

Staff

A theoretical analysis of the basic characteristics, institutions, and operational activities of a modern capitalistic economy which is involved in the transformation of scarce economic resources into the goods and services demanded by consumers. Topics discussed include inflation, unemployment, government monetary and fiscal policy to achieve full employment, and economic growth.

Three credit hours

ECON 102 Principles of Economics II

Mr. McKeil

A theoretical analysis of the firm and its role in the transformation of scarce economic resources into the goods and services demanded by consumers. Special attention is focused on the development of a market mechanism for the exchange of goods, services, and resources within a capitalistic economy. Topics discussed include consumer preferences and consumer behavior, production theory and production costs, the monopoly firm, and resource pricing.

Three credit hours

ECON 201 Current Economic Problems

Mr. Witherill

An in-depth study and application of economic principles to some of the outstanding economic issues of society. These include: the economics of pollution control; problems of the city — including transportation, metropolitan organization, and finance; and problems of labor — such as automation and unemployment. (Not for major credit in either Economics or Business Administration.) Prerequisite: ECON 101.

Three credit hours

ECON 301 Macroeconomic Analysis

Mr. Bay

A theoretical analysis of the basic forces that cause inflation, growth, and fluctuations in economic activity. The effects on employment and other factors are thoroughly treated. Stabilization policies are examined and evaluated. Prerequisites: ECON 101 and ECON 102.

Three credit hours

ECON 302 Microeconomic Analysis

Mr. Bien

Price, income, and employment theory as tools in the study of economics. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 310 Money and Banking

Mr. Bay

An extensive examination of the operation and performance of the American banking and financial system. Includes a study of monetary theory and policy. Debt management and present international monetary problems are discussed briefly. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 320 Labor Economics

Mr. Chandler

A discussion of labor in an industrial society serves as background for an examination of the origins and structure of the labor movement, the theories of the labor movement, the theories of wages and labor's income, the process of collective bargaining in industrial relations, and the development of labor legislation and social security laws. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 330 Social Control of Business

Mr. McMahon

Public policy toward business; government powers and private rights; government aids; regulation of competition and monopoly; public enterprise. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 340 History of Economic Thought

Mr. Durgin

A survey of the development of basic economic principles and theories from pre-industrial times to the present. Major emphasis is on the Classical School (Smith, Ricardo and Malthus), and its critics, the development of the Austrian School, the synthesis of Neo-Classicism, and the emergence of Macro-economics. Prerequisite: ECON 101 and ECON 102. Three credit hours

ECON 350 Comparative Economic Systems

Mr. Durgin

The structures and operating principles of the major contemporary economic systems are examined and compared. Prerequisite: ECON 101. Three credit hours

ECON 351 Economic Systems of the Soviet Union

Mr. Durgin

A study of the development, institution, and structure of the Soviet economy. Emphasis on current theories and problems of central planning. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 360 Economic Development

Mr. Witherill

The theories and practices of interregional and international economic development. Special attention is given to development problems of emerging nations. Prerequisite: ECON 101. Three credit hours

ECON 370 International Trade

Mr. Bien

The principles and practices of international trade and finance are thoroughly treated. Special emphasis is given to current trends in the international economy and to United States commercial policy. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 380 Public Finance and Fiscal Policy

Mr. McMahon

Public expenditure theory; principles of taxation; the federal budget and alternative budget policies; federal tax policy; fiscal policy for stabilization; federal debt. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 381 State and Local Government Finance

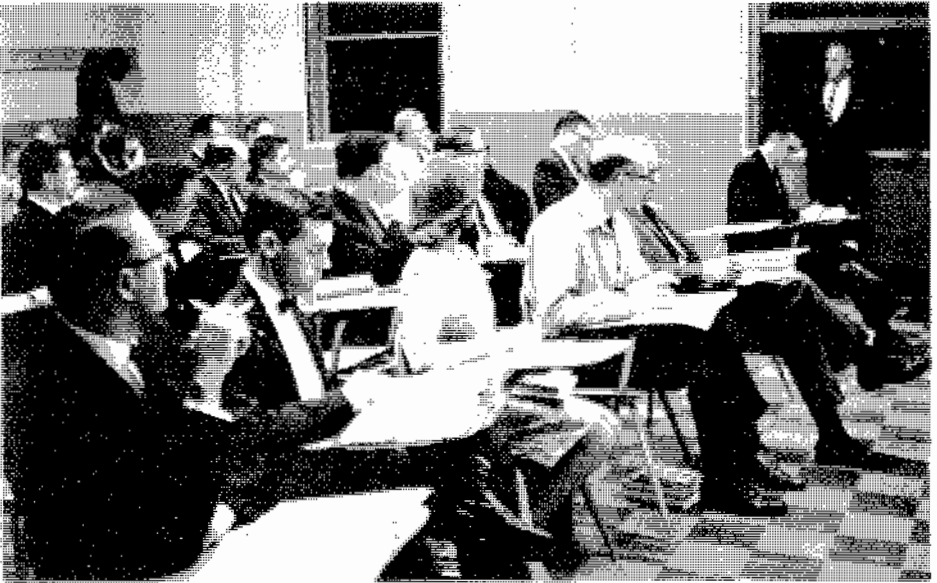
Mr. McMahon

Development of the federal system; fiscal performance; intergovernmental fiscal relations; state and local revenue systems; budgetary practices; state and local debt. Prerequisites: ECON 101 and ECON 102. Three credit hours

ECON 490 Independent Readings and Research in Economics

Staff

Selected topics in the various areas of economics may be studied and researched on an independent basis. (Not for graduate credit.) Prerequisites: Senior standing and permission of the instructor. Three credit hours



MASTER OF BUSINESS ADMINISTRATION GRADUATE COURSES

BUS 510 Operations Research

Mr. Siedlik

This course deals with the formulation and solution of optimization models for business decision making and economic resource allocation. Major emphasis on mathematical programming models, including linear programming fundamentals, simplex methods, duality theory, sensitivity analysis and parametric programming in postoptimality analysis, goal programming, linear programming under uncertainty, dynamic programming, allocation problems (assignment, transportation models, transportation simplex methods), network flows, integer programming, nonlinear programming, polygonal approximations, and gradient methods. Emphasis also on applications in accounting, finance, economics, marketing, and production management. Prerequisites: one course in statistics and one in calculus.

Three credit hours

BUS 520 Industrial Relations and Personnel Management

Mr. Chandler

A comprehensive investigation of the changing pattern of industrial relations in the United States. Major emphasis is on the human, social, and economic aspects of employer-employee relationships in both union and non-union settings. Provides an understanding of and appreciation for the crucial importance of the development of sound and flexible personnel policies by top management. Among the areas considered are: the changing nature of the labor force; wages, salaries, and fringe benefits; hours of work; and the impact of technological change on the work force. Prerequisite: one course in management or industrial relations and permission.

Three credit hours

BUS 523 Collective Bargaining

Mr. Chandler

Discusses the major issues and problems in the collective bargaining process. Provides the business manager with the knowledge of sound collective bargaining attitudes and techniques necessary to achieve a responsible and mature attitude in his relationship with employee representatives. To this end, major focus is on the development of the union movement in this country, the changing nature of public policy toward collective bargaining, and the public responsibility of both unions and management. In addition, attention is given to the specific tools of collective bargaining, including strikes, lockouts, grievance procedures, arbitration, mediation, and bargaining strategies and techniques. Prerequisite: BUS 520.

Three credit hours

BUS 527 Human Relations in Industry

Mr. Waters

This course is designed to acquaint the student with the complex system of interdependent human, social, technical, and organizational forces which underlie the feelings, action, and relationships of people in organizations. Such subjects as leadership theory, organizational theory, individual and group behavior, and communication theory are presented. Prerequisite: Six hours in business subjects and permission. Three credit hours

BUS 530 Senior Executive Decision Making

Mr. Plowman

Administrative practice at the higher levels of business management, with major emphasis on long range executive planning of profit, sales, production, social goals and objectives, and of strategies and policies to achieve these objectives. Coordinates all executive activities, viewed as tools for use in developing administrative competence, in the formulation of business policies at the decision-making level. Prerequisite: BUS 510 or equivalent. Three credit hours

BUS 533 Production Management

Staff

Decision models will be introduced with emphasis on statistical inference and decision theory, queuing theory, inventory theory, simulation, game theory, and Markovian decision models. Application areas include Product R & D investment models, capacity investment decision models, facility design models, line-balancing models, system maintenance models, and production system operating models. Prerequisite: BUS 510 or permission of instructor. Three credit hours

BUS 537 Organizational Behavior in Business

Staff

Emphasis on the importance of the influence process, motivational settings, and the structural backgrounds of organizational status and social relations. Analysis through case discussion and readings will develop a conceptual framework for improving individual decision-making ability with respect to individual, group, and intergroup problems. Prerequisites: One course in management and permission. Three credit hours

BUS 540 Managerial Accounting

Mr. Findlay

Development, analysis, and interpretation of accounting data and financial statements for managerial control, coordination, and decision-making; emphasis upon accounting as a tool of management. Topics are developed by utilization of case studies, problems, and reference material. Prerequisite: Six semester hours in accounting. Three credit hours

BUS 550 Managerial Economics

Mr. Durgin

Application of economic analysis to the management of business enterprises. Designed to develop the student's ability to understand and use some of the important economic concepts, tools, and methods, relevant to operations and decisions within a business firm. Particular attention is given to the analysis of market demands, price policy, cost structures and production functions, capital budgeting, planning, and financing. Prerequisite: Nine semester hours in economics or permission. Three credit hours

BUS 553 Business Cycles and Forecasting

Mr. Bay

A theoretical analysis of the basic forces that determine fluctuations in the level of income. Stabilization policies are examined and evaluated. Basic forecasting techniques for the over-all economy and for certain major sectors are also explored. Prerequisites: six hours in economics and a course in introductory calculus. Three credit hours

BUS 560 Financial Management

Mr. Fitzpatrick

A consideration of management decisions in the administration of corporate funds. Specific areas covered include capital budgeting, inventory control, working capital management, and the cost of capital. The side effects of taxation, depreciation methods, and earnings retention policies are noted. Current capital structure patterns are analyzed and evaluated. Prerequisite: One course in finance and permission. Three credit hours

BUS 563 Investment Management

Mr. Fitzpatrick

Emphasizes analysis and valuation procedures required to determine the investment quality of specific securities. Sets forth criteria for the formulation of a sound investment policy and the selection of investment media to implement it. Develops the techniques of continuing portfolio management and the task of periodic reappraisal. Prerequisites: One course in finance and permission. Three credit hours

BUS 570 Marketing Management**Mr. Waters**

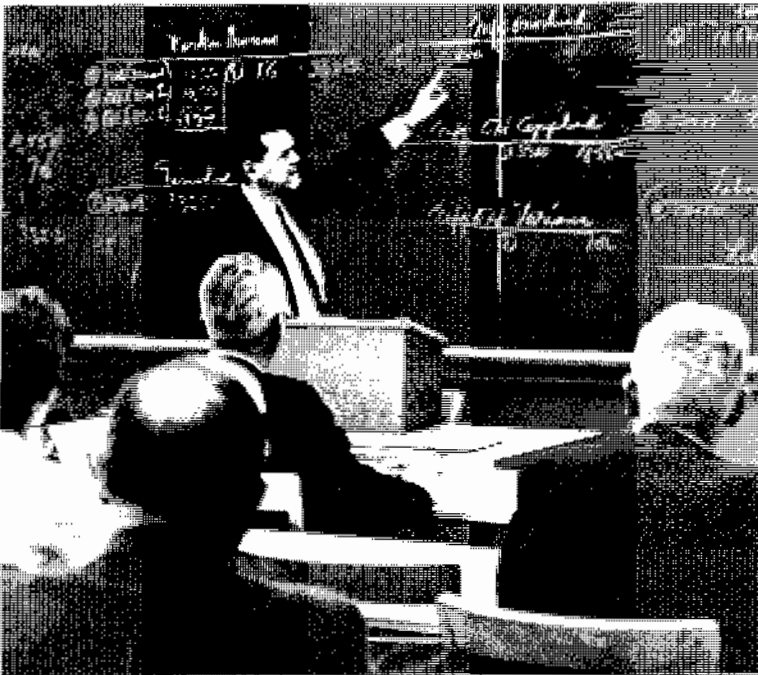
This course is organized to give the graduate student an opportunity to develop and test, through the case method, a number of marketing policies and strategies. Furthermore, the student will read and discuss the current literature in the field of marketing reviewing current marketing practices and predictions for the balance of the century. Prerequisite: one course in marketing.

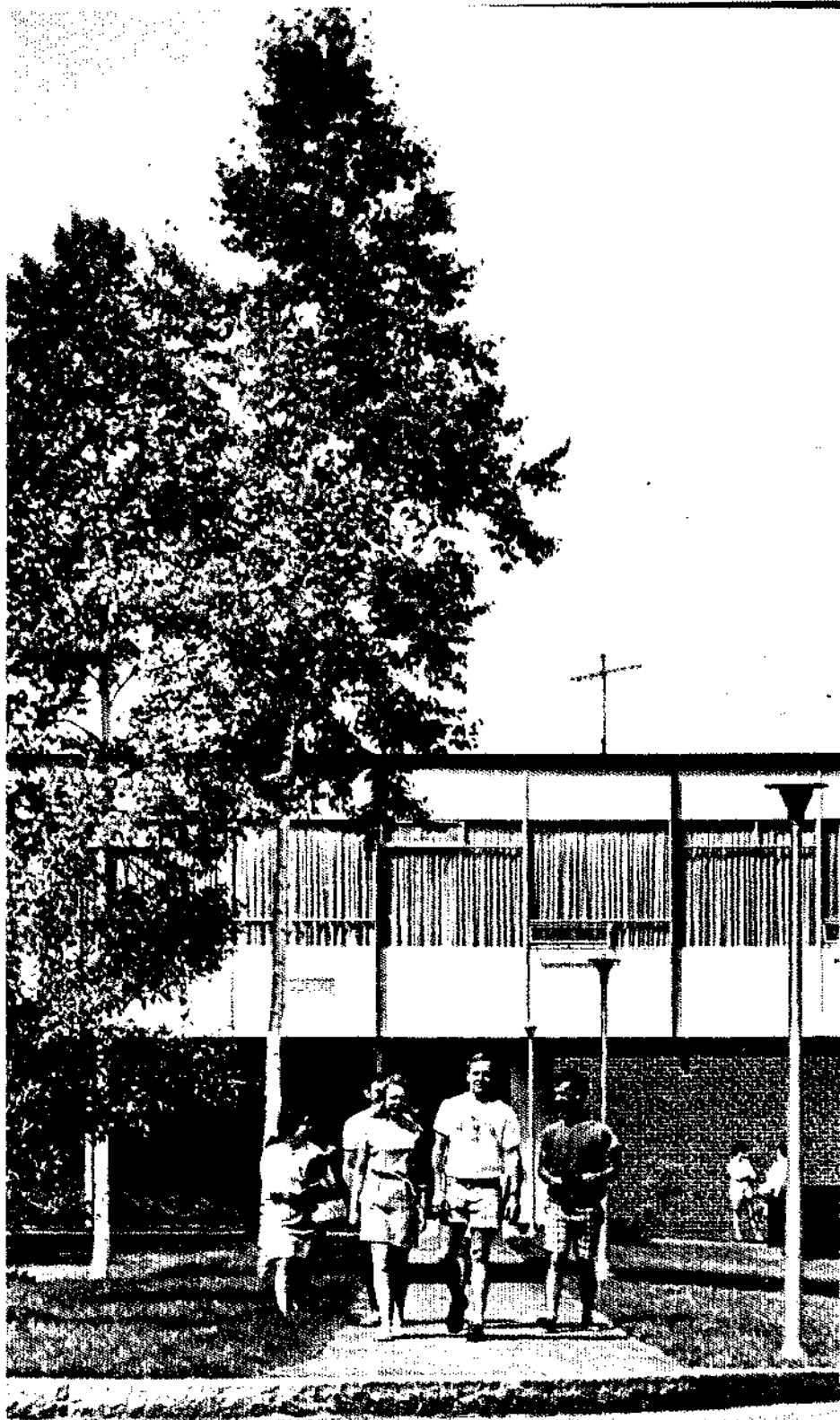
Three credit hours**BUS 573 Market Research and Analysis****Mr. Manck**

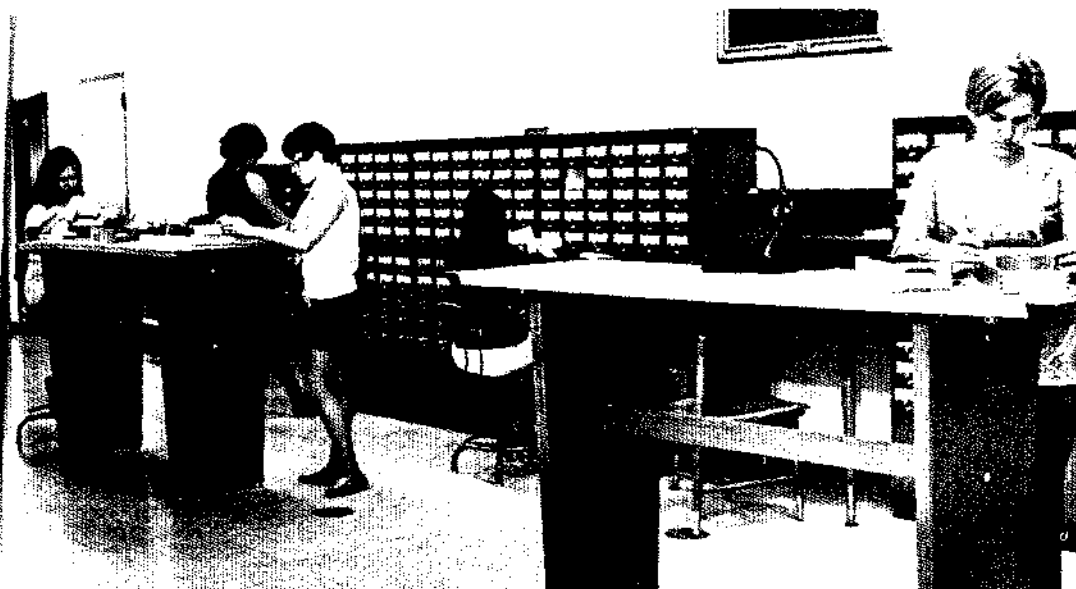
A study of the procedure and applications of market research. Such areas as the organization and operation of a research department, survey methods, experimentation, measurement of potential demand, and the analysis of distribution costs are considered. Emphasis on developing the student's ability to apply these and other techniques toward the solution of marketing problems. Prerequisites: BUS 570 and one course in statistics.

Three credit hours**BUS 583 Business Logistics****Mr. Plowman**

Explores in depth the need for and means of centralization of decision-making to accomplish effective senior executive control of the chain of logistic activities from point of completion of manufacturing or other form utility creating process to delivery at the point of use or consumption. Interdisciplinary relationships with cybernetics, econometrics, operations research, computer-facilitated information analysis, purchasing (materials management) and the customer relations aspect of marketing (physical distribution) reviewed in their roles as logistics sub-systems or building blocks. Prerequisite. BUS 510 or permission of the instructor.

Three credit hours





School of Education

WILLIAM B. WISE, Acting Dean

Elementary Education Department: Professors Hempel, Kerr, Neuberger; Associate Professors M. Costello (Chairman), O'Donnell, Peabody; Assistant Professor Fickett; Instructors Allen, Small.

Secondary Education Department: Professors Cobb (Chairman), Rhoades; Associate Professors Hackett, Soule; Assistant Professors Littlefield, Peterson, Walker; Instructor Bemis.

Foundations Department: Professor Southworth; Associate Professors Bowman, Milbury, C. Smith, J. Whitten (Chairman); Assistant Professors Bergeson, Chronister, Colucci, LaPointe, D. Moore; Instructor A. Smith.

Industrial Arts Department: Professors Berry, Mitchell (Chairman); Associate Professors Faulkner, Mertens, Slocum; Assistant Professors Carter, Morrill, Warren; Instructor W. Moore.

Physical Education Department: Professors R. Costello, Sullivan (Chairman); Associate Professors Goodwin, Hodgdon, Sturgeon; Assistant Professors Bouchard, Folsom, Martin, Willard; Instructors Breton, Caliendo, Thomas, Raybould.

**BACCALAUREATE
PROGRAMS IN
TEACHER
EDUCATION**



The School of Education concerns itself with direct preparation of school teachers and with providing professional courses for students in any college of the University who wish to meet teacher certification requirements.

All curricula and programs require four years for completion. Upon graduation, the student receives the Bachelor of Science degree and the proper teaching certificate. The University of Maine at Portland-Gorham prepares teachers in the following course programs:

Kindergarten-Primary

The kindergarten-Primary curriculum qualifies students to teach in kindergarten through grade eight, with emphasis on kindergarten through grade three. A detailed description of this program is provided on the following pages of this section of the catalog.

Elementary

The Elementary curriculum qualifies graduates to teach grades kindergarten through eight with emphasis on grades four through six. A detailed description of this program is provided on the following pages of this section of the catalog.

Secondary (7-12)

The Secondary curriculum qualifies graduates to teach grades seven through twelve in the fields of biology, English, French, general science, history, mathematics, theatre and speech, and social studies. Specific pre-professional courses which students in the Secondary Curriculum must include in their 30-hour General Education core, together with a listing of required and limited-elective courses in the Professional Education Curriculum for Secondary Majors, are provided on the following pages of this section of the

catalog. The academic major, minor, and area-concentration programs are provided by the appropriate departments of the College of Liberal Arts, and descriptions of those programs will be found under the relevant departmental headings of that portion of the catalog devoted to the College of Liberal Arts.

Secondary Education students with majors or minors in English, History, or the Social Sciences area must achieve at least six credits with grades of B or better in such majors or minors. No grades of D will count toward fulfillment of the major or minor requirements. No required course may be repeated more than once.

Art

Graduates of the program are qualified to teach or supervise art in all grades of the public schools. All information about the Art Education curriculum is provided under the Art Department heading in the section of the catalog dealing with the College of Liberal Arts.

Music

The aim of the Music Education Program is to develop individual potential in the areas of musicianship and scholarship as well as to present the most recent trends in the field of music education. Upon satisfactory completion of the four-year program graduates receive a Bachelor of Science degree with a major in Music Education and are certified by the State of Maine to teach music in grades one through twelve. The program qualifies graduates to teach or supervise all phases of vocal and instrumental music. All information about the Music Education curriculum is provided under the Music Department heading in the section of the catalog dealing with the College of Liberal Arts.

Industrial Arts

The Industrial Arts curriculum prepares teachers for the teaching of industrial arts in elementary and secondary schools. It is the only college program in the State of Maine in this specialized field. A detailed description of this program is provided on the following pages of this section of the catalog.

Vocational Trade and Industrial Education

This is a part-time evening and summer program leading to a B.S. degree with a major in Trade and Industrial Education or in Trade and Industry. A detailed description of this program is provided on the following pages of this section of the catalog.

COURSES IN PHYSICAL EDUCATION

The Physical Education Department provides the required program in physical education for all undergraduates, aged 19 or younger, at UMPG. It also offers an extensive program of intramural sports, together with a number of professional courses in physical education. Although a major in physical education is not currently available at UMPG, students who complete the listed program of professional courses will be adequately prepared to enter the coaching field upon graduation. Descriptions of the various courses offered by the Physical Education Department are printed in the final subsection of the portion of the catalog dealing with the School of Education.



PROGRAMS FOR ELEMENTARY MAJORS AND KINDERGARTEN-PRIMARY MAJORS

Both Elementary Majors and Kindergarten-Primary Majors are required to complete a basic core of courses which meet the General Education Requirements of UMPG and which are especially adapted to meet the general educational needs of teachers of children at the elementary or kindergarten-primary levels.

Core Requirements for Elementary and Kindergarten-Primary Majors

Basic Core:		Credit hours
Humanities	ENG 120 Introduction to Literature, or ENG 150 Topics in Literature, plus one course from foreign language, philosophy, or English.	6
Fine Arts	Any electives from Art, Music, or Theatre-Speech.	6
Science	PSCI 110 Elements of Physical Science, or equivalent.	3
Mathematics	MS 100 unless passed through proficiency test. Mathematics elective will be substituted if MS 100 is passed through proficiency.	3
Social Sciences	Electives from psychology, sociology, anthropology, political science, history, geography, economics.	6
Interdisciplinary Courses		6
		<hr/> 30
Additions	Physical Education 100 (2 semesters)	2
to core:	MS 101 Elements of Mathematics II	3
	BIO 101 Biological Principles	3
	BIO 102 Biological Experiences	1
		<hr/> 9

Professional Education for Kindergarten-Primary Majors

Each student in Kindergarten-Primary Education on the Gorham campus is required to complete a minimum of 36 credit hours in professional education. Portland campus students must complete a minimum of 33 credit hours in professional education with three additional elective hours. The requirements are as follows:

	Credit hours	
	Gorham	Portland
EDU 100 American School		
or		
EDU 103 Philosophy of Education	3	3
EDU 300 Primary Curriculum or EDU 328 (below)	3	3
EDU 302 Kindergarten-Primary Reading	3	3
EDU 304 Teaching Primary School Mathematics	3	3
EDU 307 Teaching of Primary Science and Health	3	3
EDU 319 Measurement and Evaluation	3	3
EDU 324 Student Teaching	12	6
EDU 328 The Teaching Process	—	3
EDU 333 Human Growth and Development	3	3
or		
EDU 334 Growth Learning Process	—	3
EDU 336 Children's Literature	3	3
	36	33
(One elective in professional education)		3
Total	36	36

The appropriate education courses must be completed before student teaching.

Additional Requirements for Kindergarten-Primary Majors

In both general and professional education there are additional or special requirements which will be indicated in each curriculum as it is set forth. The General Education Requirements and Physical Education Requirements for all undergraduates seeking a baccalaureate degree at UMPG are set forth on the inside front cover of this catalog. These requirements are covered by the Core Requirements for Elementary and Kindergarten-Primary Majors listed in the tabulation above.

All students in the Kindergarten-Primary Curriculum are considered Education Majors, even though they may earn an added academic major. In addition to the general and professional requirements, they are required to complete either two academic minors of 18 credit hours each or one academic major of 30 credit hours.

The academic major and minor programs for students of Kindergarten-Primary Education are described under the pertinent Department Headings in the section of the catalog devoted to the College of Liberal Arts. Appropriate courses selected to meet the requirements of the UMPG General Education Requirements, described on the inside front cover of the catalog, may be counted toward either the two academic minors or the academic major selected by a student in the Kindergarten-Primary Curriculum.

A student in the Kindergarten-Primary Program may obtain an academic major in English, History, Mathematics, the Social Science Area program of the Geography-Anthropology Department, or the Science Area program (including both physical and biological sciences) described in the section of the catalog dealing with Physical Sciences and Engineering.

A student in the Kindergarten-Primary Program may obtain academic minors in English, History, Mathematics, Geography, the Social Science Area program of the Geography-Anthropology Department, and the Science Area program (including both physical and biological sciences) of the Physical Science and Engineering Department.





Professional Education for Elementary Majors

Each student in Elementary Education on the Gorham campus is required to complete a minimum of 36 credit hours in professional education. Portland campus students must complete a minimum of 33 credit hours in professional education with three additional elective hours. The requirements are as follows:

	Credit hours	
	Gorham	Portland
EDU 100 American School		
or		
EDU 103 Philosophy of Education	3	3
EDU 300 Primary Curriculum or EDU 328 (below)	3	3
EDU 302 Kindergarten-Primary Reading	3	3
EDU 304 Teaching Primary School Mathematics	3	3
EDU 307 Teaching of Primary Science and Health	3	3
EDU 319 Measurement and Evaluation	3	3
EDU 324 Student Teaching	12	6
EDU 328 The Teaching Process	—	3
EDU 333 Human Growth and Development	3	3
or		
EDU 334 Growth Learning Process	—	3
EDU 336 Children's Literature	3	3
	36	33
(One elective in professional education)	3	3
Total	36	36

The appropriate education courses must be completed before student teaching.

Additional Requirements for Elementary Majors

In both general and professional education there are additional or special requirements which will be indicated in each curriculum as it is set forth. The General Education Requirements and Physical Education Requirements for all undergraduates seeking a baccalaureate degree at UMPG are set forth on the inside front cover of this catalog. These requirements are covered by the Core Requirements for Elementary and Kindergarten-Primary Majors listed above.

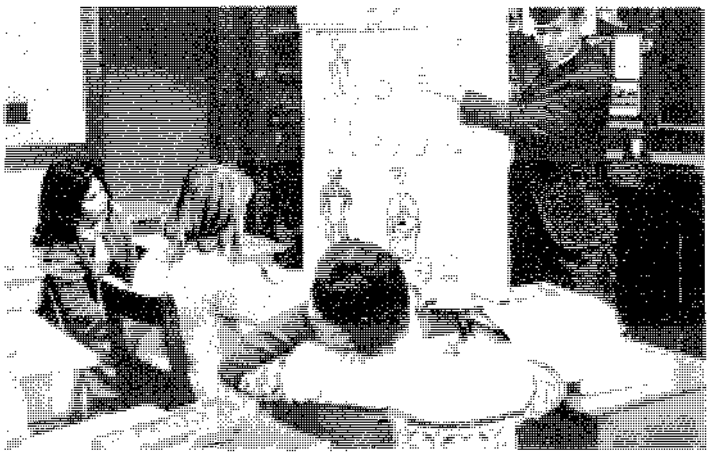
All students in the Elementary Curriculum are considered Education Majors, even though they may earn an added academic major. In addition to the general and professional requirements, they are required to complete either two academic minors of 18 credit hours each or one academic major of 30 credit hours.

The academic major and minor programs for students of Elementary Education are described under the pertinent Department Headings in the section of the catalog devoted to the College of Liberal Arts. Appropriate courses selected to meet the requirements of the UMPG General Education Requirements, described on the inside front cover of the catalog, may be counted toward either the two academic minors or the academic major selected by a student in the Elementary Curriculum.

A student in the Elementary Curriculum may obtain an academic major in English, History, Mathematics, the Social Science Area program of the Geography-Anthropology Department, or the Science Area program (including both physical and biological sciences) described in the section of the catalog dealing with Physical Sciences and Engineering.

A student in the Elementary Curriculum may obtain academic minors in English, History, Mathematics, Geography, the Social Science Area program of the Geography-Anthropology Department, and the Science Area program (including both physical and biological sciences) of the Physical Science and Engineering Department.





PROGRAMS IN SECONDARY EDUCATION

The secondary curriculum qualifies graduates to teach grades seven through twelve in the fields of biology, English, French, general science, history, mathematics, theatre and speech, and social studies. The academic major, minor, and area-concentration programs are provided by the appropriate departments of the College of Liberal Arts, and descriptions of those programs will be found under the relevant departmental headings of that portion of the catalog devoted to the College of Liberal Arts. The Social Science Area program is described in the subsection dealing with the Geography-Anthropology Department, and the Science Area program (including both physical and biological sciences) is described in the section dealing with Physical Sciences and Engineering.

General Education Requirements for Secondary Majors

As part of the thirty-hour general education core required of all students, and described on the inside front cover of this catalog, students of Secondary Education must meet the following specific pre-professional requirements:

- A. A three-credit course in either ENG 120 Introduction to Literature or ENG 150 Topics in Literature.
- B. Three credit-hours in psychology.

Departmental courses in the student's major area may not be applied towards fulfillment of the general education core requirements.

Professional Education Curriculum for Secondary Majors

Required	1. EDU 100 American School	3 credits
	2. EDU 333 Human Growth and Development or EDU 334 Growth-Learning Process	3 credits—Gorham 3 credits—Portland
	3. Appropriate Methods Course	3 credits
	4. One quarter of Student Teaching (EDU 324)	6 credits—Portland
	5. Two quarters of Student Teaching (EDU 324)	12 credits—Gorham
Limited Electives	1. One additional quarter of Student Teaching (EDU 324) or	
	2. Related Professional Field Lab Experience	6 credits—Portland
	3. EDU 314 Secondary Curriculum	3 credits—Gorham
	4. EDU 328 The Teaching Process	3 credits—Portland

A student must receive a minimum of 18 credit hours in Professional Secondary Education, including student teaching.

COURSES IN EDUCATION

EDU 100 The American School

Staff

An introduction to public education — its history, organization, functions, and issues. Elementary and secondary curricula, including special areas, are considered as well as the social, economic, and professional aspects of teaching. School visitations may provide opportunities for self-evaluation and direction.

Three credit hours

EDU 101 The Role of Education in Social Change

Mr. Peppe

A critical examination of four basic types of social change procedures, with emphasis on the theories that support each, the possible effects of each on persons and the general social order, and the socio-psychological conditions that give rise to social change. The case-study method is used in examining the basic types; theoretical literature is used to provide a working fund of knowledge on the nature of social systems.

Three credit hours

EDU 103 Philosophy of Education

Mr. Whitten

A course designed to explore the importance of philosophy as it relates to the theory and practice of education. The role of philosophy in personal and professional life is the central theme of the course.

Three credit hours

EDU 150 Preprofessional Field Experiences

Mr. Hemple

An exploratory introduction to education through direct involvement with youth in public schools or educative agencies. At least two hours per week of field work, including seminars as necessary, in the school setting. An elective primarily for sophomores with enrollment limited according to transportation and available opportunities. Transportation not provided. (Pass-Fail only).

Two credit hours

EDU 300 Primary Curriculum: Methods and Materials

Miss Peabody

A core course which analyzes curriculum, methods, and materials from kindergarten through third grade, with special attention to language arts and social studies. Topics include programming, types of curricula, evaluation, development of units, lesson planning, grouping, sociometric procedures, reporting to parents, analysis of textbooks, and audio-visual techniques. Observation, participation, and supplementary guest speakers.

Three credit hours

EDU 301 Elementary Curriculum: Methods and Materials

Mrs. Costello

A basic course which emphasizes language arts and social studies in the intermediate grades. Includes programming, types of curricula, evaluation, development of units, lesson planning, grouping, sociometric procedures, reporting to parents, analysis of textbooks, and audio-visual techniques. Observations and resource speakers are included.

Three credit hours

EDU 302 Primary Reading

Mr. O'Donnell

This course introduces and analyzes the basic components of the developmental primary reading program. Students are encouraged to formulate instructional goals which must be considered in planning balanced reading activities. The topics include: individual differences in reading readiness; word perception and vocabulary development; reading interests; the directed reading-thinking-activity; oral reading; diversifying comprehension requirements; and diagnosis of reading competence. Special attention given to research and innovations with emphasis on the applied use of concepts, practices, and materials.

Three credit hours

EDU 303 Elementary Reading

Mr. Fickett, Mr. Small

This course will involve the relationship of reading skills to the typical learner, the materials used to teach him, the processes that are common approaches, and various kits used as vehicles. The student also will be exposed to the classroom, both as an observer and a participant in teaching a reading lesson.

Three credit hours

EDU 304 Teaching Primary School Mathematics

Staff

Techniques for teaching mathematics in primary grades. Includes preparation and laboratory use of materials, analysis of current textbooks, and exposure to experimental programs.

Three credit hours

EDU 305 Teaching Elementary School Mathematics

Mr. Allen

Developing techniques for teaching mathematics to intermediate grade pupils. Major consideration will be given to the philosophy of teaching mathematics, comparing various curricula of the subject, developing organized lessons, using techniques for evaluating the aims of the lessons, and exploring ways to enrich the mathematics curriculum.

Three credit hours

- EDU 306 Secondary Reading** Mr. Walker
This course places emphasis upon developmental, corrective, adaptive, and remedial reading. Methods of teaching reading in the secondary school and reading instruction as it applies to the content areas. Three credit hours
- EDU 307 Science and Health for the Primary Teacher** Mrs. Kerr
Problems and methods of teaching science and health. Current practices and teaching materials are emphasized and evaluated. This course gives the student an opportunity to design, prepare, teach, and evaluate his work at the K-3 level. Three credit hours
- EDU 308 Science and Health for the Elementary Teacher** Mrs. Kerr
Problems and methods of teaching science and health. Current practices and teaching materials are emphasized and evaluated. Three credit hours
- EDU 309 Selection and Utilization of Education Media** Mr. Milbury
A course designed to orient the pre-service and the in-service teacher to current trends in instructional media. Instruction will be directed to proper selection and utilization of the latest available equipment and materials. There will be provision for associated laboratory work. Three credit hours
- EDU 310 Preparation of Classroom Instructional Materials** Mr. Bergeson
A lecture-laboratory series which involves students in the creation of instructional materials. Techniques include the dry mounting of flat pictorial materials, cloth backing of pictorial materials, professional quality lettering, rudimentary photography and processing (including use of the darkroom), and the production of several techniques of transparent projectuals. Classes limited to 18. No prerequisite. Three credit hours
- EDU 311 Advanced Production of Audio-Visual Materials** Mr. Milbury, Mr. Bergeson
Further sophistication of insight and refinement of skills in the local production of instructional materials. Prerequisite: Successful completion of EDU 310. Limited to twelve students. Three credit hours
- EDU 312 Teaching Language Arts in Elementary School** Mrs. Costello
Recent methods and materials basic to the teaching of communication skills. Topics include spelling, handwriting, listening, creative expression, oral and written reporting. Use of tapes, records, filmstrips, and recent language arts books for the elementary school. Opportunities to work with children in local schools. Three credit hours
- EDU 313 Maine School Law** Mr. Cobb
A review and interpretation of those statutes which directly affect the teacher. The case-study method is employed to cover such topics as certification, employment, tenure, dismissal, professional rights and responsibilities of the teacher, liability, curriculum requirements, attendance and classification of pupils, church-state relationship, and pupil control. Three credit hours
- EDU 314 Secondary Curriculum** Mr. Hackett, Mr. Cobb
Secondary Curriculum will be an effort to model a teaching-learning process that emphasizes that each person learns only what he needs and wants to know. Thus the student will be presented with a number of behaviors that might be perceived as appropriate for a teacher and permitted to select those objectives and methods of achieving these objectives that most closely meet his needs. The student will consider philosophy, objectives, motivation, learning theory, evaluation, methods, school administration and organization, school law, et al. Three credit hours
- EDU 315 Teaching English in the Secondary School** Mr. Lyons
A methods course for English majors preparing to enter secondary teaching, Grades 7-12. Students are familiarized with current developments in the "new English" as evidenced by recent theory and practice. Practical applications include special projects in the teaching of language, literature, composition, and reading. Students are given opportunities for first-hand observation of secondary English classrooms in the greater Portland area; workshops and conferences with visiting junior and senior high school teachers; tutorial assignments as University "Writing Laboratory" aides; and mastery of basic skills in the use of audio-visual equipment before actual classes. Three credit hours

EDU 317 Teaching Social Studies in the Secondary School**Mr. Whitten**

The course deals with the role of the social studies teacher as an agent of change, prompting sensitivity, procedure, method, and concern. It presents new concepts, methods, and materials in the professional dimensions of social studies instruction. Three credit hours

EDU 318 Teaching Science in the Secondary School**Mrs. Kerr, Mr. Rhoades**

History of science education, methods and materials in the teaching of science, curricular trends, emphasis on behavioral objectives. May include student demonstrations, opportunity for observation and participation in secondary schools. Students concentrating in biology are strongly urged to take EDU 330, Teaching Biology in the Secondary School, in place of this course. Prerequisite: junior or senior standing. Three credit hours

EDU 319 Measurement and Evaluation**Staff**

Construction, selection, and use of educational achievement tests, including diagnostic and survey instruments. Skill in writing essay and objective types is developed. An inquiry into the validity and reliability of typical standardized tests. Elements and uses of statistics; tabulation of data; measures of central tendency, variability, and correlation. Three credit hours

EDU 320 Kindergarten Development**Mrs. Chaplin, Mrs. Marsh**

A unique class in that it meets in the kindergarten classroom. Students meet with two classroom teachers who teach theory for one-half of the two-hour class and provide opportunity for the students to observe and participate in class development related to these theories during the second hour. Prerequisite: EDU 300 Primary Curriculum: Methods and Materials. Two credit hours

EDU 321 Atypical Reading Patterns**Mr. Fickett**

The purpose of this course is to give the prospective teacher added depth with the typical as well as the atypical reader. Special areas of emphasis will be speech and reading, dyslexia, Frostig materials, and Vallett materials. Three credit hours

EDU 322 Remedial Reading**Miss Peabody**

An empirical approach, relating class discussions to clinical observation. Methods by which the teacher copes with individual difficulties are explored. Testing and diagnostic work are studied and applied to subject-groups. Three credit hours

EDU 323 Independent Study in Education**Mr. Rhoades, Staff**

To provide juniors and seniors who have demonstrated critical and analytical capability an opportunity to pursue a project independently, charting a course and exploring an area of interest within their major field, bearing upon it previous course experiences and emerging with an intellectually sound, coherent synthesis, or an artistic or technical creation reflecting a high caliber of performance. Credit hours to be arranged.

EDU 324 Student Teaching**Staff**

Full-time student teaching during the senior year is provided under supervision in off-campus situations for all who meet prerequisites. In Portland, students are assigned to Elementary or Secondary schools for one half semester. During the other quarter, students usually enroll in a full time program of courses. In Gorham, students are assigned to public schools or other educative agencies for the full semester. This provides opportunity to teach according to choice in a different situation each quarter. Opportunities include Kindergarten-Primary, Elementary, Secondary, Art, Music, Industrial Arts, Theatre and Speech, and Trade and Industry. Prerequisites vary according to major field of study. See curriculum listings in the catalog. Six credit hours - P
Twelve credit hours - G

EDU 325 Seminar in Primary Education**Miss Peabody**

Consideration of such critical problems in primary education as school law in relation to the primary teacher; grouping and individual differences; basic organization of student teaching; the primary teacher in relation to community, school, and state. Faculty members from special areas as well as visiting lecturers participate. Two credit hours

EDU 326 Seminar in Elementary Education

Mrs. Costello

A study of issues in elementary education: school law; professional and ethical procedures; organization of student teaching; and teacher relationships with schools, community, and state. Visiting lecturers participate. Prerequisite: enrollment in EDU 324 Student Teaching. Two credit hours

EDU 327 Seminar in Secondary Education

Mr. Cobb

A group discussion concerned with student teachers' questions and answers.

Two credit hours

EDU 328 The Teaching Process

Mr. Chronister

Styles of teaching based on cognitive and non-cognitive foundations of education are examined. This is one of the courses prerequisite to student teaching in all regular undergraduate programs. (Not open to freshmen or sophomores.)

Three credit hours

EDU 330 Teaching Biology in the Secondary School

Mr. Dorsey

A course designed primarily for students preparing to teach biology in the secondary school. Emphasis is placed on advances in the secondary biology curricula, notably the Biological Sciences Curriculum Study approaches. A major portion of the course work is devoted to the laboratory exercises and techniques which typify the investigative approach of these curricula. Simulated situations in the teaching of biology will be employed.

Three credit hours

EDPY 331 Group Dynamics

Mr. Southworth

A study of the nature of group process and one's own functioning in a group. Problems of leadership, roles filled, and techniques will be integral parts of the course. The developing awareness of one's self in relation to others in a group will be of importance. Specific techniques will include reading, leadership of other groups, and participation in a seminar planned to aid in the exploration of leadership styles of self and others. Open to upper class undergraduates and graduate students.

Three credit hours

EDPY 332 Psychology of the Self

Mr. Southworth

An exploration into the development of the self, primarily as an issue of personal growth. Topics might include alienation, loneliness, and verbal-nonverbal communication. Learning techniques center around extensive reading, common class experiences, and intensive small group interaction.

Three credit hours

EDPY 333 Human Growth and Development

Mr. Bowman

A study of significant elements in the physical, mental, emotional, and social make-up of children as they develop from infancy to adolescence. Selected case studies and projects in the application of basic principles of growth and development to problems of adjustment to school, home, and community. Special attention is given to the developmental tasks of school-age children.

Three credit hours

EDPY 334 Growth-Learning Process

Mr. Smith

The pupil and his learning processes, including learning theories, pupil growth patterns, and selected techniques for the study of pupil development. This is one of the courses prerequisite to student teaching in all regular undergraduate programs. (Not open to freshmen or sophomores.) Prerequisite: General Psychology.

Three credit hours

EDPY 335 Educational Psychology

Mr. Southworth

Basic principles, techniques, and research in Educational Psychology. Special consideration given to the learning process, perception, motivation, individual differences, and measurement, with reference to the facilitation of effective teaching and learning. A one-semester course open to upperclass students.

Three credit hours

SEM 306 Human Reproduction, Contraception, and Family Planning

Mr. Mazer

Topics to be presented during the sixteen class sessions include human reproductive anatomy and physiology, sexual arousal, fertility, types and functions of contraceptive devices, homosexuality, pregnancy, conception, masturbation, family planning, and reproductive senility. The aims of this course will be to provide a solid foundation of factual knowledge and then to use this foundation to encourage class discussion of significant sexual problems of current concern.

Three credit hours

Industrial Arts

Purposes

The undergraduate curriculum in Industrial Arts has as its central purpose the preparation of certified teachers who are able to organize, manage and teach a program of industrial arts in the elementary and secondary schools of the State.

A secondary purpose of the program is to provide non-teaching majors an opportunity to develop general technical proficiencies along with a basic knowledge of business administration, leading to middle management positions in industry.

A B.S. degree with a major in Industrial Arts or in Technology will be granted upon successful completion of the following requirements:

REQUIRED OF BOTH TEACHER EDUCATION MAJORS AND TECHNOLOGY MAJORS

General Education Courses: 53 credit hours total

Humanities	9 credits
Fine and Applied Arts	6 credits
Mathematics and Science	12 credits
Social Sciences and Psychology	9 credits
Interdisciplinary	6 credits
Modern Industry (IA 270)	3 credits
Physical Education	2 credits
Electives (General)	6 credits

Core Requirements in Technical Education: 27 credit hours total

(Each course listed carries 3 credits.)

IA 100 Manufacturing and Construction
IA 101 Energy and Transportation
IA 130 Graphic Communication
IA 210 Electronics Technology
IA 220 Power Technology
IA 231 Technical Graphics
IA 241 Graphic Arts Technology
IA 250 Metals Technology
IA 260 Woods Technology

REQUIRED OF TEACHER EDUCATION MAJORS

Professional Education Courses: 24 credit hours total

EDU 100 American School	3 credits
EDU 335 Educational Psychology	3 credits
IAED 380-381 Curriculum Methods and Materials	6 credits
ED 324 Student Teaching and Seminar	12 credits

Teacher Education Requirements, Continued

Teaching Area Options

Teacher Education majors have four teaching area options, one of which must be selected prior to entrance to the junior year. Each student should plan his program with his adviser. The teaching areas are I—Laboratory of Industries, II—Energy and Transportation, III—Graphic Communication, IV—Manufacturing and Construction. The following tabulation indicates the number of credit hours a student should take in each of the teaching areas, as selected from the list of technical electives below.

	II	III	IV
I. Laboratory of Industries	6	6	9
II. Energy and Transportation	12	3	6
III. Graphic Communication	3	12	6
IV. Manufacturing and Construction	3	6	12

TECHNICAL ELECTIVES FOR BOTH TEACHER EDUCATION MAJORS AND TECHNOLOGY MAJORS

II—Energy and Transportation

- IA 311 Communications Electronics
- IA 312 Computer Technology
- IA 321 Automotive Systems
- IA 322 Automotive Diagnosis and Tuneup
- IA 413 Instrumentation
- IA 414 Digital Electronics
- IA 423 Fluid Power
- IA 424 Fluid Power Systems

III—Graphic Communication

- IA 332 Architectural Drawing and Design
- IA 333 Descriptive Geometry
- IA 342 Photo-Offset Lithography
- IA 343 Communications Design
- IA 434 Industrial Production Illustration
- IA 444 Photographic Reproduction
- IA 445 Color Reproduction Theory

IV—Manufacturing and Construction

- IA 351 Machining and Fabrication
- IA 352 Fabrication and Forming
- IA 361 Custom Production in Wood
- IA 362 Residential Construction
- IA 363 Wood Science
- IA 370 Crafts Technology
- IA 371 Plastics Technology
- IA 452 Metallurgy and Metrology
- IA 472 Materials Testings (Metals/Wood)
- IA 490 Special Problems in Industrial Arts

REQUIRED OF TECHNOLOGY MAJORS

Additional Course in General Education: 3 credit hours

EDU 100 American School

Business Administration and Economics: Elect 18 credit hours
(Electives from the following 3 credit courses)

Economics	Cost Accounting
Accounting	Finance
Industrial Management	Industrial Relations
Marketing	Human Relations

Technical Electives: 24 credits from the groups above.

Minimum of two courses in each group

Special Problems: 2 credit hours

INDUSTRIAL ARTS CURRICULUM

Freshman Year

	Credit Hours
English (Elective)	6
Mathematics (Elective)	6
Science (Elective)	6
Physical Education	2
EDU 100 American School	3
IA 130 Graphic Communication	3
IA 100 Manufacturing and Construction	3
IA 101 Energy and Transportation	3

Sophomore Year

PSY 101 General Psychology	3
Fine Arts (Elective)	6
Literature (Elective)	3
Scogis (Elective)	3
IA 210 Electronic Technology	3
IA 220 Power Technology	3
IA 231 Technical Graphics	3
IA 241 Graphic Arts Technology	3
IA 250 Metals Technology	3
IA 260 Wood Technology	3
IA 270 Modern Industry	3

Junior Year

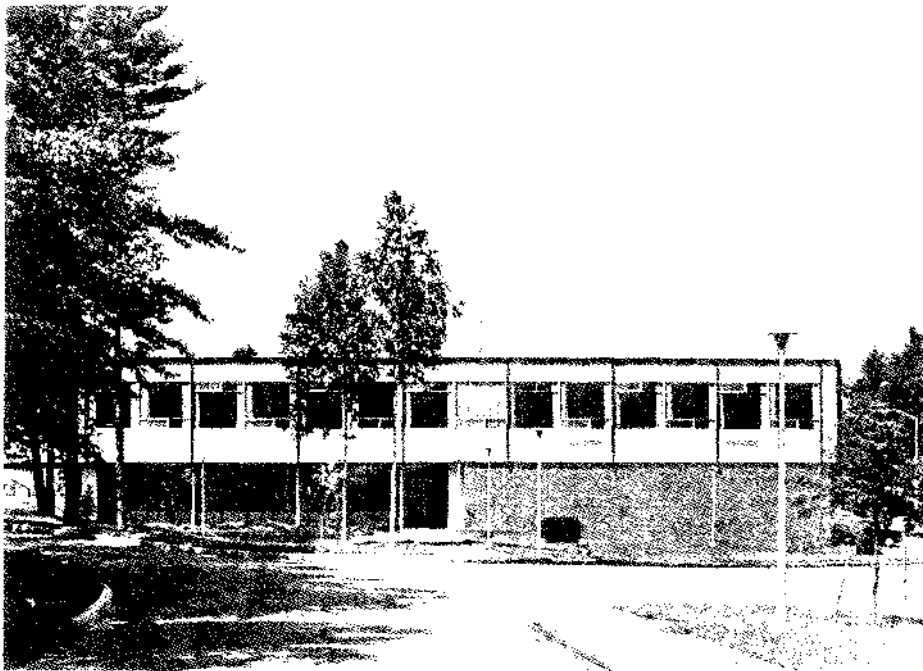
	(Teacher Education Majors)	
	Social Science (Electives)	6
	Scogis (Elective)	3
EDU 335	Educational Psychology	3
IAED 380-381	Curriculum Methods and Materials	6
	Industrial Arts Technical (Electives)	12
	(Technology Majors)	
	Social Science (Electives)	6
	Scogis (Elective)	3
	Economics (Elective)	3
	Accounting (Elective)	3
	Finance (Elective)	3
	Industrial Arts Technical (Electives)	12

Senior Year

	(Teacher Education Majors)	
EDU 324	Student Teaching and Seminar	12
	General Education (Electives)	6
	Industrial Arts Technical (Electives)	9
	Special Problems (Elective)	2
	(Technology Majors)	
	Industrial Management (Elective)	3
	Marketing (Elective)	3
	Industrial Relations (Elective)	3
	Industrial Arts Technical (Electives)	12
	Special Problems (Elective)	2
	General Education (Elective)	6

Clinical Training in Manual Arts Therapy

An opportunity is provided junior and senior Industrial Arts majors to participate in a clinical training program provided by Veterans Administration Hospital, Brockton, Massachusetts. Two hundred and forty hours, or six weeks, to be spent at hospital, at convenience of student. Transportation not furnished, but room and board provided at no expense. Consult department chairman for further details.



COURSES IN INDUSTRIAL ARTS

ENERGY AND TRANSPORTATION

IA 101 Energy and Transportation

Mr. Mertens

Concepts of electricity and electrical circuits, motive power generation and transportation. Units and laboratory experiences in residential wiring and appliance servicing. Construction of models to facilitate the study of power sources and transportation vehicles. Required for all first-year students.

Three credit hours

IA 210 Electronics Technology

Mr. Slocum

Review of basic network theory; AC networks; theory and use of electrical measuring instruments; semiconductor, diodes, and transistors; basic communication circuits.

Three credit hours

IA 220 Power Technology

Mr. Carter

A study of those industries concerned with power; its sources, generation, transmission and control. Applications of power in the fields of manufacturing construction and transportation are considered and developed. Emphasis is placed on thermal engines — theory, construction, operation, maintenance and service.

Three credit hours

IA 270 Modern Industry

Staff

Evolution and structure of modern American industry and its impact upon the social, economic, and cultural milieu. Major areas and functions of industry explored include: personnel administration, research and development, production, finance, marketing, and service. Industrial visitations and reports.

Three credit hours

IA 311 Communication Electronics

Mr. Slocum

Detailed study of common communication circuits, including phonographs, AM-FM radio, television and radar; integrated circuit technology and application.

Three credit hours

- IA 312 Computer Technology** Mr. Carter
Basic programming and use of University computing facilities; principles of logic design of digital equipment; social, industrial, and psychological consequences of the computer revolution. Open to all students. Three credit hours
- IA 321 Automotive Systems** Mr. Carter
The study of the automobile and its systems. Theory, design and construction, operation, maintenance, testing and service included. Utilization of prime movers and devices common to all fields of transportation explored and considered. Prerequisite: IA 120. Three credit hours
- IA 322 Automotive Diagnosis and Tuneup** Mr. Carter
The study of automotive systems. Analysis and diagnosis. Tuneup and servicing included. Opportunities for independent research and problem solving provided. Prerequisite: IA 221. Three credit hours
- IA 413 Instrumentation** Mr. Slocum
Introduction to the study of sensing devices and instruments necessary to observe and control both manufacturing processes and the performance of mechanical and electrical machinery. Emphasis on pressure in liquids, atmospheric pressure, temperature, indicating instruments, mechanical and electrical transducers, potentiometric devices, and other monitoring instruments. Prerequisite: IA 110. Three credit hours
- IA 414 Digital Electronics** Mr. Slocum
Semiconductor junction theory; special devices such as SCR's, FET's; digital electronics, including switching theory and applications. Permission of instructor. Three credit hours
- IA 423 Fluid Power** Mr. Carter
A study of fluids at work. Investigation of the theory and application of hydraulics and pneumatics in mechanics and industry. Design, construction, and maintenance of fluid power devices and systems. Three credit hours
- IA 424 Fluid Power Systems** Mr. Carter
Application of fluid power and fluidic systems to manufacturing and construction industries. Prerequisite: IA 423. Three credit hours

GRAPHIC COMMUNICATION

- IA 130 Graphic Communication** Mr. Faulkner, Mr. Morrill
Introduction to the concepts of effective industrial communications. Translating ideas and images through understanding and applying the elements of graphic design, shape and dimension, layout and image assembly and reproduction techniques. Three credit hours
- IA 231 Technical Graphics** Mr. Faulkner
Concepts of spatial relationships and visualizations with related techniques. Basic skill development and understanding taught through freehand illustrations as well as conventional instruments and devices. Multi-view projections, pictorial techniques, primary and secondary auxiliaries, detail and assembly working drawings and reproduction techniques. Contemporary industrial practices and processes. Three credit hours
- IA 241 Graphic Arts Technology** Mr. Morrill
A study of the common reproduction systems utilized in the graphic arts industries and technology. Designing, composing, reproduction, assembling and finishing of printed materials utilizing conventional reproduction techniques. Emphasis on letterpress, offset lithography, and screen printing with related experiences in rubber stamp making, block printing, embossing and photo enlarging. Lecture and lab, three credit hours
- IA 332 Architectural Drawing and Design** Mr. Morrill
Basic architectural design and drawing as related to residential and light construction. A detailed set of plans for a single family home will be executed. Construction techniques, environmental considerations, building materials, specifications, costs and financing, codes and zoning, schedules and architectural models. Prerequisite: IA 231 or equivalent. Three credit hours
- IA 333 Descriptive Geometry** Mr. Faulkner
Analysis of the spatial relationship of points, lines, planes and solids with orthographic and pictorial practice. Vector analysis, nomographs, charts, graphs, graphical arithmetic, truss systems with application. Prerequisite: IA 232 or permission of instructor. Three credit hours

IA 342 Photo-Offset Lithography Mr. Morrill
A study of those industries utilizing photo-offset lithograph with emphasis upon camera work, stripping, platemaking and presswork. Photographic conversion of line and halftone copy, photo-screen stencils and finishing procedures are also included. Three credit hours

IA 343 Communications Design Mr. Morrill
An introduction to the principles of layout and design in preparing camera copy for lithographic reproduction. Emphasis on design elements and fundamentals, manuscript and illustration preparation, graphic and photographic techniques, and production specifications. Three credit hours

IA 434 Industrial Production Illustration Mr. Faulkner
Principles and techniques employed by contemporary industry to graphically describe industrial products, technical concepts and service information. The media range will include chalk, ink, pencil, charcoal, water color, tempera, pressure sensitive transfer symbols and various methods of reproduction. Engineering and architectural problems. Prerequisite: IA 231 or permission of instructor. Three credit hours

IA 435 Systems Analysis and Design Mr. Faulkner
Research applied to solving basic engineering problems. Contemporary systems of analysis and design. Economic factors, resource utilization, planning, design, model construction, follow-up studies and evaluation techniques applied to specific practical problems. Prerequisite: IA 333 and permission of instructor. Three credit hours

IA 444 Photographic Reproduction Mr. Morrill
Photographic concepts, processes and technique utilized in graphic arts reproduction. Experience in contact printing, continuous tone enlarging, use of filters, and color separations. Prerequisite: IA 342. Three credit hours

IA 445 Color Reproduction Theory Mr. Morrill
Advanced study in the additive and subtractive theories of color reproduction. Experiences in photographic separation and offset press printing of color originals. Emphasis on understanding physiological and psychological responses to color. Prerequisite: IA 444. Three credit hours

MANUFACTURING AND CONSTRUCTION

IA 100 Manufacturing and Construction Mr. Mertens
Basic concepts and common functions involved in the production of manufactured goods and the construction of residential and commercial structures. Custom and line production activities in manufacturing and the construction of models of various types of structures. Required of all first-year students. Three credit hours

IA 250 Metals Technology
A study of metal manufacturing industries. Introduction to concepts of designing, planning, fabrication, finishing, and distribution as they pertain to these industries. Selection, use, and care of equipment. Safety practices. Three credit hours

IA 260 Wood Technology Mr. Warren
Structure of wood and its relation to moisture, strength properties, and working qualities. Wood-based materials: veneer, plywood, particleboard, hardboard will be considered. Basic skills in hand and machine processes will be developed. Emphasis on research and experimentation and basic processes in the wood manufacturing industry. Safety practices. Three credit hours

IA 351 Machining and Fabrication
A study of metal industries concerned with electric and gas welding and machining techniques. Emphasis on process engineering. Individual and group problems. Laboratory and maintenance practices. Prerequisite: IA 150. Three credit hours

IA 352 Fabrication and Forming
Concepts, principles and activities in TIG welding, sheet metal fabrication and casting techniques as they relate to the manufacturing and construction industries. Consideration is also given to plumbing. Group and individual problems and activities. Prerequisite: IA 215. Three credit hours

IA 361 Custom Production in Wood**Mr. Warren**

Production and wood manufacturing problems including jigs, fixtures, special machine operations, and advanced finishing techniques. General maintenance procedures on production equipment. Group and individual research assignments and related technical problems. Prerequisite: IA 160.

Three credit hours**IA 362 Residential Construction****Mr. Warren**

A study of the residential construction industries including construction principles; layout, foundation, framing, exterior covering, and finish. Related areas of services, plot planning, earth-moving principles considered in research activities. Group and individual problems. Prerequisite: IA 160 or permission of instructor.

Three credit hours**IA 363 Wood Science****Mr. Warren**

Wood anatomy and identification experiences leading into a study of the properties of wood, wood-liquid relations, bonding and finishing of wood, and machining as they relate to the manufacturing processes. Prerequisite: IA 160 or permission of instructor.

Three credit hours**IA 370 Crafts Technology****Mr. Mertens**

Design and manufacture of products utilizing ceramics, leather, plastics, art metals and other craft materials. Examination of artistic crafts for leisure-time activities and for adult programs. Individual and group research and problem solving.

Three credit hours**IA 371 Plastics Technology****Mr. Mertens**

Pattern and mold design and construction; thermo-forming, injection-molding, reinforced plastics, blow molding, foam and plastisol forming. Theory and application of thermoplastic and thermo-set principles.

Three credit hours**IA 452 Metallurgy and Metrology**

The technology of metallurgy and metrology. Heat treatment, powdered metals, machining and inspection of metal parts. Individual and group activity. Prerequisite: IA 150.

Three credit hours**IA 472 Materials Testing****Mr. Warren**

Industrial techniques involved in the analysis of the physical properties of materials and their utilization in the manufacturing and construction industries. Emphasis on research and experimentation. Individual and team activities. Prerequisite: IA 150.

Three credit hours

INDUSTRIAL ARTS EDUCATION

IA 271 Industrial Arts for the Elementary School**Mr. Mertens**

The role of industrial arts in the elementary school. Activities and projects correlating with unit teaching as they enrich the general curriculum. Study of correct material and tool usage, with special emphasis upon safe practice. Non-majors only.

Three credit hours**IA 490 Special Problems in Industrial Arts****Staff**

Provides upper level students an opportunity to pursue independently a topic, project or experiment of interest.

Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of merit. Permission of instructor. Technical elective may be substituted.

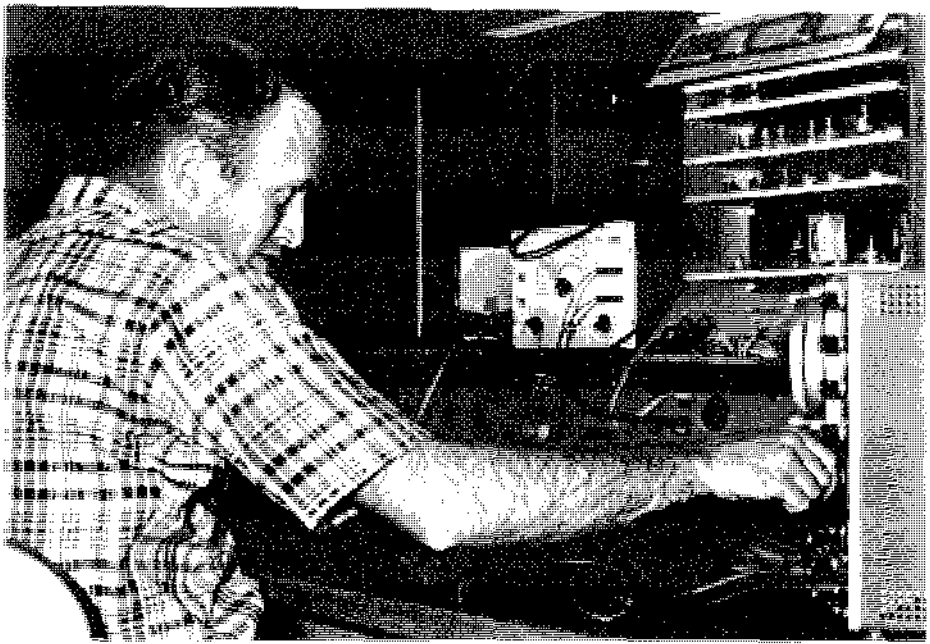
Two credit hours**IAED 380 Curriculum Methods and Materials****Mr. Mitchell**

Evaluation of contemporary curriculums in industrial arts. Development of long and short range plans, with emphasis on unit teaching and performance-based objectives. Task analyses for teaching skills and concept development. Instructional media preparation and utilization. Organization for individual or group instruction. Required prior and upon application to student teaching. Prerequisite: EDU 335.

Three credit hours**IAED 381 Curriculum Methods and Materials****Mr. Mitchell**

Utilization of prepared plans for micro- and participation-teaching. Audio and video tape presentations and critiques. Introduction to criterion referenced evaluation techniques. Safety principles and classroom control stressed. Basic organization and administration procedures for implementing a modern program of industrial arts. Orientation to student teaching. Prerequisite: IAED 380.

Three credit hours



Vocational Trade and Industrial Education

A part-time Evening and Summer program designed to:

- a) prepare instructors for the teaching of vocational-industrial and/or technical subjects in the high schools and post-secondary schools of Maine. Candidates must be eligible for vocational teaching certification.
- b) provide non-teaching majors an opportunity to pursue a collegiate program leading to a baccalaureate degree which recognizes trade or technical competency and provides knowledge of business and industry leading to supervision, technician, or middle management positions.

A B.S. degree with a major in Trade and Industrial Education or in Trade and Industry will be granted upon successful completion of the following requirements:

Curriculum Requirements

One hundred and twenty (120) semester hours of credit are required for the bachelor's degree. A minimum of one year, or 30 semester hours, **exclusive of work trade experience credits**, must be earned at this institution.

A. General Education		45 credit hours
Humanities	6	
Fine and Applied Arts	6	
Science and Mathematics	15	
Social Sciences	6	
PSY 101 General Psychology	3	
IVE 360 Modern Industry	3	
Interdisciplinary Courses	6	

B.	Professional Education (Teaching Majors Only).....	27 credit hours
IVE 305	Curriculum Development in Vocational Education	3
EDU 333	Human Growth and Development	3
IVE 310	Methods and Materials of Instruction	3
IVE 340	Shop Organization and Management	3
IVE 350	Philosophy of Vocational Education	3
IVE 411	Measurement and Evaluation (Vocational)	3
EDU 324	Student Teaching (Required for all candidates with less than three years of successful teaching experience)	6
C.	Area of Specialization (Technical)	45 credit hours
IVE 400	Trade Experience, verified (Credits will be determined by rating plan)	maximum
IVE 440	Related Industrial Experiences (Two options, total credits to be no more than the difference between those granted for IVE 400 and 45 credits.)	
	Recommended Electives	
IVE 315	Learning and Programmed Instruction	3
IVE 320	Coordination of Cooperative Education	3
IVE 325	Conference Leading	3
IVE 330	Principles and Practices of Vocational Guidance	3
IVE 420	Trends in Vocational Education	3
IVE 450	Local Administration and Supervision of Vocational Education	3
IVE 455	Development of Technical Education	3
IVE 460	Independent Study in Vocational Education	3
EDU 310	Preparation of Instructional Materials	3
EDU 314	Curriculum (Education)	3

Non-Teaching Major		
(To be taken in place of professional education).....	27 credit hours	
IVE 300	Trade Analysis	3
IVE 325	Conference Leading	3
	Business Administration	18 credit hours
	(Electives from following areas)	
	Economics	
	Accounting	
	Industrial Management	
	Marketing	
	Cost Accounting	
	Finance	
	Industrial Relations	
	Human Relations	
	(Elect one)	
IVE 460	Independent Study in Vocational Education	3
IVE 350	Philosophy of Vocational Education	3

COURSES IN VOCATIONAL TRADE AND INDUSTRIAL EDUCATION

IVE 300 Trade Analysis

Staff

Identification of trade fields, units, operations, and items of related information and their organization into units of instruction. Three credit hours

IVE 305 Curriculum Development in Vocational Education

Staff

This course is concerned with developing specific course content from an occupational analysis. The identification of educational needs and objectives precedes the selection and organization of relevant matter. Prerequisite: IVE 300. Three credit hours

IVE 310 Methods and Materials of Instruction

Staff

This course treats the general and specific materials and methods of teaching vocational courses. Deals with both the theoretical and practical aspects. Three credit hours

IVE 315 Learning and Programmed Instruction

Staff

The first application of the laboratory and scientific study of the learning process. The principles of learning derived from experimental study which have provided a foundation for advances in the techniques of learning. Three credit hours

IVE 320 Coordination of Cooperative Education

Staff

The role of the coordinator in organizing and conducting a program of work-study experience in high school. Introduction to cooperative half-time training, community survey, advisory committees, laws and regulations; and examination of the responsibilities and activities of the coordinator. Three credit hours

IVE 325 Conference Leading

Staff

A course in the philosophy and techniques of organizing and conducting successful conferences. Each participant will assume the responsibility of planning and leading a simulated conference. Three credit hours

IVE 330 Principles and Practices of Vocational Guidance

Staff

Discussion and study with the intent to develop a better understanding of principles and objectives of Vocational Guidance. Three credit hours

IVE 340 Shop Organization and Management

Staff

Basic principles of planning, organizing and managing an industrial or technical shop or laboratory. Selection and arrangement of equipment including specification writing. Control of personnel for efficient shop management. Prerequisite: IVE 310. Three credit hours

IVE 350 Philosophy of Vocational Education

Staff

A survey of the history and philosophy of vocational education in the United States with emphasis upon recent developments. Three credit hours

IVE 400 Trade Experience, verified (see IVE 440, Option #2 below.)

(Credits will be determined by rating plan)

IVE 411 Measurement and Evaluation

Staff

The construction, selection, and use of achievement and performance tests in industrial-technical education. Skill in writing test items is developed. Elementary statistics for the industrial-technical instructor, including grading, are stressed. Three credit hours

IVE 420 Trends in Vocational Education

Staff

Identification, analysis, and discussion of major problems and trends in vocational education. Three credit hours

IVE 440 Related Industrial Experiences

(Two options, total credits to be no more than the difference between those granted for IVE 400, and 45 credits).

OPTION #1

This course is designed to include attendance at an approved industry-sponsored school or seminar for the purpose of providing the vocational/technical teacher with advanced related training. Courses provided by organizations such as General Motors Training Centers, or International Typographical Union, qualify under this course offering.

OPTION #2

Approved employment with a company may qualify a student under this option. An agreement must be approved by the advisor in advance. The experiences should provide opportunities for applying technical skills and for judgment. Credit will be determined on the basis of one credit for each ten full weeks of employment with a minimum of five credits for each period of approved continuous full-time employment. A daily log, summary report and evaluation by an industrial supervisor will constitute part of the course.

For additional information concerning either option of IVE 440, consult your advisor.

IVE 450 Local Administration and Supervision of Vocational Education

Staff

Procedures and practices utilized in establishing, promoting, coordinating, supervising, and controlling vocational programs on the local level

Three credit hours

IVE 455 Development of Technical Education Programs

Staff

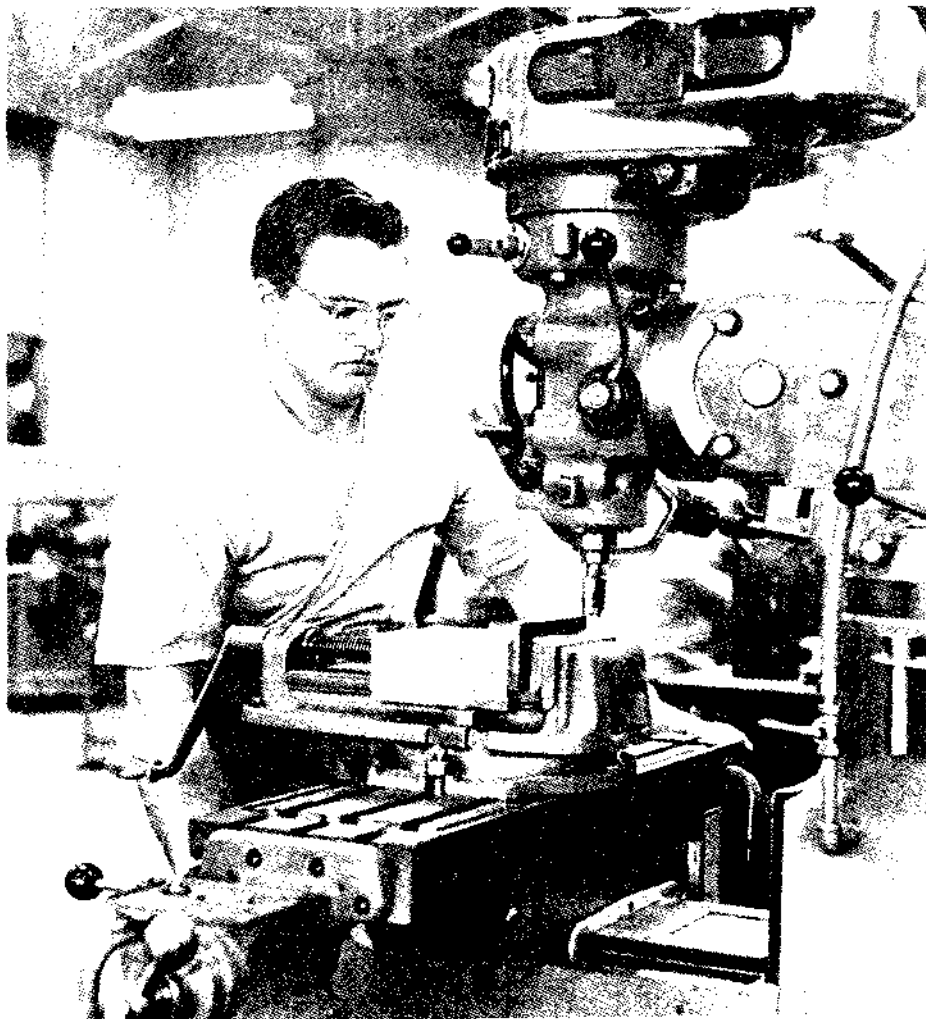
Planning and development of technical education programs including the determination of needs and organization of programs for secondary and post-secondary schools.

Three credit hours

IVE 460 Independent Study in Vocational Education

An opportunity to pursue independently a topic, project, or experiment of interest. Students will prepare a contract or proposal for study to be conducted and, upon completion, submit findings in a scholarly report or other evidence of completeness. Permission of advisor

Three credit hours





Physical Education

Physical Education (Required Program)

The required physical education program is designed to establish regular habits of physical activity, to teach basic motor skills, and provide an exposure to a variety of recreational activities that may be enjoyed in later life. The program takes into consideration the needs of each individual and allows a choice of physical activity to satisfy such needs and the capabilities of each student.

Recreation and Intramural Athletics

The Physical Education Department conducts an extensive program of sports and recreation on an intramural level. An attempt is made to provide activities for all interest groups in as many sports as possible. Competition in leagues or tournaments is conducted in soccer, tennis, golf, cross-country, bowling, flag-football, table tennis, basketball, volleyball, field hockey, lacrosse, badminton, handball, squash, paddleball, track and field, softball, and archery.

In addition to the competitive program, all athletic facilities are available on a drop-in basis at regularly scheduled hours during the day, evening, week-ends, and vacation periods.

Physical Education (Professional Courses)

The professional courses in physical education are designed for students who have a desire to qualify as physical educators, coach athletic teams, and direct recreational programs. Sound health, outstanding character, proficiency in motor skills, and an alert mind are requirements for admission.

All professional physical education courses offered at the Portland-Gorham campuses of the University of Maine may be transferred. The Portland-Gorham campuses do not offer a major in physical education at present; however, students completing the program of courses listed will be adequately prepared to enter the coaching field upon graduation.

Required Courses in Physical Education

PE 100 Foundations of Physical Education

Staff

Required course for all freshmen. Designed to inform the student of the key concepts of exercise and activity while helping him assess his personal needs in reference to current and future exercise and physical activity. Lecture and laboratory. (Separate sections for men and women.) Two semesters; one credit hour per semester

Professional Courses in Physical Education

PE 201 Conditioning

Mr. Caliendo

Discussions and practical application of various theories of athletic conditioning, i.e., Progressive Resistance, Circuit Training, Isometrics, Interval Training, Aerobics, Calisthenics, etc. One credit hour

PE 202 College Health

Mr. Costello

The aim of this course is to help students grow in scientific health knowledge, develop desirable health attitudes, improve health practices, and solve individual and group health problems. Two credit hours

PE 203 Athletic Training

Mr. Caliendo

Care and prevention of athletic injuries; the use of proper field equipment, support methods, therapeutic modalities, pharmacology in athletics, and training techniques. Two credit hours

PE 205 Rhythmic Activities

Mrs. Breton

To develop skills, techniques, understandings for competency in rhythms, folk dance, and square dance. One credit hour

PE 207 Gymnastics

Mrs. Breton

To develop skills, techniques, and understanding for competency in conditioning exercises, tumbling, apparatus, and free exercise. (Open to women only.) One credit hour

PE 299 First Aid Safety

Mr. Caliendo

Lectures and laboratory experiences in the utilization of techniques of first aid as prescribed by the American Red Cross. Successful completion of course requirements will lead to Advanced Red Cross certification. Two credit hours

PE 302 Coaching: Philosophy and Fundamentals

Mr. Bouchard

Emphasis on the methods of teaching and coaching soccer and baseball. Specific offenses and defenses in soccer will be analyzed. Three credit hours

PE 303 Coaching Basketball

Mr. Sturgeon

Emphasis on the methods of teaching and coaching basketball; specific offenses and defenses analyzed. A definite plan of offense and defense presented. Techniques will also be covered. Two credit hours

PE 304 Teaching Physical Education in the Elementary and Secondary Schools

Mrs. Hodgdon

Discussion of the principles of planning well-balanced programs of physical education for grades one to six. Opportunity for organizing and teaching activities to elementary age students. Special emphasis upon fundamental skills, sports, games, and gymnastics; and how to teach them in the elementary school program. This work can be applied to all ages, including college and recreational groups. Three credit hours

PE 305 Coaching Track

Mr. Martin

Coaching experience on the field with analysis of the form and technique of the various events. Selection of candidates, training, conditioning, diet, organization and promotion of track will be covered. Two credit hours

PE 306 Movement Education in the Elementary School

Miss Goodwin

Course is designed to help the prospective teacher in planning balanced units of instruction to meet the needs of boys and girls — keeping in mind the importance of engaging in activities which present challenges, having opportunities to be creative, and participating in the planning. Children from grades one to six are part of the experience. Activities based on movement skills are stressed. Also traditional and contemporary dance movements, movement exploration, creative activities. Three credit hours

PE 308 Physical Education for the Mentally Retarded

Mr. Costello

This course is planned to help the student understand corrective physical education with emphasis on the mentally retarded children in a variety of activities, including games, relays, tumbling, apparatus, swimming, and bowling. Investigation of the causes and incidence of mental retardation is also undertaken. Three credit hours

School of General and Interdisciplinary Studies

While a University must continually strive to maintain the traditional functions, it must also be flexible enough to allow for innovation and experimentation. An educational system, if it is to survive, must always strive for a balance between the richness of its past and the novelty of the present. At UMPG the School of General Interdisciplinary Studies (SCOGIS), is one way of providing such innovation.

This school is envisioned as a catalyst in the process of educational change. SCOGIS will offer a flexible creative curriculum, stressing innovation in teaching, development of new learning models, and interdisciplinary, problem-oriented programs.

SCOGIS programs and courses will not duplicate offerings of the other academic units of the University. The major emphasis will be placed on studies, themes, and projects leading to a baccalaureate degree in general and interdisciplinary studies. Provision will also be made for independent study and tutorial work.

The faculty of SCOGIS will be drawn from all academic units of the University and the community at large according to guidelines and procedures developed by the SCOGIS students, administration and faculty.

Information concerning program offerings may be obtained from the Office of Dean of SCOGIS — UMPG.



The senior course in Community Health Nursing provides School of Nursing students with valuable field experience in the Greater Portland urban area.



University of Maine School of Nursing

MARY ANN EELLS, Dean

Professor MacLean; Associate Professors Cotton, Eells, Gray, Ivanisin, Roscoe, Tryon; Assistant Professors Fish, Jensen, Maddox, Stone, Talbot; Instructors Coggeshall, Dubowick, Edwards, Hammond, Marshall, Paige, Tukey.

GENERAL DESCRIPTION

The University of Maine School of Nursing offers a baccalaureate program of four years and one summer session which leads to the degree of bachelor of science with a major in nursing. One hundred and twenty hours are required for graduation.

The first two years in the program, consisting largely of general education courses, are available on the Orono, Portland-Gorham, and Presque Isle campuses. The junior and senior years which include clinical nursing courses are available only at Portland-Gorham.

The program is accredited by the National League for Nursing and approved by the Maine State Board of Nursing. Graduates are eligible to take the State Board Test Pool Examinations for license as registered nurses.

In addition to the usual University fees and expenses, nursing students must purchase uniforms (approximately \$75.00) during the sophomore year and provide themselves with a car for one semester during the senior year for use in the course in Community Health Nursing.

Continuing Education Division counseling and courses are available to individuals who have an interest in pursuing part-time education. Courses with a credit/non-credit option will be offered at various campuses of the University of Maine as reasonable interest is expressed and resources are available.

Objectives of the Program

In order to prepare the student for nursing in today's world and for the future, the program at the University of Maine School of Nursing is designed to prepare a nurse who can: 1) make relevant, effective responses to the needs of people in providing direct care; 2) demonstrate an ability to work effectively to coordinate care in various settings; 3) identify her role as a professional nurse in the community.

Philosophy

The faculty believes that nursing is an art and a developing science which began with the simple acts of caring and curing. The essence of nursing is captured in the word "response". Nursing begins with the initial response of recognizing the biological, social, and psychological needs of the client, makes a priority assessment of such needs, and utilizes feasible modes of nursing intervention. It is this set of sensitive and crucial responses which comprise excellence in nursing care.

The faculty further believes that adequate professional nursing preparation occurs within the climate of higher education. The practice of nursing stems from a theoretical base that concerns man in his biological, social and cultural environment, and the utilization of this knowledge in nursing science.

The Baccalaureate Program

The student who matriculates at Portland-Gorham must attain a cumulative average of 2.0 to enter the courses at the junior level of the nursing major.

Students receiving a D grade or below in a clinical course of the nursing major beyond the first semester of the junior year will be required to repeat the course.

SCHOOL OF NURSING PROGRAM

FRESHMAN AND SOPHOMORE YEARS

Required			Credit Hours
Humanities			6
Fine and Applied Arts			6
Science and Mathematics			20
BIO 101	Biological Concepts	3	
BIO 111	Human Anatomy and Physiology	3	
BIO 112	Practical Human Anatomy and Physiology	1	
CHEM 113	Chemical Principles	4	
CHEM 114	Chemical Principles	4	
BIO 311	Microbiology	4	
BIO 312	Microbiology Lab	1	
Social Sciences			12
PSY 101	General Psychology	3	
PSY	Elective	3	
SOC 101	Introduction to Sociology	3	
SOC	Elective		
or			
ANY 101	Introduction to Anthropology	3	
or			
POL 101	Introduction to Government		
SCOGIS			
SCO 150	SCOGIS I	3	
FN 352	Human Nutrition		3
NSG 100	The Role of the Nurse		3
	Physical Education		1

SUMMER SESSION

Required			Credit Hours
NSG 300	Introduction to Patient Care		3

JUNIOR YEAR

Nursing			24
NSG 301	Medical-Surgical Nursing	6	
NSG 302	Medical-Surgical Nursing	6	
NSG 303	Nursing of Mothers and Children	6	
NSG 304	Nursing of Mothers and Children	6	
SCOGIS			3
SCO 350	SCOGIS II	3	

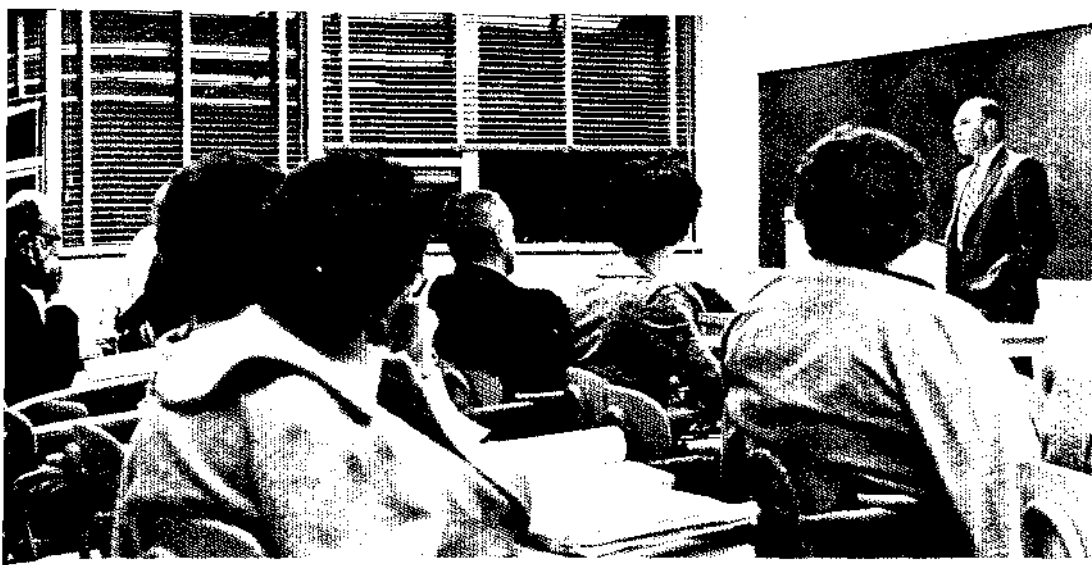
SENIOR YEAR

Nursing			29
NSG 400	Advanced Medical-Surgical Nursing	12	
NSG 401	Community Health	3	
NSG 402	Community Health Nursing	6	
NSG 403	Psychiatric Nursing	6	
NSG 404	Seminar in Nursing	2	

The clinical nursing courses are taught in the Departments of Medical-Surgical Nursing; Maternal and Child Health Nursing; Advanced Medical-Surgical Nursing; Community Health Nursing and Psychiatric Nursing.

COURSE DESCRIPTIONS

- NSG 100 The Role of the Nurse** Mrs. Eells
A survey of the current and expanding roles of the nurse. Three credit hours
- NSG 300 Introduction to Patient Care** Miss Stone, Staff
An introduction to the fundamental concepts and skills of professional nursing. Prerequisite: Junior status or consent of instructor. Three credit hours
- NSG 301 Medical-Surgical Nursing** Miss Talbot, Staff
Nursing intervention required for the major health needs of adults with an emphasis upon the scientific principles necessary to nursing action. Prerequisite: NSG 300. Six credit hours
- NSG 302 Medical-Surgical Nursing** Miss Talbot, Staff
A continuation of NSG 301. Six credit hours
- NSG 303 Nursing of Mothers and Children** Miss Tryon, Staff
A family-centered approach to the nursing needs of parents and children in community care agencies. Prerequisite: NSG 300. Six credit hours
- NSG 304 Nursing of Mothers and Children** Miss Tryon, Staff
A continuation of NSG 303. Six credit hours
- NSG 400 Advanced Medical-Surgical Nursing** Miss Stone, Staff
Concepts of nursing intervention based on scientific principles. Emphasis is on current trends in clinical nursing and the organizational principles relevant to her leadership role in coordinating the work of others. Prerequisites: NSG 301, NSG 302, NSG 303, and NSG 304. Twelve credit hours
- NSG 401 Community Health** Miss Roscoe
Concepts and principles basic to the development and maintenance of community health, including theories of ecology, biostatistics, epidemiology, and the organization and delivery of health care. Three credit hours
- NSG 402 Community Health Nursing** Miss Roscoe, Staff
Concepts of community health and the nursing process essential to the practice of nursing in the community. Six credit hours
- NSG 403 Psychiatric Nursing** Miss Cotton, Staff
The study of psychodynamic concepts and their application to nursing care. Six credit hours
- NSG 404 Seminar in Nursing** Miss Ivanisin
Current problems and issues of the profession. Two credit hours
- NSG 295 Independent Study in Nursing** Staff
Individualized study in an area of nursing with the permission of the instructor. Two to three credit hours
- NSG 395 Independent Study in Nursing** Staff
Individualized study in an area of nursing with the permission of the instructor. Two to three credit hours
- NSG 495 Independent Study in Nursing** Staff
Individualized study in an area of nursing with the permission of the instructor. Two to three credit hours
- FN 352 Human Nutrition** Miss Jensen
Body metabolism and requirements for nutrients by normal individuals. Prerequisites: CHEM 101, CHEM 102 or equivalent, and BIO 111. Three credit hours



Graduate Studies

ROBERT M. YORK, Dean

ELIZABETH F. KERR, Assistant Dean

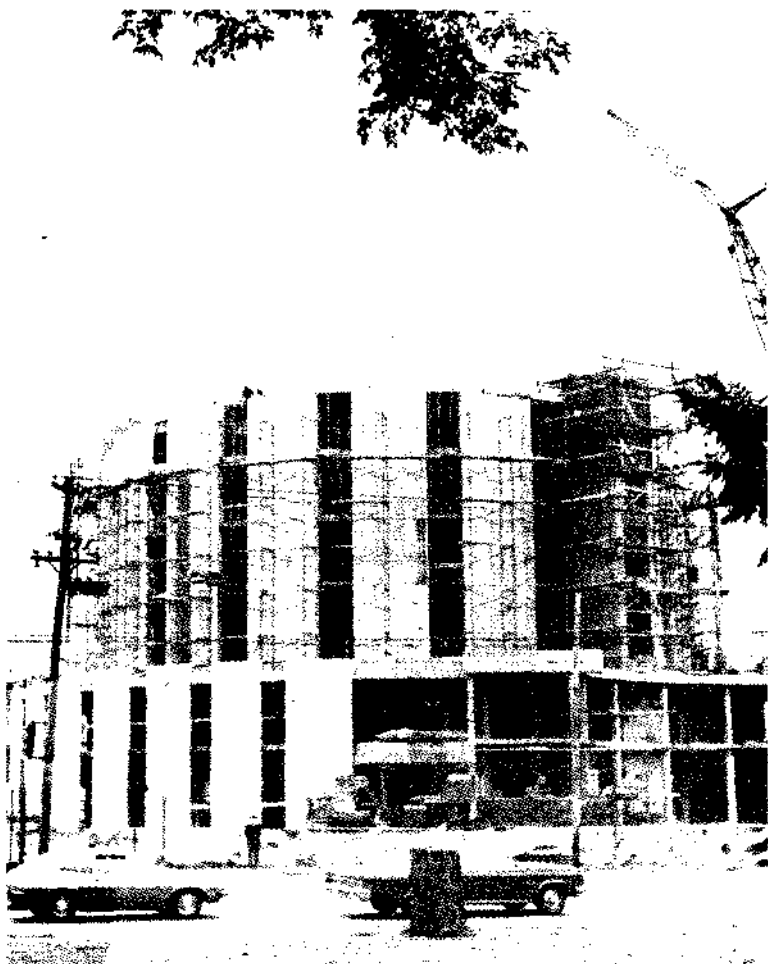
Currently, UMPG offers programs leading to the following graduate degrees: Master of Business Administration, Master of Education, Master of Science in Education, and Master of Engineering. In addition, a program leading to the degree of Master of Library Science is offered in cooperation with the University of Maine at Orono, which grants the degree in that program. Information concerning each of these programs may be obtained from the Office of Graduate Studies, 103 Corthell Hall, UMPG, Gorham, Maine 04038.

Application for admission to a program of graduate study should be made to Dr. Robert York, Dean of Graduate Studies, 103 Corthell Hall, UMPG, Gorham, Maine 04038, on the form provided for this purpose. In order to be admitted to a program of graduate study, an applicant must have received a baccalaureate degree from an accredited college or university and, as judged by his previous scholastic record or otherwise, must show promise of ability to pursue advanced study and research.

All applicants, except those for the M.B.A. program, are required to provide the results of their performance on either the Graduate Record Examination or Miller Analogies Test. In the case of the GRE the results should include the scores obtained on the general aptitude portion of the examination and on **the appropriate advanced test**. Applicants for the Master of Business Administration program should present scores from the Admission Test for Graduate Study in Business in lieu of GRE scores or MAT scores.

An application is not considered complete until all the required transcripts, the appropriate test scores, and letters of recommendation are on file. All material sent in support of an application for admission becomes the property of UMPG and will not be returned to the student.

An applicant's admission status will be one of the following: Regular, Conditional, Non-Degree, or Transient.

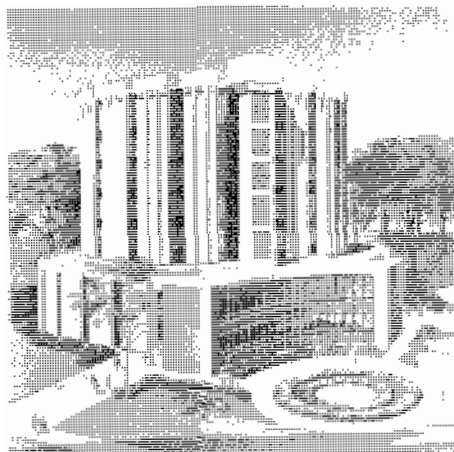


Before the publication of the 1972-73 catalog it is expected that the School of Law will be housed in this new building, now under construction at the corner of Deering Avenue and Falmouth Street, across Deering Avenue from the main portion of the Portland Campus. The School of Law will occupy all but the upper floors of the new building.

School of Law

EDWARD S. GODFREY, DEAN





Architect's sketch of the finished appearance of the building under construction for the School of Law and for Research and Advanced Study.

School of Law

EDWARD S. GODFREY, DEAN

Professors Harry P. Glassman, Edward S. Godfrey, L. Kinvin Wroth, John Andrew Spanogle, Jr., Donald L. Garbrecht (Librarian), David J. Halperin, Orlando E. Delogu; Associate Professors Gerald F. Petruccelli, Jr., Merle W. Loper, Robert J. Desiderio; Lecturers Leonard M. Nelson, Richard E. Poulos, Cushman D. Anthony (Director, Clinical Practice Program), James H. Bonney, Robert B. Williamson, David B. Hawkes, William F. Julavits (Assistant Dean).

History and General Description

The University of Maine School of Law, established in Portland in 1961, is the successor of the university's college of law which existed in Bangor from 1898 to 1920. The school is presently located about a mile from the undergraduate campus of the university in Portland; but during the summer of 1972 the school will move into a new building on that campus, where the law school will share facilities with the Advanced Study and Research Center.

The research activities of the law students and faculty already extend over a wide range of social problems, and the proximity of the law school to the various institutes in the Research Center will foster continuing interdisciplinary study. A distinctive feature of the school is the close working relationship among students and faculty.

The school is a charter member of the Association of American Law Schools, having resumed membership in 1966, and is on the fully approved list of the American Bar Association. As an element of the University of Maine, the school is accredited by the New England Association of Colleges and Secondary Schools.

Library and Physical Facilities

The library, containing over 90,000 volumes, provides a sound working collection of legal and collateral materials. After August, 1972, the library will have space for expansion to 150,000 volumes. An integral part of the library program is a course of instruction to students in legal research, beginning early in the first year and continuing through the senior year as an adjunct of the senior thesis program.

Basic Program of Study and Degree Requirements

The law school is on the semester basis, with 88 semester credits required for the J.D. degree. The first year curriculum, including work in the basic legal subjects, is required of all students. Through the case-and-problem method of instruction, the student has an opportunity to apply, compare, and test legal concepts in varying situations, using legal precedents and authorities from all jurisdictions, as well as relevant materials drawn from other disciplines. The approach is national, although statutes and rules peculiar to Maine are noted to some extent. Classroom work is supplemented by programs of legal writing, drafting, advocacy, and clinical practice designed to promote professional skills. Within this framework the successful student comes to understand basic principles of law, their purposes and social origins, and the processes by which legal institutions grow.

The school has a writing program designed to develop the student's skill in research, writing, and advocacy. In the first year the program is devoted to legal analysis and writing, with emphasis on criticism and rewriting. In the second year a student may participate in a moot court program in which he prepares a formal brief upon an assigned legal issue and argues his position orally before a moot court. Prizes are awarded to the finalists in the moot court competition. In the third year each student is required to prepare, submit and defend a research paper on some topic determined by the student in consultation with a faculty adviser. He may satisfy this requirement by preparation, during the third year, of a note or comment in publishable form for the *Maine Law Review*. The thesis affords the senior law student an opportunity to explore in depth some topic, not necessarily treated in the regular curriculum, in which he has developed a special interest. In appropriate cases, the school will support field research that may be needed in preparation of a senior thesis.

The curriculum is taught by a resident faculty of ten members, plus occasional lecturers from bench and bar.

Special Programs

Third-year students in good standing are permitted under special rules to represent indigent clients before any state court in Maine provided they are properly supervised in a public agency or legal assistance office. Some third-year students will be authorized under similar rules to represent the state in prosecutors' offices in counties near Portland. The clinical practice courses are specifically offered to help the student further develop and refine his skills in advocacy and negotiation. Junior and senior students who are interested in serving as research assistants to professors are often invited to do so.

Activities

Law students participate on many university committees and councils concerned with governance of the University of Maine at Portland-Gorham. The *Maine Law Review*, published twice a year by law students, concerns itself with national and state legal problems, with some emphasis on matters of current interest to the public. The Student Bar Association, which performs the usual functions of student government, has a special committee for research on behalf of lawyers and judges on problems which they refer to it for study; the association is partly financed with the proceeds from such research. The Law Students Civil Rights Research Council gives research assistance in civil rights cases, particularly those arising in Maine, and the Law Forum brings speakers and special lecturers to the school from other states and countries.

Students

About three-fourths of the students are from New England, the rest come from other states, principally the midwest and northeast. In the entire school, during 1970-71, there were 100 students, graduates of sixty colleges and universities, of whom ten were women.

Admissions

An applicant must, by the time of entering law school, hold a bachelor's degree from an accredited college or university and must have taken the Law School Admission Test. Transcript evaluation of LSAT is required except in unusual circumstances. There are no specific prerequisites for undergraduate curriculum. Students beginning their legal studies are admitted only in September; transfer students will be admitted at the beginning of the spring semester only in extraordinary circumstances. Written recommendations may be required, but personal interviews are not especially encouraged. The deadline for applications is February 1, and applications received after that date will be entertained only if the lateness is satisfactorily explained. For those accepted for the class entering in September, 1971, the mean LSAT was 620 and the mean grade-point average was 3.0. Transfer applications will be accepted only for students with good records at the law school they have been attending. Decisions on transfer applications are not made until June or July.

Expenses and Financial Aid

Residents of New England are charged \$450 for tuition for the year 1971-72; non-residents, \$1,350. Scholarships and loans are made available primarily on the basis of comparative need.

Housing

Most law students live in apartments in the city of Portland or suburban homes. There may be a few dormitory rooms available for law students in the undergraduate dormitories at the Gorham campus of the University of Maine at Portland-Gorham. It is recommended that new students come to Portland a few days before school opens in order to find suitable housing.

Where to Write

Persons desiring more detailed information or application forms should write: Registrar, University of Maine School of Law, 68 High Street, Portland, Maine 04101.



Continuing Education Division

WALTER P. FRIDINGER, Director of Public Services
WILLIAM U. SMALL, Director of C.E.D. and Summer Session

Nye E. Bemis, Center Director of Continuing Education and Summer Session, Gorham Campus; John N. Farrar, Assistant Director for Counseling, Continuing Education and Summer Session; Raymond F. Kane, Short Course Coordinator; Catherine A. Laffin, Administrative Assistant to the Director; William P. Mortensen, Director, Bureau of Community Services; Carol J. Gray, Director, Bureau of Health Professions Education.

The Continuing Education Division offers a broad diversity of programs, including those to meet specialized needs and designed to relate the University to the outlying community, and also those to meet the cultural and academic needs of persons who have to work during normal daylight hours but who are able and willing to take university courses offered in the late afternoon, in the evening, on Saturdays, or during day or evening Summer Sessions.

ACADEMIC PROGRAMS OFFERED BY C.E.D.

Persons who have to work during daytime hours may enroll for individual courses for which they are qualified. Adults who have not made formal application for degree status, but are interested in following a C.E.D. program leading to admission as a degree candidate, are required to receive counseling from a C.E.D. Counselor in order to be admitted as Deferred Degree Candidates. Persons who register as Deferred Degree Candidates, complete the basic program specified by their C.E.D. Counselor, and earn grades acceptable for transfer, may then apply as regular Degree Candidates with a transfer of applicable credits.

Applicants who satisfy the same admission standards as students enrolled in the day division of UMPG are classified as Degree Candidates. Undergraduates who wish degree status must apply to the Director of Admissions,

as explained on pages 5 through 10 in this catalog. Graduate students must apply to the Dean of Graduate Studies, as explained on page 193. Degree Candidates are those who have been accepted by the Committee on Admissions.

The Continuing Education Division offers many of the academic programs described on the earlier pages of this catalog. A few programs, such as those of the School of Law or some of the laboratory-centered undergraduate programs in the various sciences, are not offered. Most of the other subjects described in this catalog are available on either an annual or a rotating basis.

The current academic-year enrollment of the Continuing Education Division totals approximately 6,000 part-time students, and an additional 3,000 persons are normally enrolled in the various Summer Session courses. Further details are given on page 4 of this catalog. C.E.D. tuition and fees are listed on page 11.

In addition to the varied CED programs for undergraduate and graduate students, the Division offers many short courses, specialized seminars, and other programs.

CERTIFICATE PROGRAM IN MANAGEMENT

For those who are interested in the field of management and desirous of improving skill and effectiveness, the Continuing Education Division offers a program leading to a certificate in Management.

The program is the result of consultations with business and educational leaders. The subjects are designed to meet the specific needs of the business community. Upon completion, it is expected the participants will be better equipped with basic, usable knowledge of management principles, thus contributing to career, company, and society.

The following courses are offered in the program:

CSM 010 Business Management I	CSM 018 Business Management II
CSM 011 Psychology Applied to Business	CSM 028 Human Relations*
CSM 012 Legal Aspects of Business*	CSM 030 Marketing and Distribution
CSM 013 General Economics	CSM 040 Production Control*
CSM 014 Oral Communication	CSM 041 Electronic Data Processing*
CSM 015 Written Communication	CSM 042 Policy Formulation and Administration
CSM 016 Management Mathematics and Statistics	CSM 050 Managerial Accounting I
	CSM 051 Managerial Accounting II*

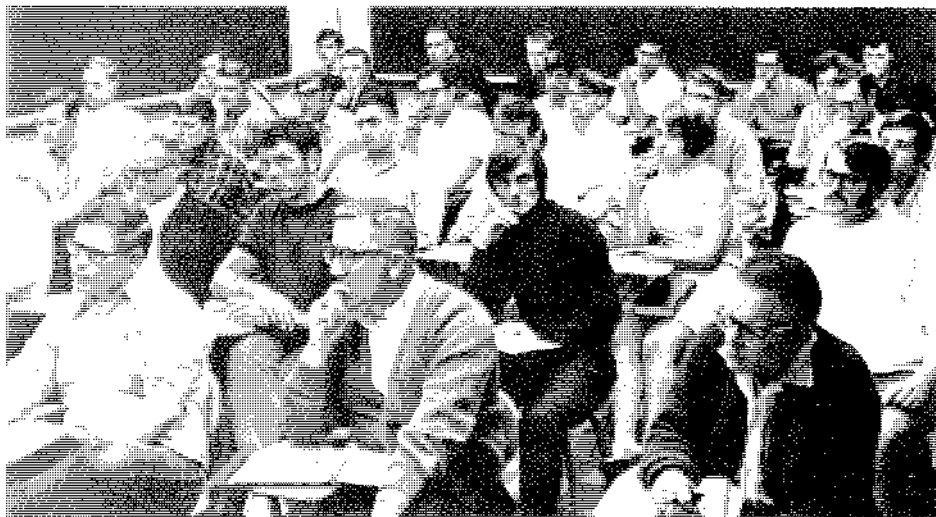
*Electives: Two to be chosen to meet Certificate requirements as explained below.

The subjects of the program are designed to be both flexible and practical from the standpoint of the needs of management. Each course will frequently have the traditional college approach as well as practical aspects necessary for current business practice. A "Certificate of Completion" rather than degree credit will be awarded to those who successfully complete the Certificate Program.

Each course is scheduled for ten weeks and, with a few exceptions, classes will be of two and one-half hours duration. Those not interested in com-

pleting the entire program may register in individual courses. Upon completion of the ten required courses and two of the five elective courses identified with an asterisk (*), a Certificate of Completion will be awarded by the Continuing Education Division.

Instructors include business specialists and faculty members from the University and other institutions. As of September 1971, the fee for each course was \$35, plus a \$5 registration fee. Textbooks and study materials are not included in the charge. A brochure is available upon request.



SPECIALIZED SEMINARS AND SHORT COURSES

Throughout the school year, the Continuing Education Division periodically offers a variety of seminars, institutes, workshops, conferences, and other short courses. The specialized programs are frequently developed at the request of the representative of a group, a member of the university staff, or an interested individual. Many programs include a group of lectures and seminars scheduled for a single day; others consist of briefer sessions once a week for several weeks.

Some of the more popular subject matter is in the area of:

Engineering

Pollution Control

Transportation

Retailing

Purchasing

Management

Shakespeare

Veterinarian Medicine

Although local talent is utilized when available, each lecturer or seminar leader is a professional in his given field, and speakers are often recruited from distant parts of the United States or Canada. Since this type of public service must be self-supporting, a nominal tuition fee is charged.

Information regarding specialized courses is available from the Continuing Education Division Office, 96 Falmouth Street, Portland, Maine 04103 (Telephone 773-2981, extension 273).

PUBLIC SERVICE FACILITIES OF U.M.P.G.

The University of Maine at Portland-Gorham offers facilities at both campuses for conferences, institutes, seminars, workshops, and training programs. Thousands of persons each year take advantage of the resources and facilities offered by the University to such groups.

Meetings of educational value — whether their primary purpose may be to impart information, solve problems, upgrade professional skills, further some aspect of education, or develop a greater understanding of current problems — are a part of the total educational program of the University of Maine at Portland-Gorham.

TRADE AND INDUSTRY PROGRAM

A program recognizing Trade and Industrial Experience and awarding college credit through part-time evening and summer courses leading to a Bachelor of Science degree is designed to:

(a) prepare instructors for the teaching of Vocational-Industrial and/or technical subjects in high schools and post-secondary schools;

or (b) provide non-teaching majors an opportunity to pursue a collegiate program leading to a degree which recognizes trade and technical competencies and provides knowledge in business and industry leading to supervisory, technical, or middle-management positions.

This program is described on page 184 of this catalog.

For additional information, contact Dr. Arthur O. Berry, Director of Trade and Industry, U.M.P.G., Gorham, Maine 04038.

THE NEW CRIMINAL JUSTICE PROGRAM

The Criminal Justice Program is a complete four-year baccalaureate degree program with major concentration patterns in Political Science, Sociology and Criminal Justice sequences. The Program is designed to permit each student to select a 36-hour core curriculum sequence in addition to completing all University requirements for the degree.

The objective of the program is to provide a basis for examining various activities concerned with the process of criminal justice. Students will receive a broad liberal education in conjunction with their concentration upon specialized areas involved within the criminal justice system.

The degree program in Criminal Justice is described on pages 58-59 in this catalog. C.E.D. offers both this program and a Certificate Program for non-degree candidates. Brochures describing both programs may be obtained from either the Portland or Gorham C.E.D. offices.

BUREAU OF HEALTH PROFESSIONS EDUCATION

Including

CONTINUING EDUCATION FOR NURSES

Through the Bureau of Health Professions Education, credit and non-credit courses are being developed to supplement the required general education courses for the nursing major now available on three campuses—Portland, Orono and Presque Isle. As interest and demand are made known to the Bureau Director for special course offerings, efforts will be made to make them available on a credit or non-credit basis in the geographic area having the expressed educational need.

In addition to regular academic course offerings, the Bureau will offer workshops, seminars, institutes and conferences in cooperation with the Maine State Nurses' Association, Bingham Associates, the Regional Medical Program and any other organization wishing joint sponsorship of a program.

Programs in Allied Health will be developed and offered through the Bureau at the request of interested professional groups and health service administrators. It is anticipated that these programs will be financed both by the professional organizations and the students who enroll in the courses.

Program information and student guidance are available through the Bureau Director, Carol J. Gray, R.N., Ed.D., at the University of Maine at Portland-Gorham, 100 Payson Smith Hall, 96 Falmouth Street, Portland, Maine; (Telephone 773-2981, extension 257).

BUREAU OF UNIVERSITY-COMMUNITY SERVICES

The Continuing Education Division established the Bureau of University-Community Services in September of 1969 at Portland-Gorham. The office is located in Payson Smith Hall at the Portland Campus.

Objectives of the Bureau are three-fold:

1. To respond to requests for University assistance by the urban community.
2. To coordinate the Continuing Education Division's efforts to develop new and innovative programs for the disadvantaged and other community groups.
3. To stimulate, develop, and monitor Continuing Education Division proposals and grants which jointly involve the local community and the University of Maine. Thus far, the Bureau has (1) developed a \$235,000 Adult Basic Education proposal for the Model Cities Neighborhood in Portland. The grant has been approved by Health, Education and Welfare. Phase II of this project began on July 1, 1971; (2) completed a study for the Insurance Women of Southern Maine; (3) completed a Synopsis on University of Maine involvement in the Model Cities Program in Portland; (4) provided financial and technical assistance in the writing of additional grant requests; (5) initiated committee work associated with possible major land gifts to be made to the University of Maine.

Further information may be obtained from William G. Mortensen, Director, Bureau of University-Community Services, U.M.P.G., 96 Falmouth Street, Portland.

THE URBAN ADULT LEARNING CENTER

218 State St., Portland (Tel. 774-5881)

The Urban Adult Learning Center is a University of Maine off-campus project, located in the heart of the Portland Model Cities Neighborhood.

The Center provides Maine with its first full-time adult education facility designed to provide basic education for the adults of the disadvantaged community.

The Center implements several forms of adult education, including innovative programs, television high school courses, teacher-training for professionals and para-professionals, and special studies relating to the disadvantaged population of the Model Cities Neighborhood.

The Center's basic objective is to identify ways to broaden and increase educational opportunities for growing numbers of uneducated and undereducated adults.

The Center is equipped with the latest educational and audio-visual aids which facilitate rapid learning. Adult students from the Model Cities area meet with instructors on an individual basis and have complete freedom in scheduling sessions since the Center is open from 9:00 a.m. to 9:00 p.m. five days a week.

The Center's activities reach a segment of the population that ordinarily does not receive the full benefits of the University's resources.

Phase II of this joint federal and University of Maine project commenced on July 1, 1971.



Local Offices Representing Statewide University Functions

Several offices, located in buildings shown on the campus maps near the back of this catalog, are not under the administration of UMPG but represent statewide services of the University of Maine. Among these are the Chancellor's Portland office at 228 Deering Avenue, the Cumberland County office of the Cooperative Extension Service at 15 Chamberlain Avenue, the Portland ETV office for the development of local instructional television at 120 Bedford Street, the Southern Maine office of the Bureau of Labor Education in Payson Smith Hall, and the Gorham Campus office of the Coordinator of Cooperative Education.

THE CHANCELLOR'S OFFICE

One of the offices of the Chancellor of the University of Maine is located next to the new building that is being erected to house the Law School and Advanced Study and Research Center at UMPG. The Chancellor's office building also houses the Health Science Program Planning Staff of the University of Maine.

COOPERATIVE EXTENSION SERVICE

A broad variety of services to bring the benefits of the University to families and community groups in both the inner city and also suburban and rural areas is provided by the Cooperative Extension Service of the University of Maine. All of Cumberland County is served by the CES office at 15 Chamberlain Avenue on the Portland Campus. Some programs, such as the annual series for persons preparing for retirement or the seminars on various aspects of family money management for married couples, are normally offered in UMPG classrooms, if space is available. Many of the urban programs are conducted in low-rent housing developments or Model City neighborhood centers, where 4-H clubs adapted to the needs of urban children are developed and training in homemaking and in the planning and cooking of meals utilizing government-surplus foods is provided. CES aides supplement the services of the professional staff in such cases.

In addition to these newer programs for inner city inhabitants, the more traditional programs for residents of suburban and rural areas throughout Cumberland County are continued. The staff of the Portland CES office includes specialists in urban community development, a nutritionist, a district recreation specialist, a dairy specialist, an agricultural specialist, and other county agents. Visiting specialists from the Orono Campus provide added services from time to time. The work of the local and visiting specialists is multiplied through volunteer leaders in community groups scattered throughout the county.

INSTRUCTIONAL TELEVISION

Instructional television, which is not broadcast for home reception like general educational television but which is beamed directly for use in specific classrooms or other meeting places, is being developed in the Greater Portland area through the services of the Portland ETV office at 120 Bedford Street. One of the recent developments has been the installation of in-service instructional television facilities at major hospitals in the area. Demonstration operations or similar procedures conducted at the University of Vermont Medical School or other facilities are transmitted to the receiving antenna on the roof of Luther Bonney Hall, converted electronically for local transmission, and then beamed to dish antennae mounted on the roofs of local hospitals. In this way, hospital staff members may view the latest surgical or therapeutic techniques on television screens in staff lounge rooms. Both live and taped instructional materials are utilized. This type of development is but one example of the sort of project being developed by the local instructional television office.

BUREAU OF LABOR EDUCATION

The Bureau of Labor Education schedules frequent seminars at convenient locations throughout the State of Maine. Some of these seminars are custom-tailored to meet the needs of specific labor-union organizations. Others, such as the seminars on "Fact Finding for Fact Finders," "Unemployment Compensation," "The Maine Economy," and "Workmen's Compensation," deal with matters of general state-wide concern.

Programs have been developed for groups interested in such subjects as steward training, grievance procedures, preparation for negotiations, negotiating techniques, labor law, ways to run a union meeting, public relations for union or employee organizations, determining the bargaining unit, labor economics, foreign import problems, community action, mediation, fact finding and arbitration, tax policy, labor history, and similar subjects. Other specialized program topics are developed on request. The Bureau of Labor Education also offers some research and consultation services. Persons desiring further information should contact Roger V. Snow, Jr., Director of the Bureau of Labor Education, at his Portland office in Payson Smith Hall.

COOPERATIVE EDUCATION

Cooperative education is a method of integrating classroom theory with practical experience. Students alternate specific periods of attendance at the University with specific periods of employment. The word "cooperative" emphasizes that the plan combines the efforts of employers and educators to form a superior total educational program for students. Its primary value is educational. Of secondary importance is the opportunity for students to earn money for college expenses and for employers to find a ready market of good workers.

Under the direction of University Professor Kenneth T. H. Brooks, a University program of cooperative education is being developed. Since the program was still in the planning stage at the time of the publication of this catalog, persons desiring further details should correspond directly with Dr. Kenneth T. H. Brooks, University Professor, Coordinator of Cooperative Education, College Avenue, Gorham, Maine 04038.



The Cape Cod building, constructed at about the close of the Revolutionary War, is the oldest structure on the Portland Campus. An even older building on the Gorham Campus, the McLellan House, is pictured on page 18. Pictures of many of the other buildings mentioned in this section will be found in the preceding sections of this catalog.

Landmark Dates in the Development of UMPG

- 1773—Construction date of the *McLellan House*, considered to be the oldest brick house in the State of Maine and the oldest building still used by UMPG. It was purchased and renovated by Gorham State College in 1966 and is currently operated as an honor resident dormitory for 16 women students.
- 1780—The approximate date of the construction of the *Cape Cod* building on the Portland Campus. In 1947 it was acquired by purchase of part of the Deering Estate by the trustees of Portland Junior College and has been used for offices ever since.
- 1807—Construction date of the *Academy Building*. Built to house the original Gorham Academy, it was presented to the State of Maine in 1895. In 1966 it was renovated to contain studios, offices, and classrooms for the Art Department.
- 1821—Construction date of the *Art Gallery*, originally built as the Gorham Town Hall. Acquired by Gorham State Teachers College in 1961 for use as a student chapel, it now houses the Gorham Campus Art Gallery.
- 1878—Establishment of *Western Maine Normal School* on the site of the former Gorham Female Seminary approved by the Maine Legislature. The Normal School opened on January 29, 1879, with six faculty members and 85 students.
 - Dr. William Corthell* appointed first president of the institution. He served for 27 years, from 1878 to 1905.
 - Corthell Hall* built to house the original Western Maine Normal School. Afterward named to honor the first president, it now houses administrative offices, information desk, classrooms and offices of the Music Department, and the Museum of Man.
- 1897—Construction of *Robie Hall*, the first unit of the Robie-Andrews Halls dormitory complex. Robie Hall is named for Governor Frederick Robie, an early benefactor of Gorham.

- 1905—Inauguration of *Dr. Walter F. Russell* as the second president of Western Maine Normal School. He served in this office for 35 years, from 1905 to 1940.
- 1906—The *President's Residence* constructed on the Gorham Campus.
- 1911—The *Industrial Arts Program* established at Gorham.
- 1916—*Andrews Hall* constructed. It is named for Professor Emerita of Music, Miriam Andrews. The dormitory complex called Robie-Andrews Halls contains accommodations for 200 resident women students. Andrews Hall also contains classrooms and laboratories of the audio-visual education program.
- 1927—Graduation date of the first class in the *Kindergarten-Primary Program* at Gorham.
- 1931—Construction date of *Russell Hall*, named for the second president at Gorham. It now contains a 500-seat auditorium with stage, workshop facilities, offices for the Theatre-Speech Department, and a small gymnasium for various recreational activities.
- 1938—*Baccalaureate degrees* awarded to the first graduates of a full four-year program at Gorham.
- 1940—Inauguration of *Dr. Francis L. Bailey* as third president at Gorham. He served for 20 years, from 1940 to 1960.
- 1945—*Gorham State Teachers College* adopted as the new name of the Gorham institution.
- 1947—Part of the former Deering Estate purchased as a campus for *Portland Junior College*, which had previously utilized rented quarters. The land purchased forms the nucleus of the present Portland Campus of UMPG.
- The present *University Bookstore Building*, a military war-surplus building, disassembled at its original location, brought by barge to Portland, and reassembled at its present location on the Portland Campus, together with several other buildings which are no longer standing.
- 1955—*Woodward Hall* constructed to provide dormitory accommodations for 96 resident men students. It was named for a former Vice-President of Gorham, Louis B. Woodward.
- 1956—A *Music Education Program*, to prepare supervisors and teachers of music for the public schools, established at Gorham.
- 1957—The *University of Maine in Portland* established by the Maine Legislature, making the former property of Portland Junior College a part of the University of Maine. Until 1961, only the first two years of the academic programs of the University's College of Liberal Arts and College of Education were available, together with the freshman year of several other University of Maine programs.
- 1958—*Dean Luther I. Bonney*, long-time Dean of Portland Junior College, appointed Dean Emeritus by the University of Maine Board of Trustees, retroactive to July 1, 1957.
- Dr. William L. Irvine* appointed Dean of the University of Maine in Portland. He served in this position for three years until 1961.
 - An *Art Education Program*, to prepare supervisors and teachers of art for the public schools, established at Gorham.
 - The *Science Wing of Bailey Hall*, the first unit of the present Bailey Hall complex, constructed at Gorham. It contains classrooms, laboratories, a greenhouse, a science museum, and offices for various physical and biological scientific disciplines.
- 1960—*Payson Smith Hall* constructed at the Portland Campus and named in honor of a prominent Maine educator who had also served with distinction as Commissioner of Education for the Commonwealth of Massachusetts. The lower level contains a large cafeteria, a formal dining room called the College Room, and a small seminar dining room. The main floor now houses the Portland offices for admissions, the registrar, the campus business personnel, student affairs, student aid, testing and counseling, placement, and other services, as well as the Continuing Education Division, the Bureau of Health Professions Education, and the Bureau of University-Community Services. The upper floors contain classrooms; a language laboratory; physics, chemistry, organic chemistry, and geology laboratories; a science lecture hall; the office of the Bureau of Labor Education; and some faculty offices.
- Upton Hall* constructed at Gorham to provide added dormitory and lounge accommodations for women students. The basement now houses the Gorham Campus Bookstore. The building is named for a long-time faculty member, Miss Ethlyn Upton. A second unit, making up the Upton-Hastings complex, was added in 1968.
 - Dr. Kenneth T. H. Brooks* inaugurated as President of Gorham State Teachers College. He served for 10 years, from 1960 to 1970.

- 1961—*The merger of Portland University and the University of Maine in Portland* approved by the Maine Legislature. Portland University had already established a baccalaureate program in Business Administration and a professional School of Law. Following the merger, the latter program was reorganized and developed into the University of Maine School of Law, currently housed in the former Portland University building on High Street in downtown Portland. The four-year undergraduate program in Business Administration was moved to the Portland Campus, to become the first four-year program of the University of Maine to be offered in this area. This program has now evolved into the UMPG School of Business and Economics.
- The Library Wing of Bailey Hall* constructed. The collection of library resources in this building accounts for some 73,000 volumes of nearly 250,000 available to UMPG students in the UMPG collections, almost 11,000 microform items of the UMPG total of some 20,500, nearly 3,000 government documents of the UMPG total of nearly 12,000, and more than 750 periodicals of the total of more than 3,000 UMPG library subscriptions. The library section provides reading areas, conference rooms, a study-smoker, and a music-listening area. The east side of the building contains classrooms, conference rooms, faculty offices, and facilities for closed-circuit television.
 - William L. Whiting* appointed Dean of the University of Maine in Portland. He served in this capacity for four years, from 1961 to 1965.
- 1962—Establishment of the *Continuing Education Division* at the University of Maine in Portland. Under the direction of John M. Blake, former Dean of Portland University, acting as a special assistant to the President of the University of Maine, the previous evening program of Portland University and the Portland extension courses of the University of Maine were consolidated and expanded into a coordinated program.
- 1963—Construction of *Warren G. Hill Gymnasium* at Gorham. Named for a former Maine Commissioner of Education and graduate of Gorham, the 2,500 seat gymnasium provides facilities for men's and women's physical education, locker rooms, classrooms, and offices for Health Services and Gorham members of the Physical Education Department.
- Anderson Hall* constructed at Gorham. Named for Hayden L. V. Anderson, alumnus of Gorham and former Executive Director of Professional Services for the Maine Department of Education, it contains lounges, study areas, and dormitory accommodations for 100 resident men students.
- 1964—A *Graduate School* established at Gorham.
- 1965—*Gorham State College* adopted as the official name of the institution at Gorham.
- Dr. David R. Fink, Jr.*, appointed Dean of the University of Maine in Portland. After serving as Dean for three years, he was promoted to Provost by the Board of Trustees in 1968, in which position he served until joining the Chancellor's staff in 1970.
 - Construction of the *Industrial Education and Technology Center* at Gorham. It contains offices, classrooms, and laboratories for conducting programs in industrial arts and vocational-industrial teacher education, providing facilities to teach concepts in the manufacturing, construction, power-transportation, electrical-electronics, graphic communications, and service industries.
 - Dedication of *Luther I. Bonney Hall* at Portland, a five-story building named in honor of the Dean Emeritus of the Portland Campus. The main floor contains academic administrative offices and Luther Bonney Auditorium, a modern, air-conditioned lecture hall seating 250 persons. The upper floors contain classrooms, seminar rooms, faculty offices, and specialized quarters for art studios, choral groups, closed circuit and other instructional television, and other audio-visual aids.
 - Opening of the *Library Wing of Bonney Hall* at Portland. The two-story wing at the left of the main entrance of Bonney Hall houses approximately 86,000 volumes of the nearly 250,000 books in the UMPG library collections, some 10,000 microform items of the UMPG total of nearly 20,500, and more than 9,000 government documents of the UMPG total of approximately 12,000. Almost 1,600 periodicals, including many scholarly journals, are regularly received. In addition to plentiful study carrels, four rooms called the Quattro Galleries, containing shifting art exhibits and comfortable furniture, provide facilities for smoking, recreational reading, listening to recorded music, and other functions.
- 1966—A *Secondary Education* program established at Gorham.

- 1967—A baccalaureate program in the *Liberal Arts* established at Gorham.
- 1968—Establishment of Gorham State College as a unit of the University of Maine with the official title of *Gorham State College of the University of Maine*.
- Hastings Hall* constructed at Gorham and named for a long-time faculty member, Miss Mary Hastings. The complex of Upton-Hastings Halls contains lounges and dormitory accommodations for 300 resident women students.
 - Acquisition of scattered houses or house lots in the vicinity of Bedford Street and Chamberlain Avenue in Portland to provide quarters for the *Student Union* and various administrative or faculty offices and to enlarge student parking facilities.
- 1969—Opening of the Portland Campus *Gymnasium and Physical Education Building*. The main gymnasium can seat 2,800 spectators. The building also contains offices, classrooms, Health Center offices, examination rooms, a general purpose corrective and adaptive room, a dance room for women, and a small auxiliary gym for a variety of activities. Two squash courts and two handball courts are located in a wing on the lower level behind the main building.
- Opening of the *Science Building* at the Portland Campus. The main tower of the Science Building, six stories high, has facilities for students in the engineering programs, as described in this catalog, on the ground floor; laboratories for the various biological sciences, as well as offices, seminar rooms, and classrooms, on the second, third, and fourth floors; laboratories and other facilities for the courses in psychology on the fifth floor; and quarters for experimental animals, as well as a greenhouse for botanical specimens, on the sixth floor. In the two-story wing, the *Southworth Planetarium* is located on the lower and ground-floor levels. The *Portland Computer Center*, ringed about with faculty offices, occupies the second-floor space directly above the Southworth Planetarium.
 - Rapid increase in the *Baccalaureate Degree programs* offered at the Portland Campus. The facilities offered by the new buildings, coupled with the marked increase in faculty and student body, enabled the University Board of Trustees to authorize, at successive meetings during this period between 1965 and 1970, a number of added programs leading to a baccalaureate degree, with majors in various arts and sciences.
 - Opening of the *Classroom Wing of Bailey Hall* at Gorham. This final unit of Bailey Hall contains a 200-seat multi-purpose lecture hall, a student lounge, classrooms, and academic and faculty offices.
 - Bachelor of Arts* degrees awarded to the first group of candidates completing this new program at Gorham.
- 1970—*Dean Edward S. Godfrey* of the School of Law appointed to serve as Acting Provost of the Portland Campus for the final semester before the administrative formation of the University of Maine at Portland-Gorham on July 1, 1970.
- Dr. William J. MacLeod*, Professor of Philosophy, appointed Acting President of the University of Maine at Portland-Gorham on July 1, 1970. Dr. MacLeod served for one year during the period of administrative merger of the former University of Maine in Portland, the University of Maine School of Law, and Gorham State College of the University of Maine.
 - Dr. Kenneth T. H. Brooks*, former President of Gorham State College of the University of Maine, created University Professor of Education.
 - Opening of the *Dining Center* at the Gorham Campus. It contains a 900-seat dining hall, faculty and Presidential dining rooms, a snack bar, and a student lounge, together with offices and conference rooms for student organizations and other activities.
 - Opening of the *Tower Residences* at the Gorham Campus. These twin high-rise student residences provide accommodations for 380, with lounge and study facilities.
- 1971—*Dr. Louis J. P. Calisti* appointed the first President of the University of Maine at Portland-Gorham, effective July 1, 1971. Dr. William J. MacLeod at the same time assumed office as Vice President for Academic Affairs. Dr. Gordon S. Bigelow assumed office as Vice President for Student Affairs.
- Academic reorganization of the University of Maine at Portland-Gorham* as a single, integrated University, as reflected by the organization of the 1971-72 catalog, completed at the opening of the academic year in September 1971. Shuttle-bus transportation permitting students to schedule courses on either campus was established at the same time.

The University of Maine at Portland-Gorham

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Chancellor of The University of Maine

DONALD R. McNEIL

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UNIVERSITY LIBRARIAN	Clifton F. Giles, Jr.
LIBRARIAN, PORTLAND CAMPUS	Marjorie A. Duval
DIRECTOR OF EDUCATIONAL MEDIA	Allen W. Milbury
COORDINATOR OF HUMAN SERVICE	
MANPOWER PROGRAMMING	Stephen P. Simonds

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BUSINESS MANAGER, GORHAM	Wayne F. Briggs
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DIRECTOR OF PURCHASING	Elliott K. Hale
BOOKSTORE MANAGER	Thomas E. O'Flaherty

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COORDINATOR OF STUDENT ACTIVITIES	Kathryn A. Monahan
ASSOCIATE DEAN OF STUDENTS FOR STUDENT SERVICES	
AND DIRECTOR OF FINANCIAL AID	Jerome H. Sullivan
ASSISTANT DEAN OF STUDENTS FOR STUDENT SERVICES	
AND ASSISTANT DIRECTOR OF PLACEMENT	Kenneth W. Lane
DIRECTOR OF PLACEMENT	Frederick E. Freise
ASSISTANT DIRECTOR OF FINANCIAL AID	Peter C. Gregory
DIRECTOR OF TESTING AND COUNSELING	Jane O. Sanborn
PSYCHOLOGICAL CONSULTANT	Ira H. Hymoff
ASSOCIATE DEAN OF STUDENTS FOR HOUSING	Koharig S. Kimmel
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MANAGER, FOOD SERVICES	Alan D. Bagge

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DEVELOPMENT OFFICER	Maurice E. Littlefield
ALUMNI DIRECTOR	Bertha F. Higgins
EDITOR OF PUBLICATIONS	Alvin D. Rogers

Administrative Staff of the Director of Public Service

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CENTER DIRECTOR OF CONTINUING EDUCATION AND SUMMER SESSION, GORHAM CAMPUS	Nye E. Bemis
ASSISTANT DIRECTOR FOR COUNSELING, CONTINUING EDUCATION AND SUMMER SESSION	John N. Farrar
SHORT COURSE COORDINATOR	Raymond P. Kane
ADMINISTRATIVE ASSISTANT TO THE DIRECTOR	Catherine A. Laffin
DIRECTOR, BUREAU OF COMMUNITY SERVICES	William P. Mortensen
DIRECTOR, BUREAU OF HEALTH PROFESSIONS EDUCATION	Carol J. Gray



Academic Administrative Structure of Undergraduate Colleges and Schools

COLLEGE OF LIBERAL ARTS

DEAN	Robert A. Estes (Acting)
ASSOCIATE DEAN	William L. Whiting
CHAIRMAN, ART DEPARTMENT	Lawrence F. Rakovan
CHAIRMAN, BIOLOGICAL SCIENCES DEPT.	Haig H. Najarian (Acting)
CHAIRMAN, ENGLISH DEPARTMENT	Phillip R. Rutherford
CHAIRMAN, FOREIGN LANGUAGES AND CLASSICS	Yves F. Dalvet
CHAIRMAN, GEOGRAPHY AND ANTHROPOLOGY	Franklin D. Hodges
CHAIRMAN, HISTORY DEPARTMENT	Phillip A. Cole
CHAIRMAN, MATHEMATICS DEPARTMENT	Paul C. Rogers
CHAIRMAN, MUSIC DEPARTMENT	Gerard G. Chamberland (Acting)
CHAIRMAN, PHILOSOPHY DEPARTMENT	William J. Gavin
CHAIRMAN, PHYSICAL SCIENCES AND ENGINEERING ..	Maurice M. Whitten
CHAIRMAN, POLITICAL SCIENCE DEPARTMENT	Allen G. Pease
DIRECTOR OF CRIMINAL JUSTICE PROGRAM	Donald L. Dahlstrom
CHAIRMAN, PSYCHOLOGY DEPARTMENT	Estelita L. Saldanha
CHAIRMAN, SOCIAL WELFARE DEPARTMENT	John M. Romanyshyn
CHAIRMAN, SOCIOLOGY DEPARTMENT	S. Henry Monsen
CHAIRMAN, THEATRE-SPEECH DEPARTMENT	Minor R. Rootes

SCHOOL OF BUSINESS AND ECONOMICS

DEAN John W. Bay
CHAIRMAN, BACCALAUREATE PROGRAM
IN BUSINESS ADMINISTRATION Robert W. Findlay
CHAIRMAN, ASSOCIATE PROGRAM
IN BUSINESS ADMINISTRATION Richard L. McKeil
CHAIRMAN, ECONOMICS DEPARTMENT Leon J. Bien

SCHOOL OF EDUCATION

DEAN William B. Wise (Acting)
CHAIRMAN, ELEMENTARY EDUCATION DEPARTMENT Melissa H. Costello
CHAIRMAN, FOUNDATIONS DEPARTMENT James M. Whitten
CHAIRMAN, SECONDARY EDUCATION DEPARTMENT Merrill E. Cobb
CHAIRMAN, INDUSTRIAL ARTS DEPARTMENT John Mitchell
DIRECTOR, VOCATIONAL TRADE AND
INDUSTRIAL EDUCATION PROGRAM Arthur O. Berry
CHAIRMAN, PHYSICAL EDUCATION DEPARTMENT James V. Sullivan

SCHOOL OF GENERAL AND INTERDISCIPLINARY STUDIES

DEAN Angelo A. Lacognata (Acting)

SCHOOL OF NURSING

DEAN Mary Ann Eells
ASSISTANT DEAN Anna B. Ivanisin
CHAIRMAN, COMMUNITY HEALTH NURSING Marjorie M. Roscoe
CHAIRMAN, MATERNAL AND CHILD HEALTH NURSING Phyllis A. Tryon
CHAIRMAN, MEDICAL-SURGICAL NURSING Jeanne G. Talbot
CHAIRMAN, ADVANCED MEDICAL-SURGICAL NURSING Judith T. Stone

Academic Administrative Structure of Graduate and Graduate Professional Schools

GRADUATE SCHOOL

DEAN Robert M. York
ASSISTANT DEAN Elizabeth F. Kerr

SCHOOL OF LAW

DEAN Edward S. Godfrey
ASSISTANT DEAN William F. Julavits
REGISTRAR Doris M. Peters
DIRECTOR, CLINICAL PRACTICE PROGRAM Cushman D. Anthony
LIBRARIAN, SCHOOL OF LAW Donald L. Garbrecht

PERSONNEL

of the

University of Maine at Portland-Gorham

EMERITI

- ANDREWS, MIRIAM E. (1922-1960), B.S., M.A., Professor Emerita of Music
- BAILEY, FRANCIS L. (1940-1960), B.A., M.A., Ph.D., President Emeritus of Gorham State College of the University of Maine
- BONNEY, LUTHER ISAAC (1957-58), Bates College, B.A., 1906; M.A. (Hon.), 1951; University of Maine, Sc.D. in Ed., 1959; Dean Emeritus, University of Maine in Portland

PERSONNEL

(The following listing includes both teaching faculty and also members of the UMPG administrative personnel. Dates in parentheses indicate the year of initial appointment.)

- ALBEE, PARKER BISHOP, JR. (1966) Associate Professor of History; Dartmouth College, A.B., 1961; Duke University, M.A., 1964; Ph.D., 1968
- ALLEN, BRUCE A. (1970) Instructor in Mathematics Education; Gorham State College, B.S., 1960, M.S. in Ed., 1967
- ANDREWS, SAMUEL GEORGE (1966) Assistant Professor of Business Administration; Babson Institute, B.S.B.A., 1964; University of Maine, M.S., 1966
- ANNETT, DONALD ARCHIE (1969) Assistant Professor of Business Administration; University of New Hampshire, B.S., 1937; New York University, M.B.A., 1963
- ANSPACH, DONALD FREDERICK (1970) Assistant Professor of Sociology; Franklin and Marshall College, A.B., 1964; Western Reserve University, M.A., 1966; Case Western Reserve University, Ph.D., 1970

- ANTHONY, CUSHMAN D. (1969) Lecturer, School of Law, and Director, Clinical Practice Program; Amherst College, B.A., 1961; University of Michigan, J.D., 1967
- ARMENTROUT, CHARLES EDWIN (1960) Assistant Professor of Physics; University of Maine, B.A., 1955; Wesleyan University, M.A., 1958; Columbia University, M.S., 1970
- AYERS, GEORGE H. (1959) Assistant Professor of Science; University of Maine, B.A., 1951; Ohio State University, M.A., 1959
- BAIER, LEE S. (1966) Associate Professor of English; Reed College, A.B., 1948, Columbia University, M.A., 1952, Ph.D., 1965
- BANNER, GERALD T. (1968) Reference Librarian, Portland Campus; New School for Social Research, B.A., 1965; Pratt Institute, M.L.S., 1967
- BARKER, GEORGE J. (1955) Associate Professor of Biological Science; Gorham State College, B.S., 1951; Boston University, Ed.M., 1958
- BAY, JOHN WILLIAM (1965) Dean of the School of Business and Economics; Associate Professor of Business and Economics; Saint Ambrose College, B.A., 1961; Boston College, M.A., 1964; Ph.D., 1966
- BEARCE, JEANA DALE (1965) Associate Professor of Art; Washington University, B.F.A., 1951; New Mexico Highlands University, M.A., 1954
- BEMIS, A. NYE (1970) Center Director of Continuing Education and Summer Session, Gorham Campus, and Instructor in Education; Gorham State College, B.S., 1964; M.S., 1969
- BERGESON, PHILIP H. (1970) Assistant Professor of Education; Utah State University, B.S., 1963; Indiana University, M.S. in Ed., 1969
- BERNARD, JULES EUGENE (1963) Professor of English; Yale, B.A., 1934; M.A., 1936; Ph.D., 1937
- BERRY, ARTHUR O. (1955) Director, Vocational Trade and Industrial Education Program, UMPG; Professor of Industrial Arts; Gorham State College, B.S., 1950; Pennsylvania State University, Ed.M., 1954; University of Connecticut, Ph.D., 1969
- BIBBER, JOYCE K. (1967) Associate Professor of History; Westbrook Junior College, AA., 1956; Barnard College, B.A., 1958; Stanford University, M.A., 1962; Ph.D., 1969
- BIEN, LEON J. (1970) Assistant Professor of Economics and Chairman, Department of Economics; Boston College, B.A., 1966; Michigan State University, M.A., 1970
- BIGELOW, GORDON S. (1971) Vice President for Student Affairs; Brown University, A.B., 1954; University of Maine, Ed.M., 1962; Brigham Young University, A.M., Ph.D., 1967
- BISHOP, JOHN SCOTT (1968) Associate Professor of Psychology; University of New Brunswick, B.A., 1953; Dalhousie University, M.A., 1957; University of London, Ph.D., 1958
- BONNEY, JAMES H. (1970) Lecturer, School of Law; Bowdoin College, A.B., 1948; University of Vermont, M.D., 1953; University of Maine, J.D., 1967
- BOUCHARD, JOEY A. (1968) Assistant Professor of Physical Education; Springfield College, B.S., 1960, M.Ed., 1961; Boston University, C.A.S., 1968

- BOWDEN, REGINALD B. (1965) Director of Public Information and Development; University of Maine, B.A., 1955
- BOWDER, JERRY L. (1960) Professor of Music; University of Washington, B.A., 1952; Lewis and Clark College, M.M., 1956; Eastman School of Music, Ph.D., 1960
- BOWMAN, JAMES A. (1949) Associate Professor of Educational Psychology; Gorham State College, B.S., 1947; Boston University, Ed.M., 1951
- BRADBARD, DAVID A. (1969) Instructor in Mathematics; University of New Hampshire, B.S., 1964, M.S., 1969
- BRADY, JAMES B. (1969) Technical Services Librarian, Gorham Campus; State University of New York at Albany, B.S., 1967, M.L.S., 1969
- BRETON, LILLETTE CAMILLE (1969) Instructor in Physical Education; University of Maine, B.S., 1965; M.S., 1968
- BRIGGS, WAYNE F. (1965) Business Manager, Gorham Campus
- BROOKS, KENNETH T.H. (1959) University Professor of Education, President of Gorham State College (1960-70); University of New Hampshire, A.B., 1947; Boston University, Ed.M., 1948, Ed.D., 1955
- BROWN, WILLIAM ALLEN (1960) Associate Professor of Mathematics; Bowdoin, B.A., 1954; University of Maine, M.A., 1959
- BULLOCK, WILLIAM B. (1970) Director of Finance and Administration; Cornell University, B.S., 1954; M.B.A., 1959
- BURKE, L. MORRILL, JR. (1959) Assistant Professor of English; Bowdoin, A.B., 1949; University of Washington, M.A., 1951
- CALIENDO, NATALE S., JR. (1970) Athletic Trainer and Instructor in Physical Education; Springfield College, B.S., 1965
- CALISTI, LOUIS J. P. (1971) President of the University of Maine at Portland-Gorham; Rutgers University, B.S., 1945; University of Pennsylvania, D.D.S., 1949; Harvard University School of Public Health, M.P.H., 1960
- CAMPBELL, THEODORE R. (1968) Director of Plant, UMPG
- CANNON, DONALD QUAYLE (1967) Associate Professor of History; University of Utah, B.A., 1961; M.A., 1962; Clark University, Ph.D., 1967
- CANTY, JOSEPH PATRICK (1959) Associate Professor of Mathematics; United States Naval Academy, B.S., 1929; University of Maine, M.A., 1962
- CARNER, FRANK K. (1970) Assistant Professor of English; Temple University, B.S. in Ed., 1964, M.A., 1967
- CARPER, THOMAS R. (1967-69) (1970) Assistant Professor of English; Harvard University, A.B., 1958; New York University, M.A., 1967
- CARTER, RICHARD H. (1964) Assistant Professor of Industrial Arts; Gorham State College, B.S., 1954; University of Maine, Ed.M., 1964
- CHABOT, MAURICE JOSEPH (1965) Assistant Professor of Mathematics; University of Maine, B.A., 1961; Bowdoin College, M.A., 1965
- CHAMBERLAND, GERARD G. (1957) Associate Professor of Music and Acting Chairman, Department of Music; Boston University, B. of Mus., 1950, M.M., 1956

- CHANDLER, JOSEPH (1968-69) (1970) Instructor in Business and Economics; Bowdoin College, A.B., 1942; University of Maine, M.B.A., 1967; University of New Hampshire, M.A. in Economics, 1971
- CHENEY, PHILIP D. (1971) Assistant Registrar — Scheduling; University of Maine at Orono, B.A., 1968
- CHRONISTER, FLOYD BROWN (1966) Associate Professor of Education; Conservatory of Music of U.M.K.C., Missouri, B.M., 1953; University of Kansas, B.M.E., 1955; M.M.E., 1959; Ed.D., 1969
- CLARK, ELMER BANKS FRED (1946) Associate Professor of French and Spanish; University of Florida, B.A.E., 1935; M.A., 1937
- CLARKE, ALFRED EVANS (1946) Part-time Admissions Officer; Dartmouth College, A.B., 1929
- COBB, MERRILL E. (1966) Professor of Education and Chairman, Department of Secondary Education; University of Maine, B.S., 1949, Ed.M., 1953; University of Massachusetts, Ed.D., 1968
- COFFIN, RICHARD NEAL (1964) Associate Professor of English; Bowdoin College, B.A., 1951; Harvard University, A.M., 1952; Boston University, Ph.D., 1962
- COGGESHALL, JUDITH ANN (1971) Instructor in Nursing; Augustana College, B.S.N., 1966; Boston University, M.S. 1971
- COLE, PHILLIP ALBERT (1957) Professor of History and Chairman, Department of History; Boston University, B.S., 1954; M.A., 1955; Ph.D., 1963
- COLE, RONALD F. (1963) Assistant Professor of Music; Bowdoin College, B.A., 1961; Eastman School of Music, M.A., 1963
- COLUCCI, NICHOLAS DOMINIC, JR. (1969) Assistant Professor of Education; Gorham State College, B.S., 1963; University of Connecticut, M.A., 1964; Ph.D., 1969
- CONNICK, GEORGE PERCY (1966) Associate Professor of History; Acting Director of Academic Planning, UMPG; Stanford University, B.A., 1957; San Jose State College, M.A., 1960; University of Colorado, Ph.D., 1969
- COSTELLO, MELISSA H. (1953) Associate Professor of Education and Chairman, Department of Elementary Education; Gorham State College, B.S., 1952; University of Maine, Ed.M., 1957; C.A.S., 1960
- COSTELLO, RICHARD A. (1953) Director of Athletics, UMPG; Professor of Health and Physical Education; University of Alabama, B.S., 1952; University of Illinois, M.S., 1953; Springfield College, D.P.E., 1965
- COTTON, JEAN (1967) Associate Professor of Nursing and Chairman, Department of Psychiatric Nursing; Simmons College, B.S., 1960; Boston University, M.S., 1962
- CROCHET, MONIQUE Y. (1970) Assistant Professor of French; University of Paris, Sorbonne, B.A., 1959, M.A., 1960, M.A.T., 1960, Ph.D., 1969
- DAHLSTROM, DONALD LEE (1971) Director of Criminal Justice Program; Assistant Professor of Political Science; American University, B.S., 1965; Washington State University, M.A., 1969

- DALVET, YVES FRANCOIS (1968) Associate Professor of French and Chairman, Department of Foreign Languages and Classics; Laval College, B.A., 1940; New York University, M.A., 1965; Yale University, M.Ph., 1969
- DAVIS, EVERETT A. (1966) Instructor in Education; Gorham State College, B.S., 1961; Indiana University, M.S.Ed., 1966
- DELOGU, ORLANDO E. (1966) Professor of Law, School of Law; University of Utah, B.S., 1960; University of Wisconsin, M.S., 1963, J.D., 1966
- DESIDERIO, ROBERT J. (1971) Associate Professor of Law, School of Law; St. Joseph's College (Philadelphia), B.S., 1963; Boston College, J.D., 1966
- DI BENEDETTO, LUCIA A. (1970) Instructor in French; Emmanuel College, B.A., 1963; Middlebury College, M.A., 1965
- DICKEY, EDNA F. (1946) Associate Professor of History; University of New Hampshire, B.A., 1933, M.A., 1936
- DIETRICH, CRAIG (1968) Assistant Professor of History; University of Chicago, A.B., 1961; Ph.D., 1970
- DORSEY, F. DONALD JR. (1967) Assistant Professor of Biology; Bowdoin College, A.B., 1950; Syracuse University, M.S., 1960; Simmons College, M.S., 1964
- DUBOWICK, DOROTHY BUNKER (1968) Instructor in Nursing; Colby College, A.B., 1948
- DUCLOS, ALBERT JOSEPH (1965) Assistant Professor of Speech; University of Maine, B.S., 1963; M.A., 1965
- DUCLOS, GLORIA SHAW (1962) Associate Professor of Classics; Radcliffe, A.B., 1949; M.A., 1953; Oxford University, B.A., 1951; M.A., 1955
- DURGIN, FRANK ALBERT, JR. (1964) Professor of Business and Economics; Tufts University, B.A., 1949; University of Toulouse, France, Licence en Droit, 1954; Docteur en Droit, 1956
- DUVAL, MARJORIE ANN (1962) Librarian, Portland Campus; Associate Professor of Library Service; New England Conservatory of Music, B. Mus., 1945; Simmons College, M.S., 1962
- EASTMAN, JOEL WEBB (1970) Assistant Professor of History; University of Maine at Orono, B.A., 1962; M.A., 1965
- EDGECOMB, ALICE DYER (1969) Extension Agent (Cumberland County), Cooperative Extension Service; Farmington State College, B.S., 1965; Gorham State College, M.S., 1968
- EDWARDS, MARY JORDAN (1966) Instructor in Nursing; Cornell, B.S., 1952
- EELLS, MARY ANN (1969) Dean of University of Maine School of Nursing and Associate Professor of Nursing; State University of New York, B.S., 1955; University of Rochester, M.S., 1968; Ed.D., 1970
- EMANUELSON, MILLARD E. (1966) Lecturer in Business Administration; Colby, B.S., 1936; Boston University, LL.B., 1951
- EMERSON, HORTON W., JR., (1962) Professor of History; Colby College, A.B., 1949; Yale University, Ph.D., 1957
- EMERY, VIRGINIA L. (1966) Administrative Assistant to the President, UMPG; Shaw's Business College, 1938
- ESTES, ROBERT A. (1966) Acting Dean, College of Liberal Arts; Professor of Mathematics; Bowdoin College, A.B., 1958; University of Kansas, M.A., 1961; University of Michigan, Ph.D., 1968

- FARRAR, JOHN NORTH (1966) Assistant Director for Counseling, Continuing Education and Summer Session; University of Maine, B.A., 1951; M.Ed., 1958; C.A.S., 1962
- FAULKNER, HOWARD M. (1970) Associate Professor of Graphics; Massachusetts State College at Fitchburg, B.S. in Ed., 1957; Northeastern University, M.Ed., 1960
- FICKETT, REGINALD N. (1964) Assistant Professor of Education; Gorham State College, B.S., 1958; University of Maine, Ed.M., 1960, C.A.S., 1968
- FIELD, JACQUELINE C. W. (1971) Exchange Instructor in Art; Edinburgh College of Art, D.A., 1962
- FINDLAY, ROBERT WALKER (1967) Associate Professor of Accounting and Chairman, Baccalaureate Program in Business Administration; Boston University, B.S., 1955; M.B.A., 1964; C.P.A. (Massachusetts and Maine)
- FISH, CAROLYN WELCH (1968) Assistant Professor of Nursing; Boston University School of Nursing, B.S., 1964; University of North Carolina, M.P.H., 1967
- FISH, LINCOLN T., JR. (1959) Professor of Mathematics; University of Maine, B.S., 1948; M.A., 1949; Boston University, Ed.D., 1951
- FISHER, IRVING D. (1967) Assistant Professor of Political Science; University of Connecticut, B.A., 1946; Columbia University, M.A., 1953
- FITZPATRICK, ALBERT ARTHUR (1968) Professor of Business and Economics; University of Southern California, B.S., 1949; M.B.A., 1951; Baylor University, M.S., 1955; University of Southern California, Ph.D., 1962
- FOLSOM, ROBERT EUGENE (1968) Assistant Professor of Physical Education; Springfield College, B.S., 1953; Boston University, Ed.M., 1963
- FOSTER, CAROLYN NEIDIG (1966) Assistant Professor of Mathematics; Douglass College (Rutgers), A.B., 1958; Purdue University, M.S., 1961; Bowdoin College, A.M., 1966
- FRANKLIN, PATRICIA R. (1970) Instructor in Art; Pratt Institute, B.F.A., 1962; The Tulane University of Louisiana, M.F.A., 1970
- FREISE, FREDERICK E. (1965) Director of Placement, UMPG; Culver Stockton College, B.A., 1941; Boston University, M.Ed., 1947
- FRENCH, ROBERT J. (1969) Assistant Professor of Geography; Dartmouth College, A.B., 1957; Northeastern University, M.Ed., 1967
- FRIDINGER, WALTER PETER (1961) Director of Public Service; Lebanon Valley College, B.S., 1938
- FULLAM, DAVID C. (1970) Instructor in Sociology; Colby College, B.A., 1960; University of New Hampshire, M.A., 1965; M.A., 1969
- GARBRECHT, DONALD L. (1962) Law Librarian and Professor of Law, School of Law; University of Minnesota, A.B., 1958, LL.B., 1961
- GAVIN, WILLIAM JOSEPH (1968) Assistant Professor of Philosophy and Chairman, Department of Philosophy; Fordham University, B.A., 1965; M.A., 1967; Ph.D., 1970
- GIGUERE, MADELEINE DINORA (1967) Associate Professor of Sociology; College of New Rochelle, B.A., 1947; Fordham University, M.A., 1950
- GILES, CLIFTON F., JR. (1969) University Librarian, UMPG; University of Massachusetts, B.A., 1960; University of Illinois, M.L.S., 1963

- GLASSMAN, HARRY P. (1962) Professor of Law, School of Law; University of California (Berkeley), A.B., 1949, LL.B., 1951; University of Virginia, LL.M., 1962
- GODFREY, EDWARD S. (1962) Dean and Professor of Law, School of Law; Harvard College, A.B., 1934; Columbia University, J.D. 1939
- GOODWIN, JEANETTE L. (1955) Associate Professor of Physical Education; Sargent College, B.S., 1944; Springfield College, Ed.M., 1955
- GRANGE, JOSEPH (1970) Assistant Professor of Philosophy; St. Joseph's, B.A., 1961; Fordham University, M.A., 1965; Ph.D., 1970
- GRASS, CALVIN F. (1966) Associate Professor of Physics; Boston University, A.B., 1949; University of Maine, Ed.M., 1954
- GRAY, CAROL J. (1970) Associate Professor of Nursing; Assistant Director of Nursing; Director, Bureau of Health Professions Education, UMPG; Columbia University, B.S. 1962; University of Washington, M.N., 1964; Columbia University, M.Ed., 1968; Columbia University, Ed.D., 1970
- GREENWOOD, HELEN L. (1969) Assistant Professor of Biology; Northeastern University, B.S., 1958; University of New Hampshire, M.S., 1960; University of Connecticut, Ph.D., 1969
- GREGORY, PETER C. (1970) Assistant Director of Financial Aid; University of Maine in Portland, B.S. and B.A., 1964
- GROSSINGER, RICHARD S. (1970) Instructor in Anthropology; Amherst College, A.B., 1966; University of Michigan, A.M., 1968
- GUAY, MERLE DANA (1969) Associate Professor of Mathematics; Tufts University, B.S., 1958; Maine, M.A., 1960; Michigan State University, Ph.D., 1967
- HACKETT, GEORGE F. (1968) Associate Professor of Education; Central Michigan University, B.A., 1952; University of Michigan, M.A., 1957
- HALE, ELLIOTT K. (1971) Director of Purchasing; University of Maine, B.A., 1948
- HALL, OWEN C. (1961) Associate Professor of Accounting; Portland University, B.S., 1955; Maine Society of Public Accountants, C.P.A.
- HALPERIN, DAVID J. (1966) Professor of Law, School of Law; Illinois Institute of Technology, B.S., 1949; Columbia University, M.S., 1950; Chicago-Kent College of Law, J.D. 1958; Yale University, LL.M., 1966
- HAMMOND, RITA (1969) Instructor in Nursing; Boston University School of Nursing, B.A., 1964
- HANNA, JOHN G. (1963) Professor of English; Trinity College, B.S., 1936; Harvard University, B.A., 1946; Boston University, Ph.D., 1958
- HANSEN, EDWIN R. (1964) Professor of Speech; Tufts, B.S., 1936; University of Denver, M.A., 1947; Cornell University, Ph.D., 1952
- HARE, PARNELL S. (1963) Associate Professor of Science; University of Maine, B.S., 1956; University of New Hampshire, M.S., 1960
- HAWKES, DAVID B. (1971) Lecturer, School of Law; University of Maine, B.S., 1966, J.D., 1969; Boston University, LL.M., 1970; C.P.A. 1971
- HEARNS, JOSEPH F. (1970) Assistant Professor of Psychology; Boston College, B.A., 1964; University of Mass., M.S., 1966; Ph.D., 1967
- HEEL, HELEN E. (1953) Assistant Professor of Music; Gorham State College, B.S., 1942; University of Michigan, M.M., 1948
- HEMPEL, CARL H. (1967) Director of Student Teaching, Professor of Education; Hyannis State Teachers College, B.S., in Ed., 1941; University of Connecticut, M.S. in Ed, 1950; Ph.D., 1960

- HERNANDEZ, ADELE BETANCOURT (1962) Part-time instructor in Spanish, Director of Language Laboratory
- HIGGINS, BERTHA F. (1966) Alumni Director; Gorham State College, B.S., 1939
- HIGGINS, GEORGE MICHAEL (1971) Assistant to the Director of Finance and Administration; University of Maine at Portland-Gorham, B.A., 1971
- HODGDON, PAULA D. (1967) Associate Professor of Physical Education; Lasell Junior College, A.A., 1948; Beaver College, B.A., 1950; Teachers College, Columbia University, M.A., 1952
- HODGES, FRANKLIN D. (1966) Assistant Professor of Geography and Chairman, Department of Geography and Anthropology; Farmington State College, B.S., 1961; Clark University, M.A., 1966
- HOJNACKI, KATHLEEN M. (1969) Assistant Dean of Students for Off-campus Programs and Student Development; Western Michigan University, B.A., 1966; Indiana University, M.S., 1969
- HOLMES, PETER KARL (1968) Associate Professor of Biology; Bowdoin College, A.B., 1956; Wesleyan University, M.A., 1958; University of Illinois, Ph.D., 1964
- HOPKINSON, DAVID BRADFORD (1959) Associate Professor of General Engineering; University of Maine, B.S., 1942; University of Vermont, M.S., 1949; University of Maine, M.E., 1961; P.E. (State of Maine)
- HORNE, EDWIN C. (1971) Associate Director of Admissions; University of New Hampshire, B.A., 1958; M.Ed., 1968
- HORTON, DONALD BION (1969) Lecturer in Biology; Executive Director, The Research Institute of the Gulf of Maine (TRIGOM); Union College (New York), B.S., 1954; University of Rhode Island, M.S., 1958; Ph.D., 1965
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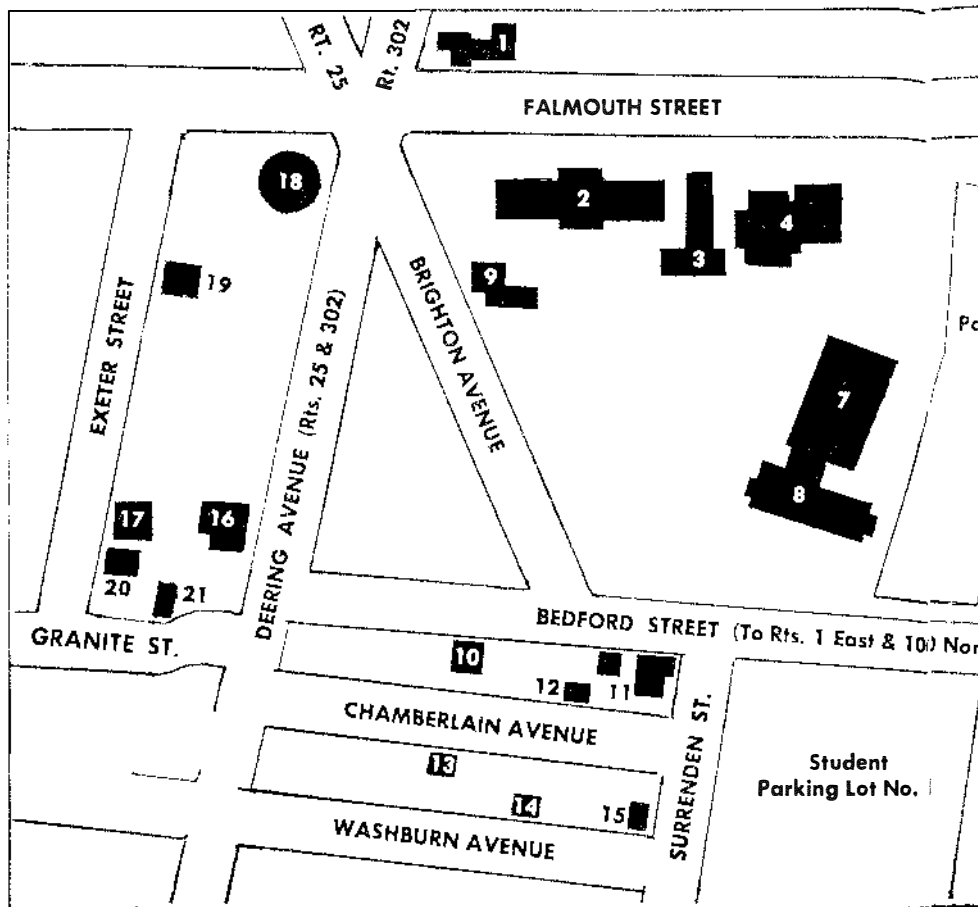
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UNIVERSITY OF MAINE

at Portland-Gorham



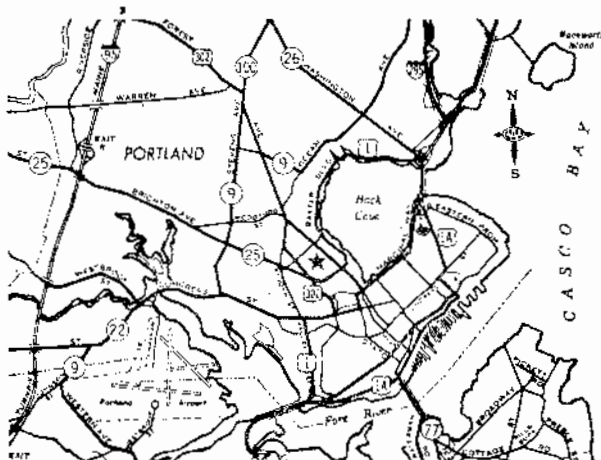
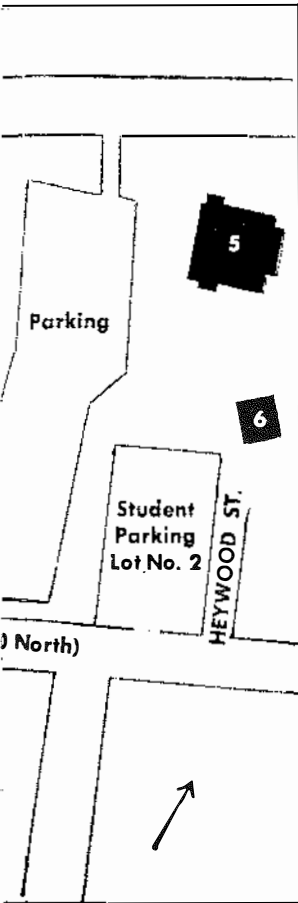
PRINCIPAL OFFICES

- | | |
|---|---------------------------|
| 17. Academic Affairs and Director of Finance and Administration | 2. Personnel |
| 2. Admissions | 4. Planetarium |
| 10. Alumni | 10. Public Information |
| 2. Business Manager | 2. Registrar |
| 4. Computer Center | 2. Student Affairs |
| 2. Continuing Education Division | 2. Student Aid |
| 12. Cooperative Extension Service | 11. Student Publications |
| 10. Educational TV | 2. Testing and Counseling |
| 5. Health Office | 14. Trigon |

the Portland campus

BUILDINGS

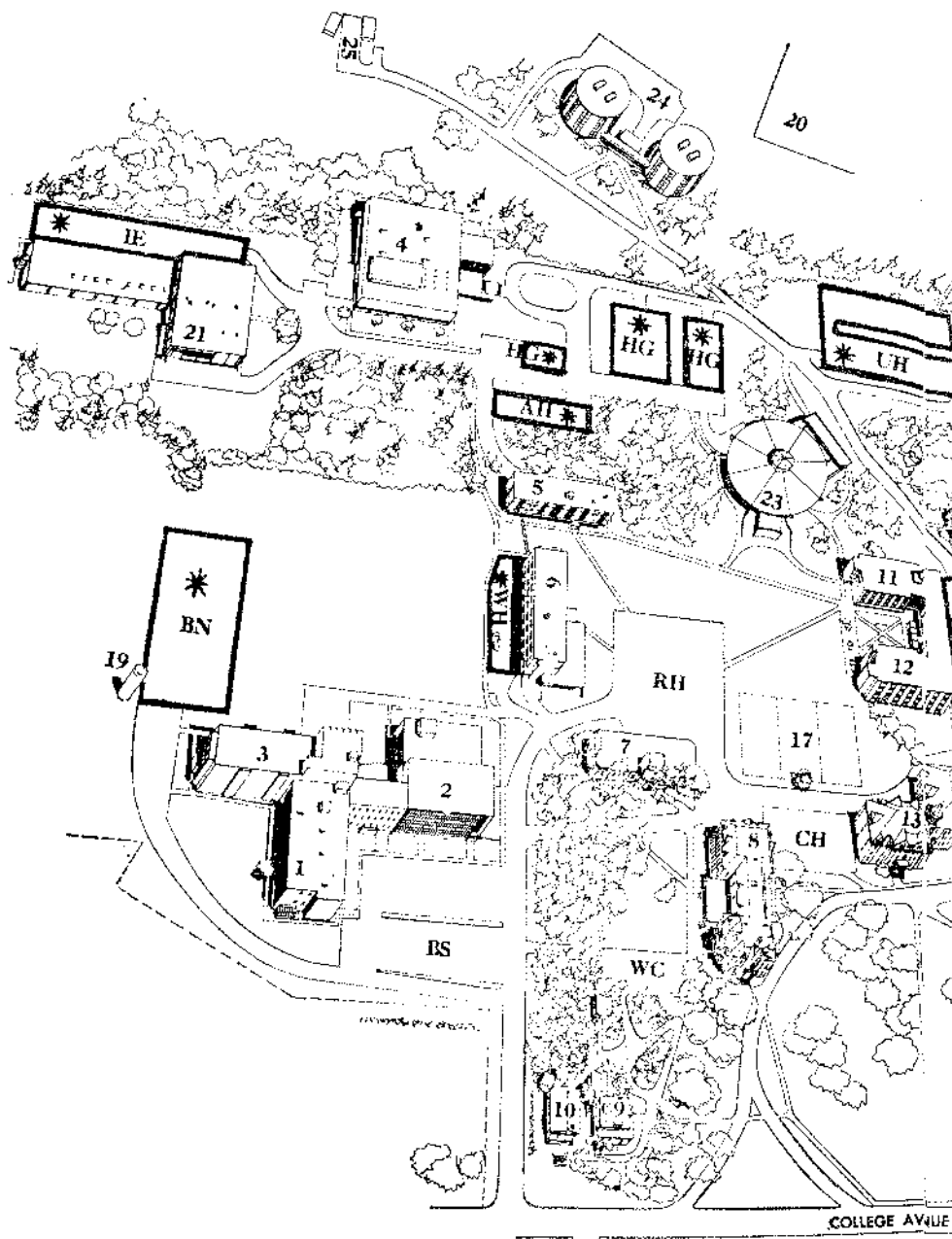
1. Residence of Dean of the Law School
2. Payson Smith Hall
3. Bookstore
4. Science Building
5. Physical Education Building
6. Central Heating Plant
7. Library
8. Luther Bonney Hall
9. Faculty Offices
10. Public Information and Development
11. Student Union Buildings
12. Cooperative Extension Service
13. Faculty Offices
14. Faculty Offices
15. Faculty Offices
16. Chancellor's Office
17. Academic Affairs and Director of Finance and Administration
18. Law School and Center for Research and Advanced Study (under construction)
19. Faculty Offices
20. Faculty Offices
21. Faculty Offices



★ Location of the Portland campus

UNIVERSITY OF MAINE

at Portland-Gorham



the Gorham campus

STUDENT PARKING LOTS

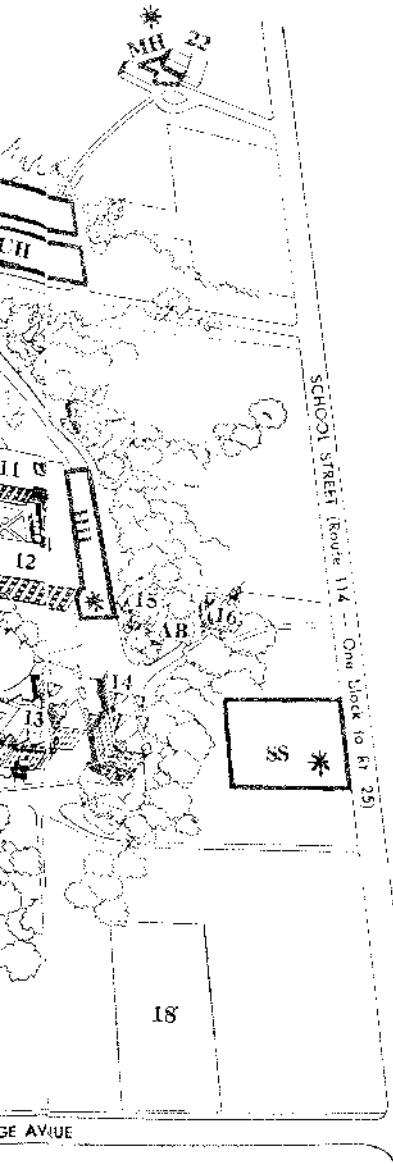
*indicates student parking lots, which are outlined by heavy borders on this map. From left to right, these are:

- IE — Industrial Education Center
- BN — Bailey Hall North
- HG — Hill Gymnasium (outlined areas only)
- AH — Anderson Hall
- WH — Woodward Hall
- UH — Upton Hall
- HH — Hastings Hall
- MH — McLellan House
- SS — School Street

After 4:00 p.m. students may park in the southern half of the BS faculty parking lot or the RH faculty-staff parking lot. These lots must be restricted at other hours.

Lightly outlined parking areas coded RH and CH are for faculty and staff only; the BS area is for faculty only. Small areas restricted to faculty-staff parking are also provided close to the gymnasium, the Industrial Education building, and the Art Building.

Ten-minute parking for visitors is provided west of Corthell (WC), west of the Hill Gymnasium, near the entrance of the Bailey Library, and by the tennis courts.



Buildings:

1. Bailey Hall — Science Wing
2. Bailey Hall — Library Wing
3. Bailey Hall — Classroom Wing
4. Warren G. Hill Gymnasium
5. Anderson Hall
6. Woodward Hall
7. Russell Hall
8. Corthell Hall
9. President's Residence
10. All Faith Chapel — Art Gallery
11. Upton Hall
12. Hastings Hall
13. Robie Hall
14. Andrews Hall
15. Maintenance Building
16. Art Building (Academy)
- 17-18. Tennis Courts
19. Water Tower
20. Athletic Field
21. Industrial Education Center
22. McLellan House
23. New Dining Center
24. Residence Towers
25. Heating and Sewage Plants

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Physical Education Requirements	Inside Back Cover

**THE PHYSICAL EDUCATION REQUIREMENTS
FOR UNDERGRADUATE STUDENTS AT U.M.P.G.**

(As revised on September 23, 1971)

The Physical Education Requirement of UMPG requires every freshman and transfer undergraduate student of either sex to satisfy the University's requirement of one year of physical education, unless excused in writing by the dean of his school or college on the basis of one or more of the following exemption criteria:

1. A student entitled to veteran's benefits.
2. A student who will be 30 years of age or over upon graduating.
3. A student who has a written medical excuse from the UMPG Health Service.
4. A student enrolled in CED and not matriculated in the day program. However, if a student changes from CED status to day-college status, the Physical Education requirements must be completed unless other exemptions are applicable.
5. Academic deans may waive the Physical Education requirements for other reasons reflecting unusual circumstances.

A carbon copy of the letter exempting the student will be sent to the student, to his faculty advisor, and to the registrar.