Southern Illinois University Edwardsville
SPARK

SIUE Academic Catalogs | University Archives and Special Collections

6-1-1986

SIUE Undergraduate Catalog, 1986-1988

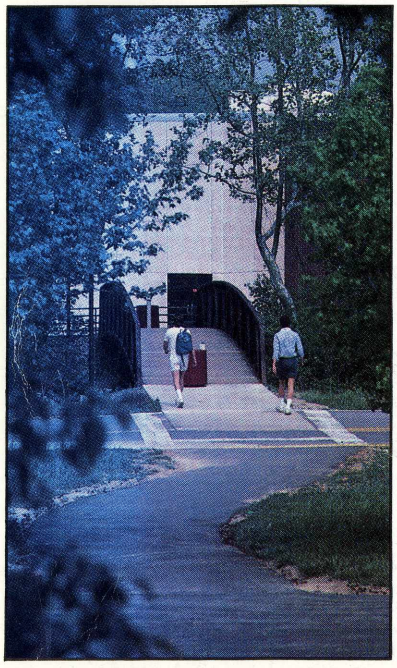
Southern Illinois University Edwardsville

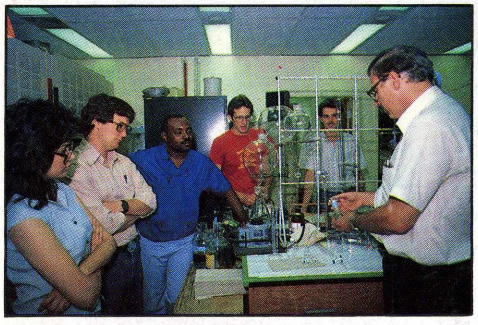
Follow this and additional works at: http://spark.siue.edu/catalogs

Recommended Citation
Southern Illinois University Edwardsville, "SIUE Undergraduate Catalog, 1986-1988" (1986). *SIUE Academic Catalogs*. 29.
http://spark.siue.edu/catalogs/29

This Academic Catalog is brought to you for free and open access by the University Archives and Special Collections at SPARK. It has been accepted for inclusion in SIUE Academic Catalogs by an authorized administrator of SPARK. For more information, please contact gpark@siue.edu.

Southern Illinois University at Edwardsville

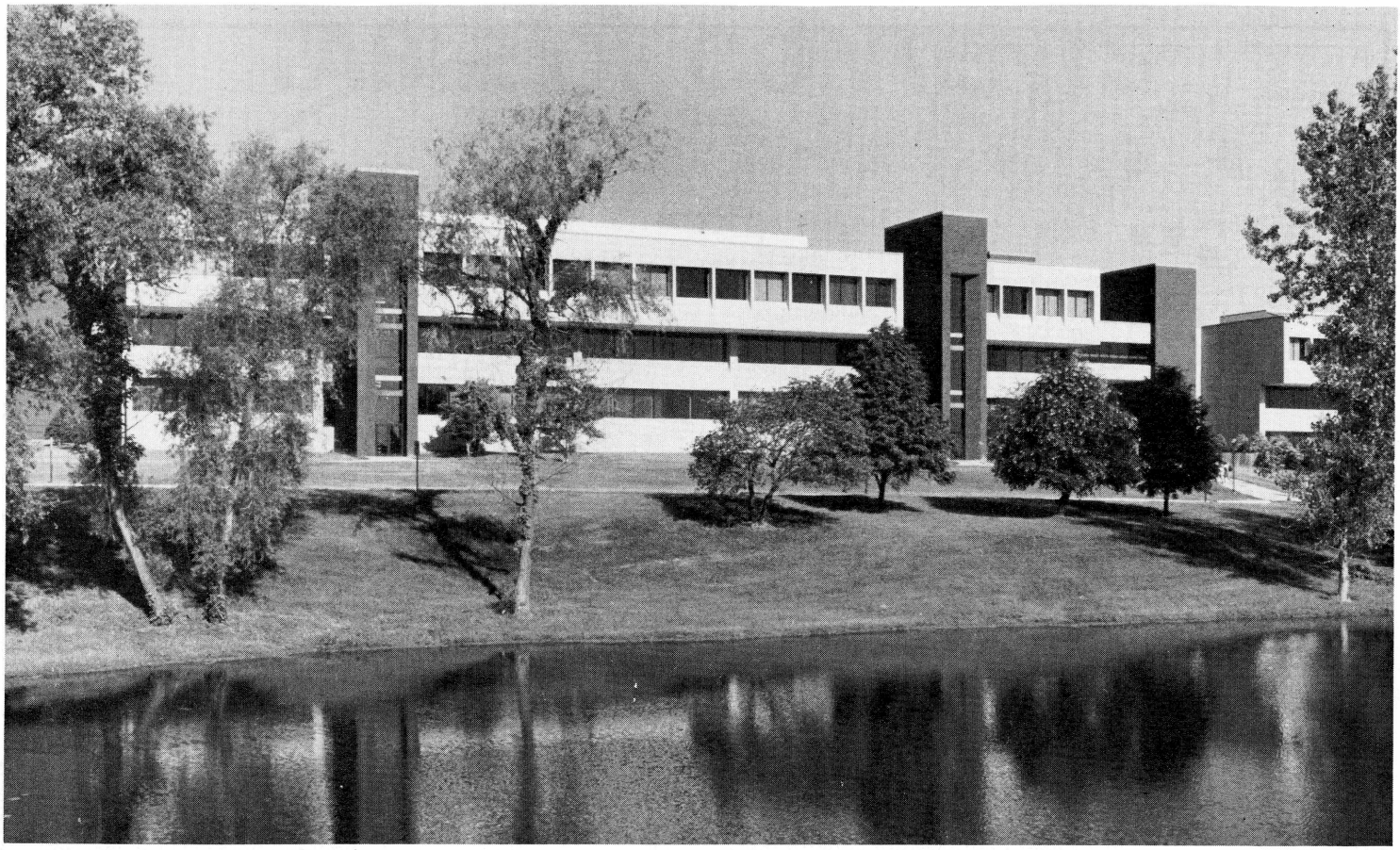




1986 - 1988
UNDERGRADUATE CATALOG

SIUE

USPS 935-420



SIUE

Southern Illinois University at Edwardsville

CATALOG

Southern Illinois University Announcements/Vol. 16, No. 5, June 1986

Second-Class postage paid at Edwardsville, Illinois 62025. Published by Southern Illinois University at Edwardsville, Illinois 62026-1001, the months of February, April, May, June, July, and October.

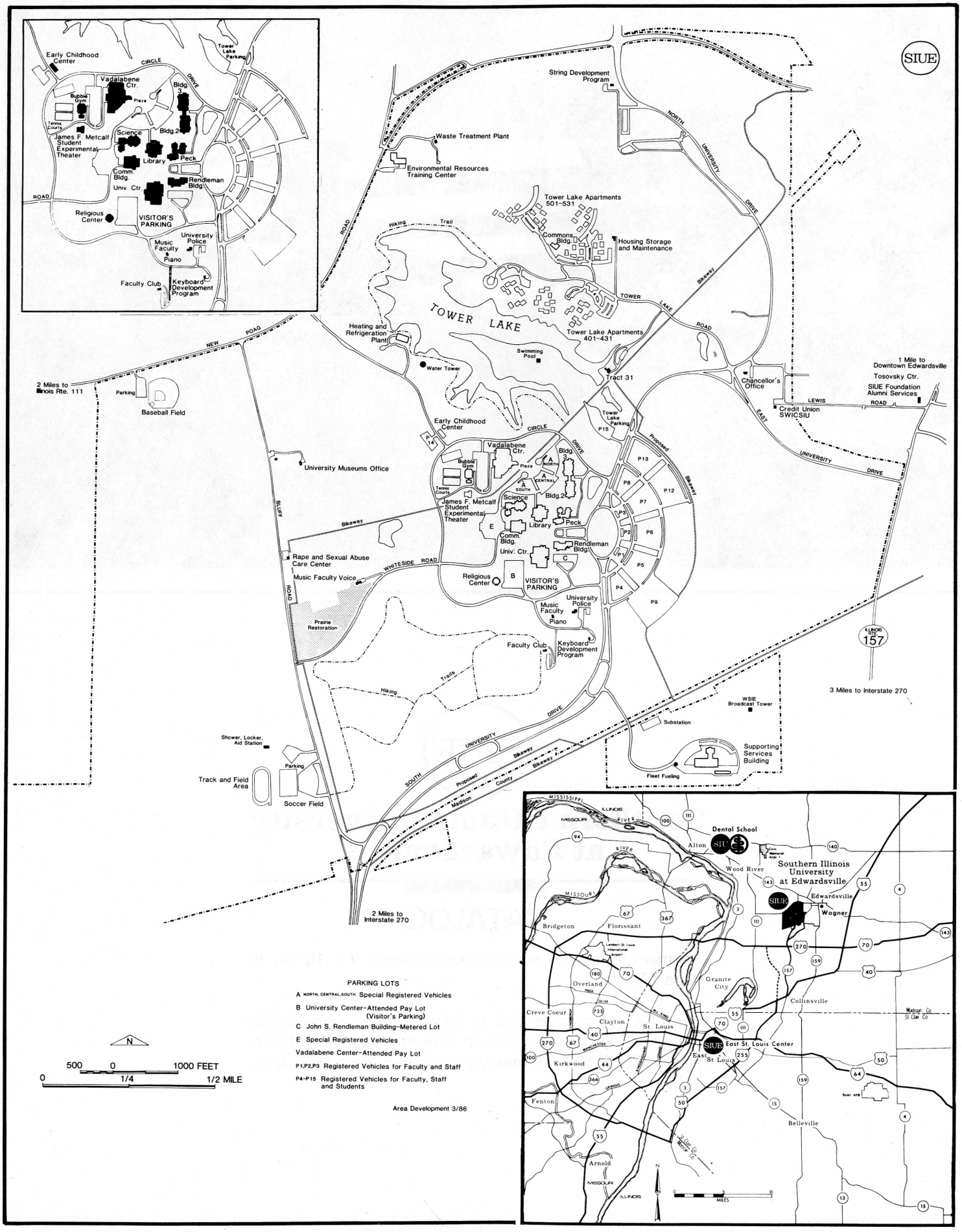

SIUE
Early Childhood Center
CIRCLE
Vadalabene Ctr.
Bubble Gym
Plaza
Bldg. 3
Bldg. 2
Tennis Courts
James F. Metcalf Student Experimental Theater
Science
Library
Peck
Comm. Bldg.
Rendleman Bldg.
Univ. Ctr.
ROAD
Religious Center
VISITOR'S PARKING
Music Faculty
Piano
University Police
Faculty Club
Keyboard Development Program
Tower Lake Parking
String Development Program
Waste Treatment Plant
Environmental Resources Training Center
NORTH UNIVERSITY DRIVE
Tower Lake Apartments 501-531
Commons Bldg.
Housing Storage and Maintenance
Hiking Trail
Bikeway
TOWER LAKE
Tower Lake Apartments 401-431
Heating and Refrigeration Plant
Water Tower
Swimming Pool
Tract 31
Chancellor's Office
1 Mile to Downtown Edwardsville
Tosovsky Ctr.
SIUE Foundation Alumni Services
LEWIS ROAD
Credit Union SWICSIU
EAST UNIVERSITY DRIVE
2 Miles to Illinois Rte. 111
NEW ROAD
Parking
Baseball Field
University Museums Office
BLUFF ROAD
Rape and Sexual Abuse Care Center
WHITESIDE ROAD
Music Faculty Voice
Prairie Restoration
Proposed Bikeway
P14
P15
P13
P8
P12
P7
P3
P2
P6
P1
P5
P4
P9
A NORTH
A CENTRAL
A SOUTH
E
B
C
Illinois Rte. 157
3 Miles to Interstate 270
WSIE Broadcast Tower
Substation
Supporting Services Building
Fleet Fueling
Shower, Locker, Aid Station
Parking
Track and Field Area
Soccer Field
SOUTH UNIVERSITY DRIVE
Proposed Bikeway
County Madison
2 Miles to Interstate 270
PARKING LOTS
A NORTH, CENTRAL, SOUTH Special Registered Vehicles
B University Center-Attended Pay Lot (Visitor's Parking)
C John S. Rendleman Building-Metered Lot
E Special Registered Vehicles
Vadalabene Center-Attended Pay Lot
P1,P2,P3 Registered Vehicles for Faculty and Staff
P4-P15 Registered Vehicles for Faculty, Staff and Students
Area Development 3/86
N
500 0 1000 FEET
0 1/4 1/2 MILE
MISSISSIPPI RIVER
ILLINOIS
MISSOURI
Dental School
Alton
Wood River
Southern Illinois University at Edwardsville
Edwardsville
Wagner
Bridgeton
Florissant
Lambert St. Louis International Airport
Overland
Granite City
Creve Coeur
Clayton
St. Louis
Collinsville
Madison Co.
St Clair Co.
East St. Louis Center
East St. Louis
Kirkwood
Fenton
Belleville
Scott AFB
Arnold
MILES

TABLE OF CONTENTS

Campus Map I

Academic Calendar III

SIU System and SIUE 2

University Policies 4

Admission 5

General Education 14

Financial Information 26

Registration 36

Academic Services 37
- Advisement 37
- Continuing Education 41
- Counseling 38
- Foreign Student Services 38
- Library 39
- Microcomputer Laboratories 40
- Services for Disabled Persons 41
- University Book Services 40

Student Activities and Services 42
- Bursar 43
- Early Childhood Center 45
- Dean of Students 42
- Health Service 45
- Housing 46
- Intercollegiate Athletics 44
- Parking 48
- Student Activities and Organizations 42
- Student Identification Cards 48

Academic Policies and Requirements 49

Instructional Units and Minor Programs 54
- Business 54
- Education 62
- Engineering 74
- Fine Arts and Communications 82
- Humanities 94
- Nursing 100
- Sciences 104
- Social Sciences 120
- Minor Programs of Study 131

University College 133
- Aerospace Studies 134

Additional Educational Programs and Opportunities 137
- Continuing Education 139
- East St. Louis Campus 137
- Environmental Resources Training Center 139
- September Option 137
- Summer University 137
- Week End University 137

Community Outreach Activities 142

Degrees and Programs 145

University Facilities 147

Officers and Faculty 149

Board of Trustees 149

Directory for Correspondence 160

Courses 165

Index 240

VISITS TO THE SIUE CAMPUS

The University welcomes visitors to its campus. Those interested in a guided tour should contact the Office of Academic Services in Peck Building 1307 or call (618) 692-3705.

Prospective students who wish to discuss admission may schedule appointments with the Admissions Counselors by visiting Peck Building 1307 or by calling (618) 692-3705.

SIUE ANNOUNCEMENTS

Southern Illinois University at Edwardsville publishes announcements of two kinds: biennial undergraduate and graduate catalogs and quarterly class schedules. The undergraduate catalog provides information about the undergraduate programs while quarterly class schedules provide information for courses offered during a given quarter.

Students and other interested persons may obtain without charge the following materials from the Office of Admissions and Records, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1001.

Undergraduate Catalog. The catalog is available for examination in high school guidance offices and libraries throughout Illinois and in some other states. Copies will be furnished free to educational institutions upon request and to new and prospective students.

Graduate School Catalog. (Also available from the Graduate School.)

Schedule of Classes. Please specify quarter (fall, winter, spring, or summer).

This publication is not a contract or offer to contract. The Board of Trustees, University executive officers, and their agents reserve the right to change information contained herein without notice. This catalog is published as a two-year edition. From time to time, changes in courses, curriculum, tuition, fees, or other details may be required.

Southern Illinois University at Edwardsville is accredited by the North Central Association of Colleges and Secondary Schools.

ACADEMIC CALENDAR

Fall 1986
August 25 - September 19 (September Option)
September 20 - December 7 (Week End University - No classes November 29-30)
September 22 (7:30 am) - December 12 (Week Day Classes)
Thanksgiving Break — November 24-30
Final Exams — December 6-12

Winter 1987
January 3 - March 15 (Week End University)
January 5 (7:30 am) - March 20 (Week Day Classes)
Final Exams — March 14-20

Spring 1987
March 28 - June 14 (Week End University - No classes April 18-19)
March 30 (7:30 am) - June 12 (Week Day Classes)
Final Exams — June 8-14

Summer 1987
June 20 - September 6 (Week End University - No classes July 4-5)
June 22 (7:30 am) - August 14 (8 week session)
June 22 (7:30 am) - September 6 (10 week session)
Final Exams — August 31 - September 6

Fall 1987
August 24 - September 18 (September Option)
September 19 - December 6 (Week End University - No classes November 28-29)
September 21 (7:30 am) - December 11 (Week Day Classes)
Thanksgiving Break — November 23-29
Final Exams — December 5-11

Winter 1988
January 9 - March 20 (Week End University)
January 4 (7:30 am) - March 18 (Week Day Classes)
Final Exams — March 14-20

Summer 1988
June 18 - August 28 (Week End University - Classes will meet July 2 and 3)
June 20 (7:30 am) - August 12 (8 week session)
June 20 (7:30 am) - September 2 (10 week session)
Final Exams — August 27 - September 2

WELCOME TO THE UNIVERSITY

"Southern Illinois University at Edwardsville assigns first priority to excellence in undergraduate education."

That assertion, which begins the University's Statement of Mission, represents a commitment that the pages of this undergraduate catalog confirm. Although our dedication to instruction, scholarship, and public service includes a strong graduate program, productive research, and effective service to our region, we never lose sight of our primary reason for being, the baccalaureate educational needs of southwestern Illinois.

I hope that you will find in these pages the information you seek. If not, please call or write; telephone numbers and addresses appear in the Directory of this catalog.

Please take some time to browse, as well. You will find in these pages information about the history of the University, about the support services we offer, about student activities, about non-traditional educational opportunities, about financial aid, and about the many units and programs that make Southern Illinois University at Edwardsville what it is—a comprehensive university with a clearly focused mission.

Finally, if you are not already a member of the University community, I hope that your reading of the catalog will persuade you to visit our campus. We stand ready to welcome you.

Earl Lazerson

Earl Lazerson
President

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE: AN INTRODUCTION

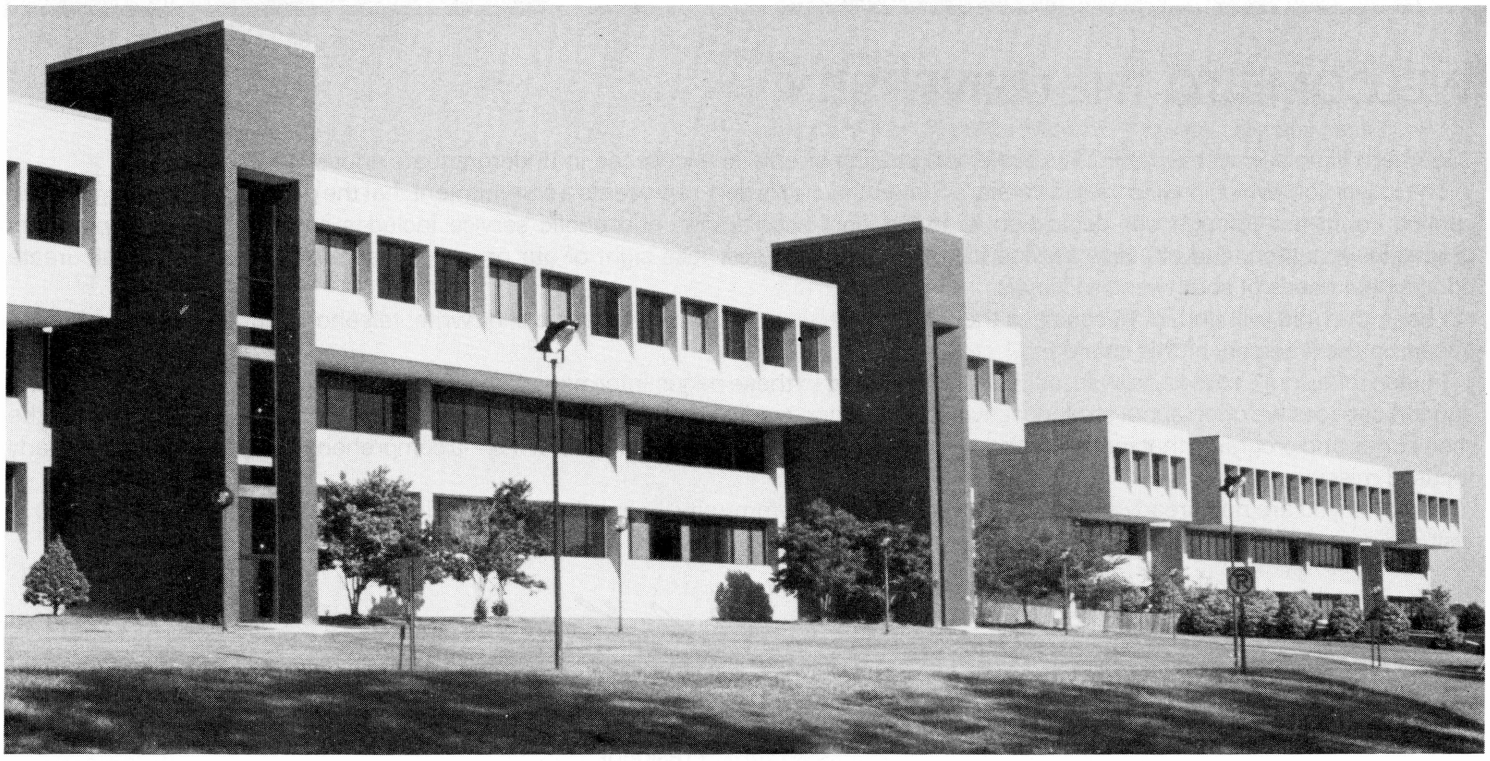
Southern Illinois University at Edwardsville is the realization of a vision of educational opportunity for southwestern Illinois. In 1957, 1900 students attended classes at "residence centers" in Alton and East St. Louis. Today, more than 10,000 students pursue their educational goals at SIUE's main campus in Edwardsville, at its Alton and East St. Louis campuses, and at numerous off-campus locations. In just 25 years, the University has become a major contributor to the educational, social, cultural and economic life of the region.

Today, SIUE is a major public university, offering a broad choice of degrees and programs ranging from career-oriented fields of study to the essential, more traditional, liberal arts. Here students have an opportunity to interact with outstanding teachers and scholars, as well as with other students from all parts of the United States and the world. They enjoy the excellent facilities of a new and growing campus, including extensive research laboratories, specialized equipment for professional preparation, and comfortable, spacious classrooms. In addition, academic services provide tutoring, testing, academic and career counseling, and other support systems designed to help students meet the demands of college life. At SIUE, students find comprehensive educational opportunities and a community in which individuals support each other in their search for knowledge and individual development.

While attending SIUE, students may choose to live on campus or at home. A large proportion of SIUE students are employed on a part-time or full-time basis while attending the University. Academic scheduling is designed to accommodate individual student needs through the availability of week-day, evening, and weekend classes. In every format, SIUE students are assured of quality instruction.

At SIUE, we believe that education is more than classroom learning. Campus activities present students with an ever-changing spectrum of cultural, social, and recreational experiences designed to complement the academic program. Theater and dance productions, musical presentations, art collections, renowned speakers and artists, and the fine swimming, biking, and other recreation offered by the University's 2600 acres of rolling, wooded hills make SIUE an exciting place. In addition, the campus is situated in a rural area with access to the resources of the metropolitan St. Louis area, located just twenty minutes away.

SIUE offers a broad range of quality educational experiences at affordable tuition rates, an architecturally distinguished campus, the tranquility of rural life, and access to the excitement of a major American city. All of these factors contribute to the quality of educational opportunities at SIUE and will make your experience here everything education should be.



SOUTHERN ILLINOIS UNIVERSITY SYSTEM AND SIUE

THE SYSTEM

The Southern Illinois University System is comprised of two universities, located at Carbondale and at Edwardsville, serving approximately 33,000 students. One of the nation's largest, the Southern Illinois University System had its beginnings in Carbondale and was chartered in 1869 as Southern Illinois Normal University. In 1949 Southern Illinois University began offering off-campus academic courses in the metropolitan East St. Louis area. This initiative led to the eventual development of a separate, distinctive institution at Edwardsville.

The complex mission and scope of the Southern Illinois University System emphasizes a commitment to quality education. As the SIU system has grown and flourished, its constituent universities have developed programs of instruction, research, and public service which have attracted and served students, faculty, and staff from throughout Illinois, the nation, and foreign countries.

A modern and comprehensive post-secondary educational institution, the Southern Illinois University System has a broad range of academic programs at the associate, bachelor's, master's, doctoral, and Professional degree levels.

The Southern Illinois University System is governed by a nine-member Board of Trustees which sets policy that enables the institutions to carry out established missions and goals. The Chancellor of the Southern Illinois University System is the chief executive officer of the System and is the primary link between the Universities and the Board of Trustees. The University Presidents report directly to the Chancellor and are responsible for the internal operations of the respective institutions.

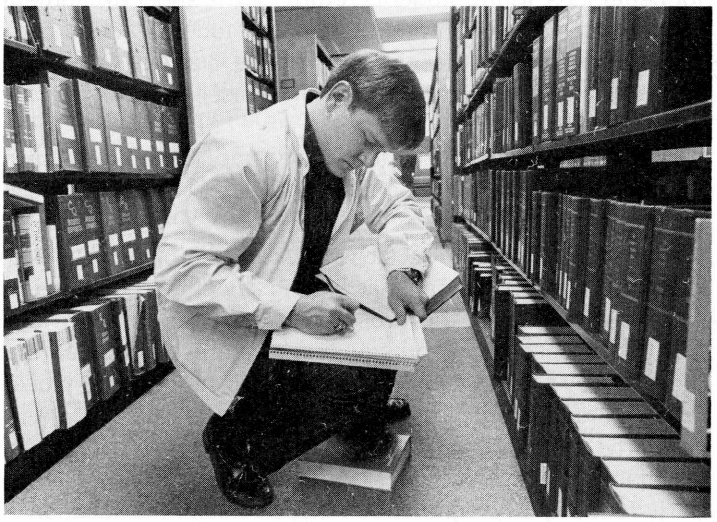
THE UNIVERSITY

Southern Illinois University at Edwardsville traces its origin to a recommendation in 1956 to the Southwest Illinois Council of Higher Education. The Council was convinced that higher education facilities were needed in counties bordering Missouri in the greater St. Louis area. They hired consultants whose reports documented that need and appealed to Southern Illinois University, one hundred miles south, to establish satellite campuses.

In 1957 SIU opened two "residence centers" in Alton and East St. Louis. The University expected to enroll 800 students. Nineteen hundred applied. By 1959 the number of students had doubled to 3800, greatly exceeding the physical facilities and demanding services faster than the University could develop and supply them.

A planning team began to investigate sites in the Metro-East counties, selecting one just south of Edwardsville. In 1960 the Illinois legislature authorized a bond issue for construction of a new state university campus. Voter approval came in November 1960. After two and one-half years of planning, University officials and area residents attended ground-breaking ceremonies for the first permanent buildings.

Southern Illinois University at Edwardsville moved onto its new campus in the fall of 1965: 2600 acres of rolling land and woods dotted with lakes along bluffs flanking the Mississippi River. Much of the land still retains its natural shape, surrounding the academic center that was designed by the internationally known architectural firm of Hellmuth, Obata, and Kassabaum of St. Louis. The brick, slate, and granite of the modern buildings complement the terrain and are softened by a carefully designed garden landscape that attracts visitors by its physical beauty. The campus immediately received several awards in recognition of the successful blend of the aesthetic and functional in a setting that enhances growth and development.



LOCATION

Southern Illinois University at Edwardsville serves the most populous region of downstate Illinois. The campus is centrally located in the eastern metropolitan St. Louis area; most of its students live and work in the industrial and agricultural counties of Metro-East. Interstate highways make the University convenient for the population within a sixty-mile radius, an area that includes 2,600,000 people.

St. Louis, twenty minutes southwest of the campus, is one of the oldest and richest cultural centers of the country, renowned for its symphony, opera, art museums, and conservatories for the arts. It is a center for educational, medical, biochemical, and business research. SIUE is one of four major universities among more than twenty institutions of higher education in the metropolitan area.

Because the University is near a metropolitan area, students and faculty can experience the diversions of ethnic restaurants, mammoth retail malls, and touring Broadway plays; but they can enjoy as well the pastoral setting of the campus and nearby state parks, small towns, and historic settlements.

STUDENTS

With an enrollment of more than 10,000 students, Southern Illinois University at Edwardsville is large enough to provide for the educational needs of its students, yet sufficiently small not to seem impersonal. Sixty-nine percent of all students come from Madison and St. Clair counties in Illinois, nine percent from Missouri. The remainder come from almost every county in Illinois, forty-five other states, and forty-nine foreign countries. Minority groups comprise sixteen percent of the total enrollment.

The majority of SIUE students are between the ages of eighteen and twenty-two and have come to the University to prepare for the challenges of life and employment. Many students, however, are over twenty-five and have enrolled in the University after beginning their families and careers. Approximately 19 percent of all students are married. Some return to complete an interrupted education, others to retrain for better jobs. Many students return for the sheer excitement of learning. More than one-third of all students attend part-time; many of them work while taking classes. For them, evening and Week End University classes are especially convenient.

Approximately 1,411 single students and 109 families live in apartment-style University housing near the recreational facilities at Tower Lake.

The University has developed a number of programs to recognize academic excellence among students. These include the Dean's College, the Presidential Scholars Program and special recognition of outstanding students at the annual Honors Day Convocation. For additional information, please refer to the Academic Services section of this catalog.

Nearly twenty percent of the SIUE enrollment consists of graduate students. The University offers master's level work in thirty-four degree programs, as well as a Doctor of Education in the Instructional Process. Students may also apply to the School of Dental Medicine, operated by SIUE at the Alton Campus. More than 1,000 SIUE students also attend classes at the East St. Louis Campus, at local community college campuses, at off-campus resident centers, and at other off-campus locations throughout Southwestern Illinois and the United States.

ACCREDITATION

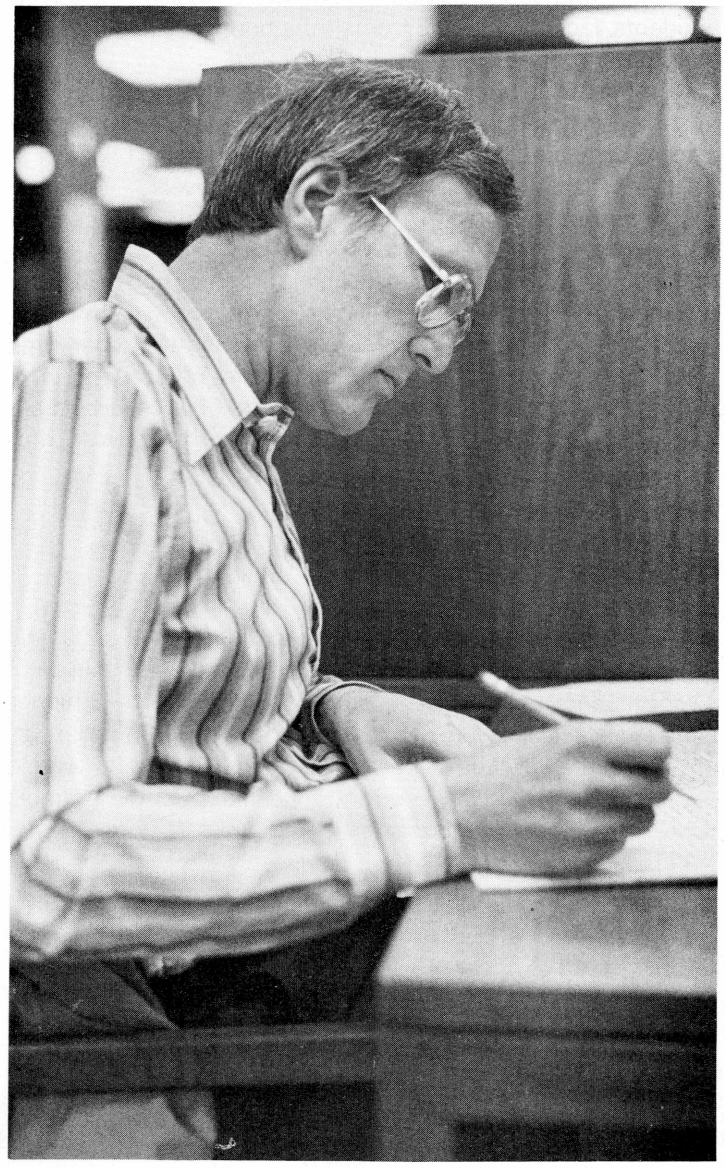
The University is accredited by the North Central Association of Colleges and Schools.

Many of its departments are accredited by professional agencies, including the following:

Accreditation Board for Engineering and Technology
American Assembly of Collegiate Schools of Business
American Chemical Society
American Council on Education for Journalism and Mass Communications
American Dental Association
American Speech-Language-Hearing Association
Council on Social Work Education
National Association of Schools of Music
National Council for Accreditation of Teacher Education
National League for Nursing

FACULTY

Approximately 600 faculty members provide instruction, research, and public service at SIUE. Eighty-five percent of the faculty possess terminal degrees earned at major universities in the United States and abroad. Many of the faculty have distinguished themselves by research and publications. In 1985 the faculty received 123 grants and contracts for research and related instructional activities. The University emphasizes the instructional responsibilities of its faculty.



UNIVERSITY POLICIES

FAIR PRACTICE

Southern Illinois University at Edwardsville maintains fair and reasonable practices in all matters affecting students: the delivery of educational programs, provision of support services, and due process with regard to disciplinary matters and the handling of grievances. In addition, the University endorses the basic principles of the codes of ethics issued by the American Association of Collegiate Registrars and Admissions Officers, and the National Association of College and University Business Officers.

Information regarding fair practices may be obtained from the Offices of the Vice Presidant and Provost, the Dean of Students, and the Coordinator of the Central Affirmative Action Office.

EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION

Southern Illinois University at Edwardsville is committed to equal educational and employment opportunity and affirmative action. SIUE administers its programs, services, and employment opportunities without regard to race, ethnicity, color, sex, creed or religion, national origin, age, handicap, veterans' status or other categories. The University abides by Affirmative Action principles. In addition, it is the policy of SIUE to make reasonable efforts to accommodate individuals with special needs.

The University complies in letter and spirit with federal and state legislation, which includes but is not limited to, Titles VI and VII of the Civil Rights Act of 1964, Executive Order 11246, the Equal Pay Act of 1963, the Age Discrmination in Employment Act of 1967, Title IX of the Education Amendments Act of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, Titles VII and VIII of the Public Health Service Act, and the Illinois Human Rights Act and related state laws. Inquiries regarding equal opportunity and affirmative action in admissions, administration, and employment should be directed to the Central Affirmative Action Office.

RIGHT TO PRIVACY AND NONDISCLOSURE

Under the Family Educational Rights and Privacy Act, all students have the right to inspect and review their official University records in accordance with provisions of the aforementioned act and within University guidelines. Inquiries regarding the Family Educational Rights and Privacy Act of 1974 should be directed to the Office of Admissions and Records.

In addition, the University, through the Director of Admissions and Records and the Office of the Dean of Students, may make accessible to any person "directory information" concerning students. Directory information consists of the following: name, school address, home town address, telephone listing, date of birth, major field of study, participation in officially recognized sports, weight or height of members of athletic teams, dates of attendance at SIUE, degrees or awards received, and the most recent previous educational agency or institution attended.

In cases where students have filed timely written notice that they object to the release of any or all items of "directory information", the specified items will not be released to any person except University personnel who, because of their educational function or research, have a legimate need, or to others as required or permitted by law. The notification must be in the form of a letter to the Director of Admissions and Records and must list the items the student wishes to have withheld. Such objection must be filed as directed by the notice published in the *Alestle* at the beginning of the academic term in which it is to be effective and, once effective, it remains so until the deadline date for notice of objection in the fall term of the next academic year.

Further, in accordance with the Privacy Act of 1974, applicants and students are advised that the requested disclosure of their social security number is voluntary. The social security number generally is used as the student identification number to avoid the assignment of a similar but University-originated number. Students retain the social security number or the University-originated number for the duration of their affiliation with the University. Social security numbers or University-orginated numbers will be used to identify the permanent records of students, such as registration, program changes, transcript requests, and certification requests. Students applying for Pell Grants or Guaranteed Student Loans are required to provide their social security numbers to the appropriate federal agencies; students applying for other Title IV federal student aid programs are requested to submit their social security numbers. Social security numbers may be used to determine eligibility for financial assistance, student status, and school attendance.

ACADEMIC ETHICS AND PLAGIARISM

The University recognizes plagiarism as a serious academic offense. Plagiarism, the act of representing the work of another as one's own, may take two forms. It may consist of copying, paraphrasing, or otherwise using the written or oral work of another without acknowledging the source; it may consist of presenting oral or written coursework prepared by another as one's own.

Normally, students who plagiarize receive a grade of E in the course in which the act occurs. The offense must be reported to the Vice President and Provost. Students who are reported a second time are suspended from the University for a period of

not less than one quarter. Students who have been suspended for plagiarism, if readmitted and again found guilty of the offense, are permanently expelled from the University.

The Dean of Students has administrative responsibility for resolving complaints, allegations, or grievances against students concerning plagiarism.

STUDENT ACADEMIC GRIEVANCE POLICY AND PROCEDURE

Copies of the Student Academic Grievance Policy and Procedure may be obtained from the Office of the Dean of Students or the Office of the Vice President and Provost.

STUDENT RIGHTS AND CONDUCT CODE

Students enrolling in the University assume an obligation for conduct compatible with the University's function as an educational institution. Students are expected to be familiar with the *Student Rights and Conduct Code.* Copies are available in the Office of the Dean of Students, the Office of the Vice President and Provost, and the Graduate Records and Admissions Office.

The Student Academic Grievance Policy and Procedure and the Student Rights and Conduct Code are currently undergoing revision. Students should obtain the most recent revision of these documents.

ADMISSION TO THE UNIVERSITY

Southern Illinois University at Edwardsville provides opportunities for study to a large and diverse student population: freshmen entering from high school; individuals completing the General Education Development (GED) examination; students transferring from other colleges and universities; adults who have postponed or interrupted their education and return for a degree; and others who want to enroll without seeking a degree.

The University has established admission policies for all categories of students. The Office of Admissions and Records assists all students preparing to enter the University.

A college-bound student who is considering a specific major program should consult the appropriate department to determine any specific admission requirements for that program and to get advice as to recommended high school courses.

APPLICATION DEADLINE INFORMATION

All categories of applicants described in this catalog (except foreign students holding F-1 visas) who wish to be considered for admission must complete their admission files two weeks prior to the beginning of the quarter for which admission is sought. The following are the file completion deadline dates through the 1988 Spring Quarter.

Quarter	*File Completion Deadline*
1986 Fall Quarter	September 5, 1986
1987 Winter Quarter	December 19, 1986
1987 Spring Quarter	March 13, 1987
1987 Summer Quarter	June 5, 1987
1987 Fall Quarter	September 4, 1987
1988 Winter Quarter	December 18, 1987
1988 Spring Quarter	March 11, 1988

ADMISSION AS A FRESHMAN

Criteria For Traditional Freshmen

Applicants who are high school seniors or applicants who have graduated from high school within five years prior to their application for admission are considered TRADITIONAL FRESHMEN. The admission decision will be based on the sum of the composite national percentile score from the American College Examination (ACT) or an equivalent score from the Scholastic Aptitude Test (SAT) and the percentile rank from the applicant's high school graduating class. A minimum combined score of 100 is required for admission. [EXAMPLE: An applicant who achieves the 35th percentile of his or her graduating class (that is, ranks 35th in a class of 100 students) must achieve at least the 65th percentile with his or her ACT composite score.]

Those wishing to be admitted as degree-seeking students must complete their admissions file two weeks prior to the beginning of the quarter for which admission is sought. A complete file consists of an application, all required official transcripts, a certification of rank in the high school graduating class, and scores achieved on a college entrance examination. ACT is the preferred admission test; however, SAT scores are acceptable.

Applicants who do not meet the admission requirements outlined in the preceding paragraph may be considered for admission through the special admission program. (See Special Admission section below.)

Requirements for 1990 Entry to the University

Those students seeking admission to the University beginning fall quarter, 1990, and thereafter, are required to complete the following high school course requirements:

4 years of English (emphasizing grammar, composition, and literature; may include not more than 1 year of creative writing or journalism).

3 years of mathematics (1 year of introductory algebra, 1 year of geometry, ½ year of algebra beyond the introductory year, and ½ year either of more advanced mathematics or fundamentals of computer programming).

3 years of science (1 year of biology, 1 year of chemistry, and 1 additional year of earth science, physics, biology, or chemistry).

3 years of social studies (at least 2 years of history and government; other acceptable subjects are anthropology, economics, geography, psychology, and sociology).

2 years of electives in foreign language, music, or art.

It is recommended strongly that college-bound students include in their high school program more than the minimum requirements for admission to SIUE by taking 2 years of one foreign language and 1 year of music and/or art.

Criteria for Non-Traditional Freshmen

Applicants who have graduated from high school five or more years prior to the date of application or who have completed the General Education Development (GED) examination are considered NON-TRADITIONAL FRESHMEN. High school graduates in this category must either have ranked in the upper one-half of their graduating class or have achieved a minimum score equivalent to at least the 50th percentile on a college entrance examination (ACT/SAT). Applicants who have completed the GED examination must have achieved an average standard score of 45 and a score of at least 35 in each of the GED testing areas.

All Non-Traditional freshmen are required to take University-administered placement tests in English, mathematics, and reading prior to advising and registration. Students whose test scores in any of the areas fall below internally established indicators of college-entry level competence must enroll in and successfully complete the designated course(s). Applicants who graduated from high school five or more years prior to application for admission and who do not meet the admission requirements described in the preceding paragraph may be considered for admission to the University through the special admission program.

Effective summer quarter, 1986, applicants wishing to be considered for admission to SIUE as non-traditional freshmen must complete their admission files two weeks prior to the beginning of the quarter for which admission is sought.

Special Admission for First-Time Freshmen

Effective summer quarter 1986, and thereafter, applicants who do not meet requirements for admission as traditional or non-traditional freshmen may be considered for admission to the University through the special admission program. [After 1990, students who achieve the minimum composite score of 100 on college entrance examinations (see Admission Standards for Traditional Freshmen above) but who have not taken all required subjects must be considered for admission under Special Admission criteria.] Such individuals must submit high school transcripts as required of all degree-seeking students, together with college entry examination scores and/or class rank information required for traditional or non-traditional admission. Recent high school graduates must have an ACT composite score of at least 13 (or SAT equivalent) and rank in the upper two-thirds of their high school graduating class (or rank in the upper one-half of their high school graduating class, regardless of their ACT scores) in order to be approved for special admission. Once admitted, students are required to take University-administered tests in English, mathematics, and reading prior to advisement and registration.

Non-traditional freshmen, individuals who have graduated from high school five or more years prior to the date of application, must take University-administered tests in English, mathematics, and reading as part of the application process for special admission. Their scores on these tests, together with their other academic credentials, will be the basis for determining whether they are approved for special admission.

Students approved for special admission must begin the program of study appropriate to their test results in English, mathematics, and reading, as prescribed by the Office of Academic Services in their initial quarter of enrollment. They must make steady progress in each succeeding quarter in rectifying any deficiency in the basic skills. Students are required to complete the basic skills requirements within 42 quarter hours and prior to enrollment in courses for which their program of study is prerequisite. Courses designated AD (Academic Development) carry institutional credit, but do not carry credit toward graduation. Other courses in which students must enroll, depending upon test results, carry credit

toward graduation. Specially admitted students who do not follow the program of study prescribed by the Office of Academic Services will not be permitted to enroll in the subsequent quarter. Like all other students, specially admitted students must achieve a C average in order to remain in good standing.

Effective summer quarter, 1986, applicants wishing to be considered for admission to SIUE through the special admission program must complete their admission file two weeks prior to the beginning of the quarter for which admission is sought.

Early Admission

Capable high school students will be permitted to enroll for University courses to be taken concurrently with their senior year of high school work subject to their having met the following admissions requirements: (a) completion of their junior year; (b) achievement of a score of at least 21 in each of the ACT areas; (c) achievement of a class rank in the upper third of their class; and (d) recommendation by their high school principals. Such students will also be permitted to enroll for University courses offered during the summer quarter between their junior and senior years of high school without being concurrently enrolled in secondary school. Enrollment for students participating in this early admission program is limited to 8 quarter hours per quarter. Applications may also be considered by the Director of the Office of Admissions and Records for exceptionally capable students who have not yet completed their junior year of high school.

The following additional standards are effective for students seeking admission to the University beginning in fall quarter, 1990, and thereafter. They are supplementary to the early admission standards listed above.

The early admissions applicant must have successfully completed at least 11 of the 15 units of high school subjects required for Traditional Admission. The 11 units must include 3 years of English, 2 years of mathematics, 2 years of science, and 2 years of social studies.

The student admitted through the early admission program, upon graduation from high school, must submit a final high school transcript to the Office of Admissions and Records. The final high school transcript must reflect successful completion of the high school subjects minimally required for Traditional Admission. (See Criteria for Traditional Freshmen.)

Effective summer quarter, 1986, applicants wishing to be considered for admission to SIUE through the early admission program must complete their admissions file two weeks prior to the beginning of the quarter for which admission is sought.

In making their recommendations, high school principals should consider the following:

(1) class rank,
(2) ACT or SAT scores,
(3) teacher recommendations regarding aptitude for college level work, and
(4) teacher assessment regarding ability to adjust to the university environment.

Application Procedures for Freshmen

Prospective students may initiate the admission process by calling or writing the Office of Admissions and Records and requesting admission materials.

A. Applicants who are high school seniors or applicants who have graduated from high school within the last five years must submit an official high school transcript and ACT or SAT scores. The transcript for high school seniors must show 6th, 7th, or 8th semester class rank. The transcript for applicants who have graduated from high school must show graduation verification and 8th semester rank. ACT or SAT scores are acceptable if they appear on the high school transcript. Students who have taken the test and have requested that SIUE receive a copy will receive confirmation by the University of receipt of the scores subsequent to the receipt of the application. Students who have not yet taken the test should make arrangements to do so as soon as possible. Beginning with the 1986 summer quarter, no admission decision will be made without the results of the ACT or SAT test.
B. Applicants who have graduated from high school five or more years prior to the date of application must submit an official high school transcript showing graduation verification and 8th semester class rank. ACT or SAT scores are optional for this category. Students who have taken the ACT or SAT test are encouraged to submit the scores.
C. Applicants who have graduated from high school five or more years prior to the date of application may be required to take placement tests before an admission decision is made.
D. Applicants who have passed the GED Test must request that the County Superintendent of Schools send an official copy of their GED scores. These persons will ***not*** need to submit a high school transcript or national entrance examination scores.

To be considered official, all documents (high school transcripts, GED scores, ACT/SAT scores, college transcript, etc.) must be mailed directly to the Admissions Office by the office or institution which issues them.

ADMISSION AS A TRANSFER STUDENT

Criteria

The following criteria govern applications for admission received September 15, 1986, and thereafter. Applicants for undergraduate admission to the University are considered to be transfer students when they present for consideration course work appropriate to baccalaureate education from accredited two-year and four-year institutions, with the exception of hours earned for college courses taken while in high school.

The admissions criteria for students who have attempted ***at least 24 quarter hours*** in courses appropriate for baccalaureate education at accredited institutions are as follows:

(a) Students are admissible in ***good standing,*** provided they have earned at least a 3.00 (C) grade-point average in such course work at the previous accredited school(s) attended.

(b) Students who do not have at least a 3.00 average as so stipulated are admissible on ***scholastic warning,*** subject to the following conditions:

(i) Those who have taken college work during the last five years must have earned at least a 3.00 grade-point average in their most recently attempted 24 quarter hours of course work appropriate to baccalaureate education. Those students so admitted who do not have college-entry competence in English composition and mathematics reflected on their transcripts are required to take placement tests.

(ii) Those who have not attempted any college work in at least the last five years must take University-administered placement tests as part of the admissions process. Their test scores must meet internally established minima in order for them to be admissible.

Those students who are required to take placement tests and whose test scores fall below internally established indicators of college-entry competence in English, reading, and/or mathematics are required to enroll in the appropriate skills course(s) in their initial quarter of enrollment. Such students must demonstrate steady progress in each succeeding quarter toward successful development or redevelopment of basic skills.

The admissions criteria for students who have attempted ***fewer than 24 quarter hours*** in courses appropriate to baccalaureate education at accredited institutions are as follows:

(a) ***Good Standing*** - Students are admissible in good standing, provided they have earned at least a 3.00 (C) grade-point average in such course work at the previous accredited school(s) attended and meet the criteria of the appropriate admission category for entering freshmen.

(b) ***Scholastic Warning*** - Students who do not have at least a 3.00 average as so stipulated are admissible on scholastic warning, provided they meet the criteria of the appropriate admission category for entering freshmen.

All students who have attempted fewer than 24 quarter hours in courses appropriate to baccalaureate education will also have their academic credentials assessed for purposes of determining whether they may be required to take placement tests. Students required to take placement tests may also be required, depending upon their test results, to enroll initially in courses designed to rectify any deficiency in basic skill areas. (See Placement Program; the criteria for requiring placement tests of entering freshmen will apply also to this category of transfer students.)

The transfer average (i.e., the cumulative grade-point average in all course work appropriate to baccalaureate education from all accredited institutions previously attended) is used only in determining the applicant's eligibility for admission. Once a student is admitted, the student's SIUE record will reflect the total number of acceptable transfer credit hours (hours earned in transferrable courses with grades of A, B, or C), but the only grade-point average calculated will be for work at SIUE.

Applicants wishing to be considered for admission as transfer students must complete their admissions files at least two weeks prior to the beginning of the quarter for which admission is sought. For applicants with at least 24 quarter hours of course work as stipulated above, a complete file consists of an application for undergraduate admission and an official transcript from each institution previously attended. For applicants with fewer than 24 quarter hours, a complete file consists of an application for undergraduate admission, an official transcript from each institution previously attended, and credentials prescribed by the appropriate admission category for entering freshmen. (An official transcript must be sent directly to the Office of Admissions and Records by each institution. All transcripts become the official property of the University and will not be returned or issued to another institution.) Any questions about the acceptability of specific courses for admission and/or for transfer credit should be directed to the Office of Admissions and Records.)

Transfer students may wish to consult the section of this catalog entitled "General Education" for information regarding the transfer of credits to the University.

Application Procedures for Transfer Students

Prospective students may initiate the admission process by calling or writing the Office of Admissions and Records and requesting admission materials.

A. Applicants with 24 or more quarter hours of transferable credits must request that each college attended send an official transcript, showing all work completed to date.
B. Applicants with fewer than 24 quarter hours of transferable credits must submit, in addition to official college transcripts, appropriate freshman credentials (high school transcript, ACT scores, GED results).

ADMISSION OF INTERNATIONAL STUDENTS AND STUDENTS IN ANY OF THE FOLLOWING CATEGORIES

Students applying for admission for Winter, 1987, and thereafter in any of the following categories will be admitted according to the standards presented below.

Students Holding or Requiring F-1 (Student) Visas

Applicants are expected to satisfy appropriate academic requirements, demonstrate English language proficiency, and provide acceptable evidence of adequate financial resources. Applicants with U.S. educational credentials will be reviewed for academic eligibility under the same standards applied to domestic students. Standard reference materials published by recognized organizations such as (but not limited to) the American Association of Collegiate Registrars and Admissions Officers and the National Association for Foreign Student Affairs will be used as general guidelines to evaluate foreign academic credentials for academic eligibility, level of placement, and acceptability of transfer credit. In individual cases, appropriate faculty should be consulted for clarification of student credentials.

F-1 applicants whose recognized first language is not English must provide acceptable verification of their English language proficiency. Verification must be on file by the appropriate deadline stated below. Details are found under the heading "Students Whose First Language Is Not English."

All F-1 applicants must submit proof of adequate financial resources to the Foreign Student Adviser in advance of admission. A financial certificate and instructions for its completion are included in the application packet. Financial arrangements must be approved by the appropriate deadline below. Questions regarding financial matters should be directed to the Foreign Student Adviser in the Office of Academic Services.

The undergraduate application materials for foreign students, which include a detailed explanation of procedures and required credentials, are available in the Office of Admissions and Records. Materials will be mailed upon request.

F-1 applicants must observe the following file completion deadline dates:

Quarter	*File Completion Deadline*
Fall	July 1
Winter	October 1
Spring	January 7
Summer	April 1

Students with Foreign Academic Credentials

Standard reference materials published by recognized organizations such as (but not limited to) the American Association of Collegiate Registrars and Admissions Officers and the National Association for Foreign Student Affairs will be used as general guidelines to evaluate foreign academic credentials for academic eligibility, level of placement, and acceptability of transfer credit.

Applicants are responsible for making all appropriate arrangements for providing official academic records attesting to all secondary and post-secondary education. Credentials not available in English must be submitted with an original and an attested translation prepared by a professional translator. University-level academic work will be considered for transfer of credit as appropriate.

Secondary and post-secondary transcripts (including certification of graduation when appropriate) must be mailed directly to the admissions office by the registrar of each school attended. Each transcript must bear the registrar's original ink signature and the school's official seal. Photocopies of marks sheets and certificates are acceptable only if the photocopies bear an original certification and original ink signature of the registrar for the school or examination board issuing the original document. The certification must state (in English) that the photocopy is a complete and exact copy of the authentic original document. Results of examinations for which certificates have not been issued must be reported directly to the admissions office by the examination board. Notarized copies of credentials are not considered to be official. All credentials submitted become the property of the University and are not returnable.

The undergraduate application materials for students with foreign credentials include a detailed explanation of procedures and required credentials, and are available in the Office of Admissions and Records. Materials will be mailed on request. F-1 applicants must complete their file by the deadline stated in the section on "Students Holding or Requiring F-1 Visas." Other applicants must complete their file no later than two weeks prior to the beginning of the quarter for which admission is sought.

Students Whose First Language Is Not English

All students with F-1 visas and/or foreign academic credentials whose first language is not English must demonstrate adequate English language proficiency in advance of admission. English language proficiency must be verified in one of the following ways:

1. Applicants may sit for either the International Testing Program or the Special Center Testing Program of the Test of English as a Foreign Language (TOEFL) and have an official score report sent directly to the Office of Admissions and Records. The minimum acceptable score is 550.

2. Applicants may sit for an institutional TOEFL examination administered on campus at SIUE. Institutional TOEFL scores will not be accepted from other institutions. The minimum acceptable score is 550.

3. Applicants may submit a properly certified copy of their University of London General Certificate of Education showing a grade of A, B, or C in the subject English Language. Recognized equivalent examinations will also be considered.

The undergraduate application materials for foreign students whose first language is not English include a detailed explanation of procedures and required credentials, and are available in the Office of Admissions and Records. Materials will be mailed upon request. F-1 applicants must complete their file by the deadline stated in the section on "Students Holding or Requiring F-1 Visas." Other applicants must complete their file no later than two weeks prior to the beginning of the quarter for which admission is sought.

ADMISSION AS A RE-ENTRY STUDENT (UNDERGRADUATE)

The following govern applications for admission received September 15, 1986, and thereafter.

Former students who have not attended SIUE for four or more quarters (i.e., registered and paid fees) must reapply for admission.

The admission criteria for re-entry students are as follows:

(1) Students who have not attended another accredited college or university since their last attendance at SIUE are admissible, subject to the following conditions:

(a) Those whose academic classification is "good standing," "scholastic warning," or "scholastic probation" will be admitted with the same classification and class/college/major.

(b) Those whose academic classification is "scholastic suspension" will be admitted into the Office of Academic Services on "scholastic probation." Such students must receive academic counseling and advising prior to enrolling in classes.

(c) Students who have been scholastically suspended more than once will not generally be readmitted to the University.

(2) Students who have attended another accredited college or university since their last attendance at SIUE are admissible, subject to the following conditions:

(a) Those who have taken fewer than 24 quarter hours in course work appropriate to baccalaureate education since their last attendance at SIUE and who have earned at least a 3.00 (C) grade-point average in such transfer work will be admitted as follows:

(i) If they had an academic classification of "good standing," "scholastic warning," or "scholastic probation" at SIUE, they will be admitted with the same classification and college/major.

(ii) If they had an academic classification of "scholastic suspension" at SIUE, they will be admitted into the Office of Academic Services on "scholastic probation."

(iii) Students who have been scholastically suspended more than once will not generally be readmitted to the University.

(b) Those who have taken at least 24 quarter hours in course work appropriate to baccalaureate education since their last attendance at SIUE and have earned at least a 3.00 (C) grade-point average in such transfer work are admissible subject to the following conditions:

(i) If they had an academic classification of "good standing" at SIUE, they will be admitted with the same classification and college/major.

(ii) If their SIUE cumulative grade-point average was below 3.00 (C), they will be admitted on "scholastic warning." Those whose academic classification at SIUE was other than "scholastic suspension" will be admitted with the same college/major; those with an SIUE academic classification of "scholastic suspension" will be admitted into the Office of Academic Services.

(c) Those who have taken course work appropriate to baccalaureate education since their last attendance at SIUE and have not earned at least a 3.00 (C) grade-point average in such transfer work, but whose SIUE academic classification was "good standing," will have their admissions files automatically referred to the Admissions Review/Appeals Committee. Their admissibility will be determined by that Committee.

Former students whose academic classification at SIUE was "scholastic suspension" and who are admissible in terms of (1)(b), (2)(a)(ii), and (2)(b)(ii) above will be admitted into the Office of Academic Services as undeclared students and be advised by that office until they declare a major. Students who wish to redeclare their former major must meet the entrance requirements for that program. Students who have been scholastically suspended more than once will not generally be readmitted to the University. Under exceptional circumstances, however, such students may appeal to the Admission Review/Appeals Committee.

The transfer average (i.e., the cumulative grade-point average in all course work appropriate to baccalaureate education from all accredited institutions since the student's last attendance at SIUE) is used only in determining the applicant's eligibility for admission. Once a student is admitted, the student's SIUE record will reflect the total number of acceptable transfer credit hours (hours earned in transferrable courses with grades of A, B, or C), but the only grade point average calculated will be for work at SIUE.

Former students wishing to be considered for admission as re-entry students must complete their admissions files at least two weeks prior to the beginning of the quarter for which admission is sought. Those who have not attended another accredited college or university since their last attendance at SIUE need submit only a re-entry application form. Those who have attended another accredited college or university since

their last attendance at SIUE must submit both a re-entry application form and an official transcript from each accredited institution attended. (An official transcript must be sent directly to the Office of Admissions and Records by each institution. All transcripts become the official property of the University and will not be returned or issued to another institution.) Any question about the acceptability of specific courses for admission and/or for transfer credit should be directed to the Office of Admissions and Records.

ADMISSION AS A NON-DEGREE STUDENT

The following is effective for students seeking admission to the University beginning summer quarter, 1986, and thereafter.

Students who wish to take undergraduate courses for credit, but who do not wish to pursue a baccalaureate degree, may be admitted to the University as non-degree students. The Non-Degree Application, which is required for admission in this category, must be submitted to the Office of Admissions and Records at least two weeks prior to the beginning of the quarter for which admission is sought. Once admitted, students may enroll in any undergraduate course for which they have met prerequisites. They must maintain a C average in order to remain in good standing. Non-degree students are not eligible for VA educational benefits and most other forms of financial assistance.

Non-degree students who desire to enter a baccalaureate degree program at a later date must apply for re-classification of status. Such an application includes submission of all credentials prescribed by the appropriate admission procedure for degree-seeking students. If students meet the criteria of the appropriate admission category and have achieved a cumulative GPA of C (3.00) in credits earned at SIUE, they may be reclassified as degree-seeking students. If they do not meet the above admission requirements, then their application for re-classification may be considered only after successful completion of at least 16 quarter hours of credit earned at SIUE. For first-time freshmen, successful completion is defined as having earned a C or better in English Composition (ENG 101) and having maintained a cumulative average of C or better in other courses requiring at least college entry level competence. For students who have previous college or university course work, successful completion is defined as having maintained a cumulative average of C or better in college level courses which do not duplicate previous course work for which SIUE gives credit. Courses taken on a pass or no credit basis will not count toward completion of the minimum 16 quarter hours, nor will courses taken on a pass basis count in the calculation of grade point average for purposes of admission as degree-seeking students.

Applications for re-classification must be completed at least two weeks prior to the beginning of the quarter for which students are seeking re-classification. No midterm status changes will be permitted. The decision regarding acceptance of credit earned by a non-degree student toward satisfying requirements for a major is made by the major department. Other courses normally counted toward a particular baccalaureate degree will be so counted for such students.

Credit earned as non-degree student will not be accepted toward a graduate degree at SIUE.

PLACEMENT PROGRAM

Effective Summer, 1986, and thereafter, prior to advisement and registration, students in the following categories are required to take placement tests:

(1) Students admitted as Traditional Freshmen who score 18 or below on the English, mathematics, social sciences, and/or composite sections of the ACT examination or who present SAT scores

(2) Students admitted as Non-Traditional Freshmen

(3) Recent high school graduates admitted through the Special Admission criteria

(4) Transfer students who lack documentation on their transcripts of college-entry competence in English composition and mathematics

Transfer students with fewer than 24 quarter hours may be required to take placement tests. Transfer students who have not attempted any college work in the five years prior to application must take University-administered placement tests as part of the admission process. In addition, non-traditional freshmen, individuals who have graduated from high school five or more years prior to the date of application, must take University-administered tests in English, mathematics, and reading as part of the special admission process.

Placement tests are used to assess the student's level of competence in English, mathematics, and reading, and to identify appropriate academic course work for the student. The Office of Academic Services has the responsibility of administering placement tests. Students whose test scores in English, reading, and/or mathematics are below internally established indicators of college-entry level competence are required to

enroll in and successfully complete appropriate course(s) as determined by their test scores. The process of development or redevelopment of basic skills must begin in the initial quarter of enrollment, and the student must demonstrate steady progress in each succeeding quarter toward successful completion of the process. This process must be concluded within 42 quarter hours and prior to enrollment in any courses to which the skills courses are a prerequisite. Courses designated AD (Academic Development) carry institutional credit, but do not carry credit toward graduation. Other courses in which students must enroll, depending upon test results, carry credit toward graduation.

ADMISSION REVIEW PROCESS

Applicants denied admission may request in writing through the Director of Admissions and Records that their admission file be reviewed by the Admission Review/Appeals Committee. The written statement should include a rationale for the request.

EDUCARD PROGRAM

Anyone who is not currently enrolled in courses for credit at SIUE may attend selected classes on a space available basis under the EDUCARD Program of the Office of Continuing Education. EDUCARD students may register up to two weeks after the beginning of a quarter for a fee of $15. Mail registration is permitted; the fee is refunded if space in the selected classes is not available. No credit is earned and no official University records are kept of EDUCARD students. Textbooks are available from Textbook Rental upon payment of the EDUCARD registration fee.

ORIENTATION AND NEW STUDENT LIFE

The University provides orientation sessions to assist all new students in adapting to the campus community. For more information, please refer to the Academic Services section of this catalog.

DETERMINATION OF RESIDENCY STATUS

A student's residency status affects several considerations, including tuition and financial assistance. Ordinarily, determination of residency status is made by the Office of Admissions and Records from evidence furnished on the application to the University. If such evidence is not sufficient or if records establish that students do not meet the requirements for resident status as defined in the following regulations, the non-resident status shall be assigned.

Students may obtain applications for classification as Illinois residents in the Office of Admissions and Records.

Definitions and Conditions

Adults, to be considered residents for purposes of SIUE tuition, must have been bona fide residents of the State of Illinois for a period of at least three consecutive months immediately preceding the beginning of any term at the University and must continue to maintain a bona fide residence in the State. Adult students who have a parent or both parents maintaining bona fide residence in the State and who reside in the parental home or elsewhere in the State are regarded as resident students.

Minors are considered to be persons under eighteen years of age. The residence of minors shall be considered to be and to change with that of the parent(s) or legal or natural guardian(s). Parents or legal or natural guardians will not be considered residents of the State unless they maintain a bona fide and permanent place of abode within the State.

If minors are emancipated, are completely self-supporting, and actually reside in the State, those individuals shall be considered residents even though the parents or guardians may reside outside the State. Marriage or active military service shall be regarded as effecting the emancipation of minors for the purpose of this regulation.

The term **BONA FIDE RESIDENCE** refers to the true, fixed, and permanent home and place of habitation to which individuals intend to return after a temporary absence. Evidence used to determine bona fide residence includes such items as voter registration, place of filing tax returns, proof of property ownership or year-around residence, driver's license, automobile registration, or place of employment.

Nonresident students married to residents of the State may be classified as residents while residing in the State. The spouses through whom students claim residence must demonstrate resident status in compliance with the requirements applicable to all students seeking resident status.

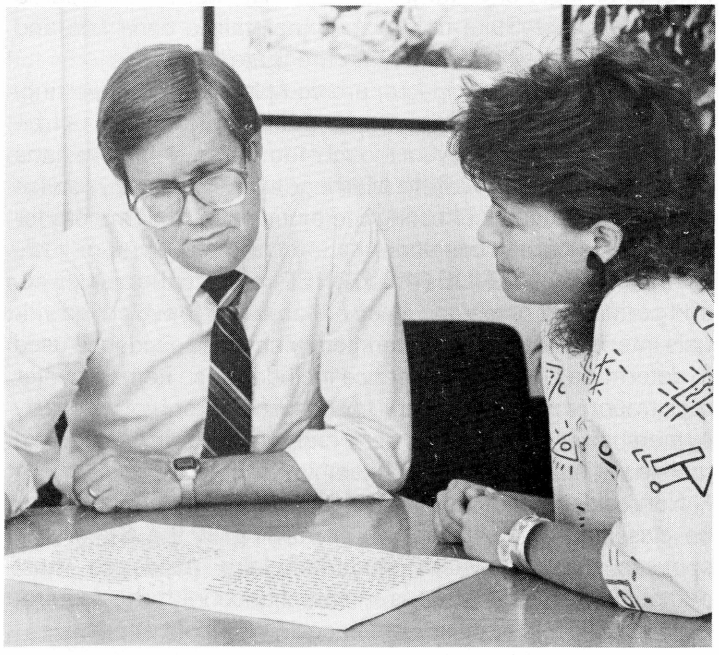
Students who are not citizens of the United States of America, to be considered residents for tuition purposes, must either be married to residents or must have permanent resident status with the United States Immigration and Naturalization Service, and must also meet and comply with all other applicable regulations to establish resident status. Students considered residents for tuition purposes may need to meet additional criteria in order to be eligible for Federal student financial assistance.

Persons actively serving in one of the Armed Forces of the United States, stationed and present in the State in connection with that servica, and submitting evidence of such service and station, shall be treated as residents while stationed and present in Illinois. If the spouses or dependent children of such members of the Armed Forces also live in the State, similar treatment shall be granted to them.

Persons actively serving outside the State in one of the Armed Forces of the United States are considered residents only on the basis of having been residents of the State at the time of entry into military service. Those separated from active military service are considered residents of Illinois immediately upon separation on the basis of (1) having been residents of the State at the time of entry into military service, or (2) having been treated as residents while in the military by attending school at this University while stationed within the State, or (3) having resided within the State for a period of three months after separation.

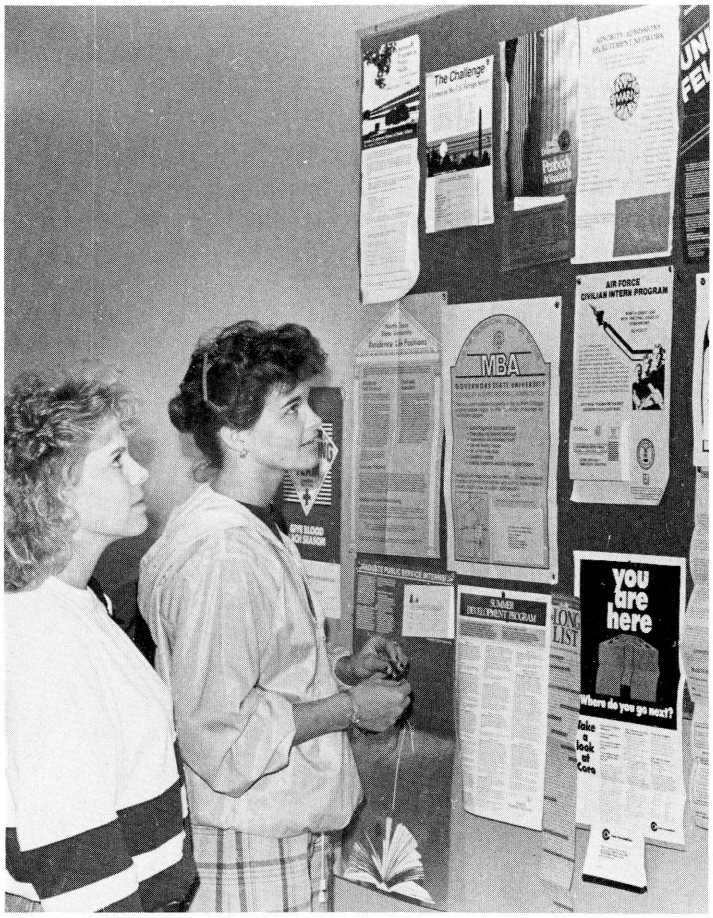
Persons incarcerated in a state or federal place of detention within the State of Illinois will be treated as residents for tuition assessment purposes while remaining in that place of detention. If bona fide residence is established in Illinois upon release from detention, the duration of residence shall be deemed to include the prior period of detention.

The spouses and dependent children of all employees on appointment with the University are considered resident students for purposes of tuition assessment during the term of such appointment.



Students may have their residency status reclassified at any time by the University on the basis of additional or changed information. If a student has been misclassified as a nonresident, the change of tuition shall apply for the entire period of the misclassification. If the student has been inaccurately classified as resident, the change of tuition shall apply for that quarter in which the misclassification has been determined. If the University has classified students as residents on the basis of false or falsified documents furnished by the students, the reclassification to nonresident status shall be retroactive to the first quarter during which residence status was based on these incorrect documents.

Students may appeal their residency status in accord with established university procedures.



Appeal of Residency Status

Students who wish to appeal the residence status assigned or tuition assessed must pay the tuition assessed, but may file a claim in writing in the Office of Admissions and Records for a reconsideration of residency status and an adjustment of tuition. The written claim must be filed within thirty school days from the date of assessment of tuition, or the date designated in the official University calendar for tuition payment, whichever is later. If a student is dissatisfied with the ruling in response to the written claim, he or she may appeal the ruling to the Dean of Students by filing a written request within twenty days of the notice of the first ruling.

GENERAL EDUCATION

PURPOSE AND GOALS

The purpose of General Education at Southern Illinois University at Edwardsville is to provide students with a foundation for intellectual development and meaningful contributions to society. The General Education curriculum encourages students to set the events of the world in perspective and to bring a reasoned approach to the challenges of a lifetime.

In particular, the goals of General Education at SIUE are to provide opportunities for students:

- to express ideas effectively in oral and written communication;
- to utilize analytic, synthetic, and quantitative skills in the solution of complex problems; and
- to develop understanding of the concepts and methodologies of disciplines in the fine arts and humanities, natural sciences, and social sciences.

REQUIREMENTS

The General Education requirements at SIUE include four types of courses: Skills, Introductory, Advanced, and Interdisciplinary. The purposes of the courses are summarized below.

Skills courses develop proficiency in basic competencies necessary for success in university study, as well as for success in employment and in personal living. All students must complete 8 credit hours (two courses) in Written Expression. The remainder of the Skills requirements may be fulfilled through one of two options. Under Option A students complete courses in Oral Communication, Critical Thinking, and either Statistics or Computer Programming, for a total of 12 additional credit hours. Under Option B, students complete one three-quarter sequence of a Foreign Language, as well as a course in Critical Thinking *or* Statistics *or* Computer Programming, for a total of 16 additional credit hours. All Skills courses, and only Skills courses, are numbered between 100 and 110.

Introductory courses provide beginning study in at least six different disciplines outside students' major fields. These courses focus on the elementary theory, principles, and methods of the disciplines that are traditionally central to the liberal arts and sciences. All Introductory courses bear the number 111, except for those introductory-level courses that may be selected as options in the General Education Area *Natural Sciences and Mathematics.* These exceptions are explained in the section entitled OPTIONS, below. All Introductory courses require writing assignments and assume college-level writing skills.

The Introductory course in a student's major field does not count toward fulfillment of the General Education Introductory course requirements. Students with double majors may use the Introductory course in one of their major fields to fulfill General Education Introductory course requirements.

Advanced courses, as understood in the General Education program, are selected courses in each discipline beyond the Introductory course that fulfill major or minor requirements of the discipline. Advanced courses contain applications of the basic principles of a discipline to selected areas of study. A listing of approved Advanced courses appears at the end of this section of the catalog. Students take at least six such courses, which are numbered between 112 and 499. Advanced courses frequently have prerequisites, and students should be certain that they have satisfied these. Moreover, students are advised to note that 400-level courses typically are oriented toward majors, minors, and, in some cases, graduate students, who have already had extensive work in the discipline. Before enrolling in such a course, students may wish to consult with the instructor.

Both Introductory and Advanced courses are distributed among three **General Education (GE) Areas:** *Fine Arts and Humanities, Natural Sciences and Mathematics, Social Sciences.* Students select at least two Introductory courses and at least two Advanced courses from each of these three Areas.

Interdisciplinary courses provide opportunities to observe and participate in the interaction of two or more disciplines. All students are required to include at least one such course among their General Education courses. All Interdisciplinary courses are numbered 300 or above and are open only to juniors and seniors.

The total number of General Education credit hours required of students selecting Skills Option A is 72. Students selecting Skills Option B are required to complete 76 General Education credit hours. A summary of these requirements is provided on the following page. Descriptions of the Skills, Introductory, Interdisciplinary, and Advanced courses appear in the course description section of the catalog.

Entry Competencies for General Education Courses

Students enrolling in General Education courses are required to have competencies necessary for successful completion of those courses. The following policies apply to students who are required to take placement testing:

1. Students who have been identified through placement testing as needing developmental instruction in English composition must successfully complete Basic Writing (Academic Development [AD] 090A and 090B) prior to enrolling in Introductory General Education courses and in other General Education courses requiring writing skills.

2. Students who have been identified through placement testing as needing developmental instruction in reading must have concurrent enrollment in College Reading (AD 080B) when enrolling in General Education courses.

3. Students who have been identified through placement testing as needing developmental instruction in mathematics must successfully complete Math 070 (Beginning Algebra) prior to enrolling in Introductory General Education courses in the GE Area *Natural Sciences and Mathematics.*

COURSE REQUIREMENTS FOR GENERAL EDUCATION

Skills Courses (to be satisfactorily completed by the end of the sophomore year) ..... 20 or 24 hours
- Written Expression 8

and

- Option A: Oral Communication 4
  - Critical Thinking 4
  - Statistics or Computer Programming ... 4

or

- Option B: Foreign Language 12
  - Critical Thinking or Statistics or Computer Programming 4

Introductory Courses (may be taken at any time) ..... 24 hours
- GE Area - Fine Arts and Humanities 8
- GE Area - Natural Sciences and Mathematics 8
- GE Area - Social Sciences 8

The Introductory course in one's major field does not count toward fulfillment of the Introductory course requirements. One Introductory course in the GE Area *Social Sciences* may be from the Western Civilization sequence.

Advanced Courses (may be taken at any time) ... 24 hours
- GE Area - Fine Arts and Humanities 8
- GE Area - Natural Sciences and Mathematics 8
- GE Area - Social Sciences 8

No course used to meet the Constitution requirement of the state of Illinois may be used to fulfill General Education requirements.

Interdisciplinary Course (junior or senior standing required) ..... 4 hours

Total in General Education ..... 72 or 76 hours

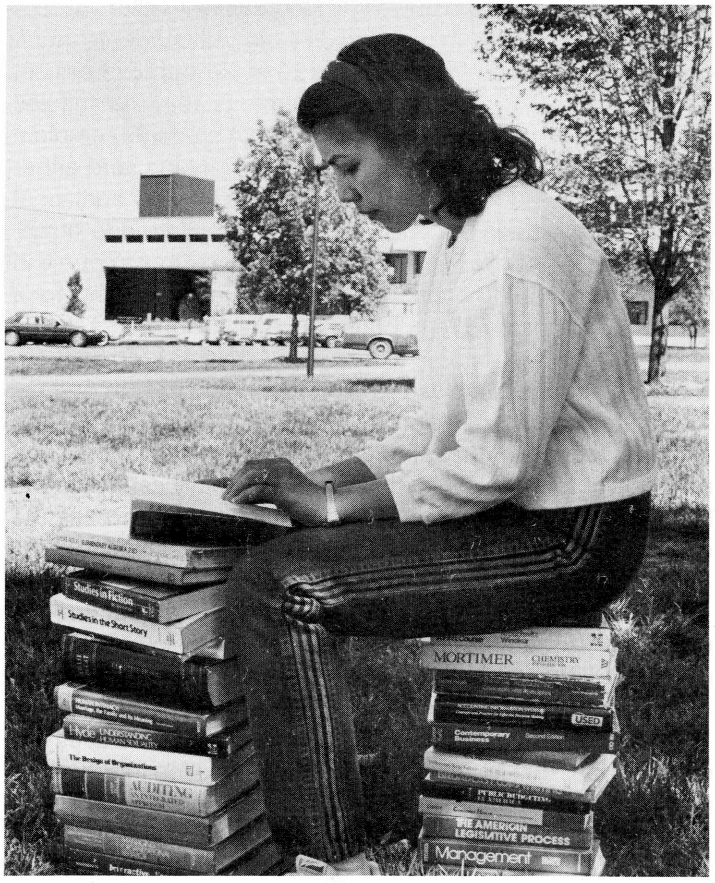
PROFICIENCY EXAMINATIONS

Proficiency examinations are available for selected courses because of the University's recognition that students may acquire skills and competencies independent of classroom work.

Proficiency examinations are available for all Skills and Introductory courses in the General Education curriculum. Some of the examinations are administered through the Office of Academic Services. Students who wish to attempt proficiency examinations should consult the Office of Academic Services in Peck Building, Room 1307 (692-3705) for information and instructions. Credit hours earned from the successful completion of a proficiency examination in a Skills course will be applied toward the fulfillment of the General Education requirement for that skill. Credit hours earned from the proficiency examination in an Introductory course will count toward the 192 hours required for graduation, but may not be used to fulfill General Education requirements. Students who have passed proficiency examinations for Introductory courses may fulfill the General Education Introductory course requirements in that Area by substituting *any* approved Introductory *or* Advanced course in that same Area (outside the major field), so long as the credit hours completed in that GE Area total 16.

Proficiency examinations are available for some Advanced courses. Students interested in obtaining information regarding proficiency examinations for Advanced courses should consult the appropriate departments.

Proficiency examinations are not available for Interdisciplinary courses.



SUBSTITUTIONS

Substitutions are possible for two Skills courses: Statistics 107 - *Concepts and Controversies in Statistics* (which satisfies the Statistics Skills requirement), and Computer Science 108 - *Applied Computer Concepts* (which satisfies the Computer Programming Skills requirement). When students have satisfactorily completed certain more advanced courses in either Statistics or Computer Programming, that Skills requirement shall be considered satisfied. Information regarding those courses that may be substituted is available from the Department of Mathematics and Statistics (692-2382) and the Department of Computer Science (692-2386).

There are no other substitutions in the General Education program.

OPTIONS

Options are available for Introductory courses in the disciplines of Biology, Chemistry, Mathematics and Physics. Students who have the background and knowledge to enroll in introductory courses more specialized than the 111 courses may consult with the Department Chairpersons regarding enrollment in introductory courses in those disciplines. The introductory courses that may be selected as options in these disciplines are Biology 112 and 113; Chemistry 120a and 125a; Mathematics 120, 125, and 150a; and Physics 206a and 211a.

The Introductory courses in History (History 111 a,b,c,d - *Introduction to the History of Western Civilization*) examine different historical periods of Western Civilization. Any of the courses will fulfill an Introductory course requirement in the GE Area *Social Sciences*. A second and third course will fulfill Advanced course requirements in that GE Area.

There are no options for Introductory courses in other disciplines.

CONSTITUTION REQUIREMENT

The State of Illinois requires that "American patriotism and the principles of representative government, as enunciated in the American Declaration of Independence, the Constitution of the United States of America and the Constitution of the State of Illinois, and proper use and display of the American flag, shall be taught in all public schools and other educational institutions supported or maintained in whole or in part by public funds." (Section 27-3 of The School Code of Illinois.) Students may demonstrate their knowledge in these areas by passing an examination administered by the Office of Academic Services or by passing one of the following courses: Government 112, History 200, 201, 202, or 426. Students seeking teacher certification are required to complete one of these courses.

Note: Government 112, History 200, 201, 202, and 426 may count toward fulfillment of either the constitution requirement or the Advanced course requirements in the GE Area *Social Sciences,* but not both.

CONTINUING SIUE STUDENTS

Continuing students will have a choice between completing the General Studies requirements in effect until Summer, 1986, or completing the General Education requirements described in this catalog. For example, students who lack only 8 hours in GHA may wish to select 8 credit hours in the GE Area *Fine Arts and Humanities* (so long as they do not select courses already taken as GHA courses) in order to complete the General Studies GHA requirements. On the other hand, students just beginning to satisfy their General Education requirements may wish to apply the hours earned in General Studies toward the General Education requirements in effect as of Summer, 1986. Because the Skills and Interdisciplinary requirements of the two programs are similar, decisions about comparable courses may be made readily. For GHA, GSS and GSM courses completed prior to Summer, 1986, a transcript evaluation made through the Office of Admissions and Records will make clear whether the courses are Introductory or Advanced. Students with courses in special programs such as Open University should consult the Office of Academic Services for information about applying these hours to the General Education requirements described in this catalog.

Continuing SIUE students may transfer credit earned at other institutions after their matriculation to SIUE. The first 8 hours earned in a GE Area will count toward satisfaction of the Introductory course requirements. Remaining courses in that Area will satisfy Advanced course requirements, provided that the courses transferred are comparable in level to Advanced courses at SIUE.

REENTERING STUDENTS

Students who have interrupted their studies after initial matriculation prior to Summer, 1986, may elect to satisfy the General Studies requirements in effect at the time of matriculation or the General Education requirements in effect as of Summer, 1986. Students who have nearly completed their General Studies requirements may elect to complete the requirements in effect at the time of matriculation. Students who have completed only a few hours prior to Summer, 1986, may wish to satisfy the requirements of the General Education program described in this catalog.

Continuing and reentering students are advised that the General Education requirements described in this catalog include no automatic waiver of required hours in the GE Area most closely related to the proposed or declared major. Students may fulfill 8 hours of General Education Advanced course requirements with courses elected for their major, provided those courses are also approved as Advanced courses in General Education.

TRANSFERRING STUDENTS

Students who enter SIUE from accredited two- or four-year institutions *prior to Summer, 1989,* and who have earned *at least 24 quarter hours in accredited institutions prior to Summer, 1986,* shall have their transcripts evaluated in the following ways:

1) Those who hold A.A. or A.S. degrees from accredited Illinois community colleges will be considered to have completed General Education requirements at SIUE with the following exceptions:

   a) All students who have not satisfactorily completed equivalent course work must satisfy the two-course English Composition Skills requirement with a grade of C or higher.

   b) Students who have transferred credit from an unaccredited institution to an accredited institution to satisfy associate degree requirements may be required to complete additional General Education courses at SIUE.

   c) Students will not receive transfer credit for remedial or developmental courses nor for any courses taken at unaccredited institutions.

2) Those who do not hold A.A. or A.S. degrees may elect to satisfy the General Studies requirements in effect prior to Summer, 1986, or the General Education requirements in effect as of Summer, 1986. Those students electing to complete the General Education requirements described in this catalog will have their transcripts evaluated in accordance with two principles: Courses credited as Introductory or Advanced must be in the traditional arts and sciences (please refer to the "Course Requirements for General Education" section of this catalog), and must be neither remedial nor developmental.

Students who enter SIUE from accredited two- or four-year institutions *after Spring, 1989,* and students who *have earned fewer than 24 quarter hours from accredited institutions prior to Summer, 1986,* must fulfill all General Education requirements described in this catalog.

1) Those who hold A.A. or A.S. degrees from accredited Illinois community colleges shall be considered to have completed the Skills and Introductory General Education requirements described in this catalog. The following principles will be in effect as these students' transcripts are evaluated:

   a) All students who have not completed equivalent course work must satisfy the two-course English Composition Skills requirement with a grade of C or higher.

   b) Students who have transferred credit from an unaccredited institution to an accredited institution to satisfy associate degree requirements may be required to complete additional General Education courses at SIUE.

   c) Students who transfer to SIUE with more than 8 transferable hours in a GE Area shall have their transcripts evaluated for completion of the General Education Advanced course requirements in accordance with guidelines provided by faculty from the appropriate GE Area.

   d) Students who have not completed at least 8 hours that may be transferred as Advanced courses in a GE Area will be required to complete sufficient Advanced courses at SIUE to fulfill the General Education Advanced course requirements. In all cases, transfer students are required to have at least 8 hours of Advanced courses in each GE Area, either by transfer or by hours completed at SIUE.

   e) Students are expected to have at least two disciplines represented by the Introductory and Advanced courses in each GE Area. Additional Advanced hours from the first discipline will be credited as elective hours toward graduation.

   f) Additional transferable hours beyond 16 in any GE Area will be credited as elective hours toward graduation.

   g) Students will have their transcripts reviewed to determine whether any courses fulfill the General Education Interdisciplinary course requirement. Most students transferring to the University should expect to complete a 4 hour Interdisciplinary (IS) course at SIUE.

   h) Students will not receive transfer credit for remedial or developmental courses.

2) Those who do not hold A.A. or A.S. degrees must fulfill all General Education requirements described in this catalog. Their transcripts will be evaluated to determine the extent to which their earlier work satisfies those General Education requirements.

TRANSCRIPT EVALUATIONS

Students are entitled to a full explanation of the transcript evaluations they receive. Those who wish to pursue questions relating to the transfer process are invited to confer with the Director of the Office of Admissions and Records, Rendleman Building, Room 1208 (692-2010).

COURSE NUMBERING SYSTEM

The course numbering system at SIUE identifies those courses appropriate for meeting the Skills, Introductory, and Interdisciplinary course requirements of the General Education program. It also assists students in selecting courses appropriate for their class level.

Courses numbered 100-110 fulfill General Education Skills requirements.

Courses numbered 111 fulfill Introductory course requirements in General Education.

Courses bearing numbers above 111 normally carry major or minor credit and may fulfill Advanced course requirements. Those courses that fulfill Advanced course requirements in General Education are listed at the end of this section.

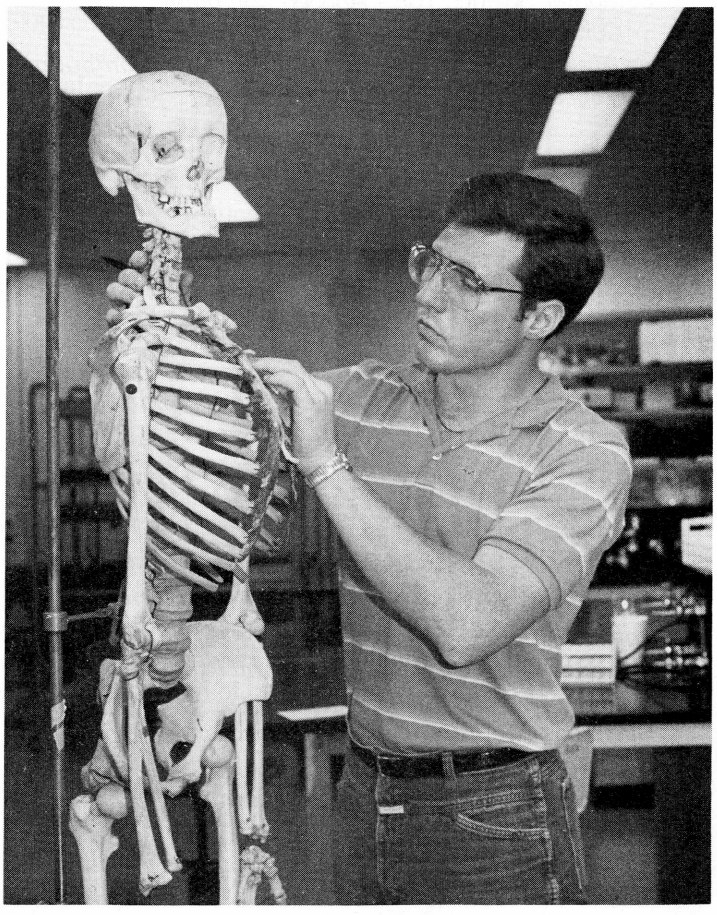
Courses bearing a prefix of IS (Interdisciplinary Studies) are courses that juniors and seniors may select to fulfill the Interdisciplinary course requirement in General Education.

In general, the first digit of a course number identifies the class level (freshman, sophomore, junior or senior) appropriate for enrollment in the course. The following is a guide for selecting courses:

- 000-099 - Courses not properly falling within the other levels
- 100-200 - Courses appropriate for freshmen and sophomores (except that 111 courses may be taken by juniors and seniors)
- 300 - Courses appropriate for juniors and seniors
- 400 - Courses appropriate for students with 96 hours or more
- 500 - Graduate courses. Not accepted for a bachelor's degree unless approved by the Graduate School and the Department granting the degree.

SUMMARY OF REQUIREMENTS AND COURSES

The following pages summarize the course requirements for the General Education program at SIUE.



COURSE REQUIREMENTS FOR
(Total Hours

SKILLS COURSES — 20 Or 24 hours

(to be satisfactorily completed
by the end of the sophomore year)

WRITTEN EXPRESSION: Both Are Required (8 hours)
- English 101 - *English Composition I*
- English 102 - *English Composition II*

and

OPTION A:

ORAL COMMUNICATIONS: Choose One (4 hours)
- Speech Communication 103 - *Interpersonal Communication Skills*
- Speech Communication 104 - *Oral Argumentation Skills*
- Speech Communication 105 - *Public Speaking*

CRITICAL THINKING: Choose one (4 hours)
- Mathematics 106 - *Reasoning and Problem Solving*
- Philosophy 106 - *Critical Thinking*

and one of: (4 hours)
- Statistics 107 - *Concepts and Controversies in Statistics*
- Computer Science 108 - *Applied Computer Concepts*
- Management Information Systems 108 - *Computer Programming Fundamentals*

or OPTION B:

FOREIGN LANGUAGE: Choose One (12 hours)
- French 101, 102, 103 - *Elementary French* (Or French 123 - 12)
- German 101, 102, 103 - *Elementary German* (Or German 126 - 12)
- Greek 101, 102, 103 - *Introduction to Greek*
- Italian 101, 102, 103 - *Elementary Italian* (Or Italian 144 - 12)
- Latin 101, 102, 103 - *Introduction to Latin*
- Russian 101, 102, 103 - *Elementary Russian* (Or Russian 136 - 12)
- Spanish 101, 102, 103 - *Elementary Spanish* (Or Spanish 140 - 12)

and one of: (4 hours)
- Mathematics 106 - *Reasoning and Problem Solving*
- Philosophy 106 - *Critical Thinking*
- Statistics 107 - *Concepts and Controversies in Statistics*
- Computer Science 108 - *Applied Computer Concepts*
- Management Information Systems 108 - *Computer Programming Fundamentals*

INTRODUCTORY COURSES — 24 hours

(may be taken at any time)

GE Area: *FINE ARTS AND HUMANITIES:* Choose Two (8 hours)
- Art 111 - *Introduction to Art*
- English 111 - *Introduction to Literature*
- Music 111 - *Introduction to Music History and Literature*
- Philosophy 111 - *Introduction to Philosophy*
- Theater 111 - *The Dramatic Experience: Theater, Script, Performance*

GE Area: *NATURAL SCIENCES AND MATHEMATICS:* Choose Two (8 hours)
- Biology 111 - *Contemporary Biology* (Or Biology 112 or Biology 113)
- Chemistry 111 - *Contemporary Chemistry* (Or Chemistry 120a or Chemistry 125a)
- Earth Science 111 - *Introduction to Physical Geology*
- Mathematics 111 - *The Nature of Mathematics* (Or Mathematics 120 or Mathematics 125 or Mathematics 150a)
- Physics 111 - *Concepts of Physics* (Or Physics 206a or Physics 211a)

GE Area: *SOCIAL SCIENCES:* Choose Two (8 hours)
- Anthropology 111 - *Introduction to Anthropology*
- Economics 111 - *Principles of Macroeconomics*
- Geography 111 - *Environments, Places, and People*
- Government (Political Science) 111 - *Introduction to Political Science*
- History 111 a,b,c,d - *Introduction to the History of Western Civilization*
- Psychology 111 - *Foundations of Psychology*
- Sociology 111 - *Introduction to Sociology*

The Introductory course in one's major field does not count toward fulfillment of the Introductory course requirements. One introductory course in the GE Area - Social Sciences may be from the Western Civilization sequence.

GENERAL EDUCATION (GE)

— 72 or 76)

ADVANCED COURSES — 24 hours

(may be taken at any time)

GE Area: *FINE ARTS AND HUMANITIES:* (8 hours)
Choose Two from among
9 ART Courses
63 ENGLISH Courses
27 FOREIGN LANGUAGE Courses
16 MUSIC Courses
37 PHILOSOPHY Courses
3 SPEECH COMMUNICATION Courses
6 THEATER Courses
1 WOMEN'S STUDIES Course

GE Area *NATURAL SCIENCES AND MATHEMATICS:* (8 hours)
Choose Two from among
1 ANTHROPOLOGY Course
6 BIOLOGY Courses
5 CHEMISTRY Courses
6 EARTH SCIENCE Courses
6 MATHEMATICS Courses
12 PHYSICS Courses

GE Area: *SOCIAL SCIENCES:* (8 hours)
Choose Two from among
20 ANTHROPOLOGY Courses
14 ECONOMICS Courses
10 GEOGRAPHY Courses
40 GOVERNMENT (POLITICAL SCIENCE) Courses
97 HISTORY Courses
28 PSYCHOLOGY Courses
25 SOCIOLOGY Courses

INTERDISCIPLINARY COURSES — 4 hours

(junior or senior standing required)

Choose One:

IS 321 - *Origins of Life*
IS 324 - *Peoples and Cultures of the East*
IS 328 - *History and Science*[1]
IS 330 - *Conceptions of Human Nature*
IS 334 - *Natural Resources: Issues and Conflicts*
IS 335 - *Early Illinois: Its Land and People*
IS 336 - *Global Problems and Human Survival*
IS 340 - *The Problem of War and Peace*
IS 341 - *The Immigrant in America*
IS 342 - *Death and Dying*
IS 350 - *Women in Social Institutions: A Comparative Approach*
IS 380 - *Song and Poetry*

[1]May fulfill Interdisciplinary Course Requirement or may fulfill Advanced Course Requirement in GE Area *Natural Science and Mathematics* or GE Area *Social Sciences.*

GENERAL EDUCATION COURSES

Skills courses are courses bearing numbers between 100 and 110. Their descriptions, as well as those of all other departmental courses, are listed in alphabetical order at the end of this catalog.

Introductory courses are those numbered 111. However, in some of the disciplines of the sciences there are alternative courses bearing numbers higher than 111 that will satisfy Introductory course requirements.

Interdisciplinary courses, which are shared between two or more departments, bear the prefix "IS." Their descriptions are found under the section "Interdisciplinary Studies," which is included in alphabetical order in the course description section of the catalog.

Students select Advanced courses to meet General Education requirements from among those departmental courses numbered 112 and above that have been approved for General Education. Not all courses in a discipline will satisfy Advanced course requirements. The following courses, listed by number and title, are those which have been approved to satisfy the Advanced course requirements in General Education. Complete descriptions for these courses appear in the course description section of this catalog.

ADVANCED COURSES

In the context of SIUE's General Education curriculum, "Advanced" courses are selected from courses beyond the Introductory level in a discipline that count toward fulfillment of the major or minor requirements of the discipline. Listed below are courses that have been designated as Advanced General Education courses at SIUE.

These courses are considered "advanced" in the sense that they contain applications of the discipline's basic principles to selected areas of study. Students who consider enrolling in Advanced General Education courses may wish to consult with their adviser or the department offering the course. In some cases, there may be prerequisites for these courses.

STUDENTS MAY CHOOSE AMONG THE FOLLOWING COURSES TO SATISFY THE ADVANCED COURSE GENERAL EDUCATION REQUIREMENTS, PROVIDED THEY HAVE MET THE PREREQUISITES FOR THE COURSES THEY SELECT. A SPECIAL WORD OF CAUTION APPLIES TO THE 400-LEVEL COURSES. SINCE SUCH COURSES ARE TYPICALLY ORIENTED TOWARDS MAJORS AND MINORS (INCLUDING GRADUATE STUDENTS) WHO HAVE ALREADY HAD EXTENSIVE WORK IN THE DISCIPLINE, ONLY WELL-PREPARED STUDENTS SHOULD SELECT THEM. CONSULTATION WITH THE INSTRUCTOR IS HIGHLY RECOMMENDED.

GE AREA: FINE ARTS AND HUMANITIES

Art

225 - History of World Art

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

424 - Baroque and Rococo Art
447 - Ancient Art
448 - Early Christian and Medieval Art
449 - Renaissance Art
469 - The Art of Africa, Oceania, and the Americas
473 - Women in Art
480 - American Art
481 - Modern Art

English

202 - Studies in Drama
203 - Studies in Poetry
204 - Studies in Fiction
205 - Black American Literature
207 - Language Awareness
208 - Survey of English Literature to 1660
209 - Survey of English Literature 1660-1830
210 - Survey of English Literature 1830-present
211 - Survey of American Literature to 1860
212 - Survey of American Literature 1860-present
301 - Basic Literary Criticism and Scholarship
303 - Literary Masterpieces of Antiquity
304 - Lit. Mastpcs. of Middle Ages and Renaissance
305 - Lit. Mastpcs. of the Modern World
306 - Introduction to the Bible
307 - Introduction to Shakespeare
308 - Detective Fiction
310 - Classical Mythology and its Influence
340 - Literature of the Third World
341 - The Black Woman in American Literature
342 - Black American Fiction
370 - Fundamentals of the English Language
371 - Principles of English Syntax
392 - Fiction Writing
393 - Poetry Writing

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

400 - Survey of Linguistic Theories and Concepts
402 - Linguistics and Literature
403 - History of the English Language
404 - Chaucer: Canterbury Tales
405 - Methods and Theories of Language Analysis
406 - Old English Grammar
407 - (Intermediate) Readings in Old English
413 - Spenser
418 - Applied Semantics
421 - Poetry and Prose of the Medieval Period
422 - Poetry and Prose of the Renaissance
423 - Poetry and Prose of the 17th Century
424 - Poetry and Prose of the Augustan Age
425 - Poetry and Prose of the Age of Johnson
426 - Poetry and Prose of the Romantic Period
427 - Poetry and Prose of the Victorian Era
428 - British Poetry and Prose of the Modern Era
430 - American Humor and Satire
431 - Major American Writers: 1800-1865
432 - Major American Writers: 1865-1918
433 - Major American Writers: 1918-present
434 - American Poetry to 1900
435 - American Poetry since 1900
436 - American Drama - Beginning to WWI
437 - Modern American Drama
438 - Intellectual Backgrounds of American Literature
439 - American Novel to Early 20th Century
440 - American Novel from Early 20th Century
454 - 18th Century Novel
455 - Victorian Novel
456 - 20th Century Novel
460 - Elizabethan and Jacobean Drama
461 - Restoration and 18th Century Drama
462 - Modern British and Continental Drama
471a - Shakespeare: Comedies and Histories
471b - Shakespeare: Tragedies and Nondramatic Works
473 - Milton
495 - History of Critical Theory

Foreign Languages

French
311 - Contemporary France
351 - Survey of French Literature (Middle Ages Through Renaissance)
352 - Survey of French Literature (Classicism Through Enlightenment)
353 - Survey of French Literature (Romanticism to Present)

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

451 - Studies in French Literature (From the Middle Ages through the Renaissance)
452 - Studies in French Literature (Classicism through Enlightenment)
453 - Studies in French Literature (Romanticism to the Present)

German
311 - German Culture
351 - Survey of German Literature (Middle Ages to 1750)
352 - Survey of German Literature (1750 through Nineteenth Century)
353 - Survey of German Literature (Twentieth Century)

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

401 - Development of German Structure
411 - German Civilization
452 - Faust
453 - Seminar in German Literature

Italian
311 - Italian Culture and Civilization

Spanish
311 - Contemporary Spain
312 - Contemporary Spanish America
351 - Survey of Spanish Literature (Middle Ages through the Seventeenth Century)
352 - Survey of Spanish Literature (Eighteenth Century until the Present)
353 - Survey of Spanish-American Literature (From the Colonial Period until the Present)

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

451 - Studies in Spanish Literature (Beginnings through 16th Century)
452 - Studies in Spanish Literature (17th through 18th Centuries)
453 - Seminar in Hispanic Literature
457 - Don Quixote
471 - Spanish-American Literature (Short Story and Novel)

Foreign Language

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

401 - Comparative Latin and Greek Grammar

Music
121 - Class Applied Piano
124 - Foundations of Music
125 - Theory of Music
144 - University Singers
211 - Music History/Literature
221 - Class Applied Piano
222 - University Band
244 - Community Choral Society
322 - Symphonic Band
338 - Jazz
355 - Chamber Music Ensembles
357 - Music History and Literature
377 - University Symphony Orchestra

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

411 - Music Literature
444 - Concert Chorale
477 - Chamber Orchestra

Students should note that no more than 4 hours of performance courses in music can be used to fulfill Advanced course requirements in General Education. The following courses are performance courses: 121, 144, 221, 222, 244, 322, 377, 444, and 477.

Philosophy
115 - Contemporary Moral Issues
120 - Religion, Reason and Humanity
230 - Introduction to Deductive Logic
283 - Nature and Impact of Physical Science
284 - Nature and Impact of Social Science
300 - Metaphysics
301 - Philosophy of Religion
302 - World Religions
306 - Existentialism and Phenomenology
307 - Pragmatism
308 - Twentieth Century Analytic Philosophy
310 - Philosophy of Law
311 - Engineering, Ethics, and Professionalism
312 - Ethics in the Medical Community
320 - Philosophical Conceptions of Woman
321 - Social Philosophies of the Women's Movement
322 - Ethics
342 - Social and Political Philosophy
345 - Aesthetics of Film
360 - Philosophy of Art
380 - Chinese Philosophy
385a - History of Western Philosophy: Greek and Roman
385b - History of Western Philosophy: Medieval and Renaissance

385c - History of Western Philosophy: Classical Modern (17th and 18th Centuries)
385d - History of Western Philosophy: 19th Century
385e - History of Western Philosophy: 20th Century
386 - American Philosophy
388 - Communism
391 - Theory of Knowledge

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

402 - Hindu Thought
403 - Buddhist Thought
412 - Contemporary Issues in Bio-Ethics
430 - Symbolic Logic
470 - Topics of Business Ethics
484a - History of Western Political Theory: Ancient and Medieval
484b - History of Western Political Theory: Renaissance and Early Modern
484c - History of Western Political Theory: Recent

Speech Communication
330 - Theories of Communication

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

410 - Criticism of Public Communication
433 - Language and Speech Communication

Theater
Theater 304 - Modern Theater in Society: Realism to Revolution

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

Theater 401 a,b,c - History of the Theater
Dance 430 a,b - History of Dance

Women's Studies
200 - Issues in Feminism: An Introduction to Women's Studies

GE AREA: NATURAL SCIENCES AND MATHEMATICS

Anthropology
365 - Human Origins

Biology
202 - Plants and Civilization
203 - Human Sexuality and Reproduction
204 - Human Heredity and Society
205 - Human Diseases
207 - Nutrition

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

412 - Contemporary Issues in Bio-Ethics

Chemistry
120 b,c - General, Organic, and Biological Chemistry
125 a,b,c - Chemical Structure and Dynamics
126 a,b,c - Chemical Structure and Dynamics Laboratory

Earth Science
200 - Earth and Its Environment
201 - Physical Geology
202 - Physical-Historical Geology
Earth Sci/Geo 212 - Physical Geography
Earth Sci/Geo 213 - Meteorology
Earth Sci/Geo 214 - Climate

Mathematics
150 a,b - Elementary Calculus and Analytic Geometry
223 - Introduction to Discrete Mathematics
260a - Calculus and Analytic Geometry
321 - Elementary Linear Algebra
323 - Combinatorics and Graph Theory

Physics
206 b,c - College Physics
211 a,b,c - University Physics
212 a,b - Introductory Physics Laboratory
302 a,b - Modern Physics
312 a,b - Intermediate Physics Laboratory
350 - Energy and the Environment
351 - Physics of Music and Acoustics
352 - Physics of Modern Sound Reproduction
355 - Light and Color
356 - Astronomy

GE AREA: SOCIAL SCIENCES

Anthropology
305a - Peoples and Cultures of the World (North America)
305b - Peoples and Cultures of the World (Asia)
305c - Peoples and Cultures of the World (Latin America and the Caribbean)
305d - Peoples and Cultures of the World (Africa)
311 - Culture of Black Americans
312 - Contemporary American Indians
313 - Women in Cross-Cultural Perspective
319 - Growth of Old World Civilization
330 - Archaeology of North America
350 - Anthropology in Contemporary Life
367 - Growth of New World Civilization

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

400 - Cultural Anthropology
407 - Primatology
410 - Anthropology of Religion
411 - Urban Anthropology
424 - Culture and Personality
432a - The Prehistory of Illinois
432b - Southwestern Archaeology
442 - Human Ecology
452 - Political Anthropology

Economics
112 - Principles of Microeconomics
221 - Economic History of the United States
241 - Contemporary Economic Issues
327 - Social Economics: Issues in Income Distribution, Employment and Social Policy
331 - Labor Economics
343 - Money and Banking
345 - Economics of the Public Sector: National

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

401 - Intermediate Microeconomic Theory
402 - Intermediate Macroeconomic Theory
421 - Economic History of Europe
423 - History of Economic Thought
425 - Comparative Economic Systems
445 - Economics of the Public Sector: State and Local
463 - Introduction to Economic Development

Geography
204 - Introduction to Economic Geography
206 - Introduction to Cultural Geography
261 - Geography of North America
362 - Geography of Europe
363 - Geography of the Middle East
364 - Geography of the Soviet Union
365 - Geography of Africa
366 - Geography of Asia
367 - Geography of Middle America
368 - Geography of South America

Government (Political Science)
112 - American National Government and Politics
320 - Introduction to Public Administration
330 - Illinois Government
340a - American Political Institutions: The Presidency
340b - American Political Institutions: The Legislature
340c -American Political Institutions: The Judiciary
342 - Issues in American Public Policy
343 - American State Governments
344 - Local Government in the United States
345a - American Political Party Systems: Historical Development
345b - American Political Party Systems: Contemporary Political Parties and Interest Groups
350a - Political Systems of Major European States: Britain, France, West Germany
350b - Political Systems of Major European States: Soviet Union
355a - Political Systems of Major Non-European States: Latin America
355b - Political Systems of Major Non-European States: Asia
370 - Introduction to International Relations
385 - Introduction to Political Theory
386 - American Political Ideas and Their Origin

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

422 - Public Financial Administration
424 - Administrative Law
425 - Constitutional Law and the Mass Media
426 - Public Administration and Public Policy Formation
442 - Politics in Metropolitan Areas
445a - American Political Behavior: Voting Behavior
445c - American Political Behavior: Public Opinion
446 - Public Policy Analysis
448 - Intergovernmental Relations in the United States
472 - International Organizations
473a - Foreign Policy of Major Powers: United States
473b - Foreign Policy of Major Powers: Soviet Union
473c - Foreign Policy of Major Powers: Western European States
474 - Public International Law
481 - Descriptive Political Theory
484a - History of Western Political Theory: Ancient and Medieval
484b - History of Western Political Theory: Renaissance and Early Modern
484c - History of Western Political Theory: Recent
495a - Constitutional Law: Federalism and Distribution of Powers
495b - Constitutional Law: Regulation of Property and Economic Activity
495c - Constitutional Law: Civil Liberties and Civil Rights
495d - Constitutional Law: Supreme Court and Criminal Procedure

History
111 a,b,c,d - Introduction to the History of Western Civilization (one or two of a-d in any sequence. An additional course of a-d will satisfy an Introductory course requirement in the GE Area *Social Sciences*.)
115 - History of Black America
200 - U.S. History and Constitution: 1492-1815
201 - U.S. History and Constitution: 1815-1900
202 - U.S. History and Constitution: 1900-present
304 - Great Trials, Assassinations and Executions
305 - The American Civil War
306 a,b,c - History of Rome
308 - History of Illinois
313 - Witchcraft, Magic and the Occult
316 a,b,c - History of Africa
317 a,b - The Westward Movement in American History
321 - Mussolini and European Fascism
322 a,b,c - History of the Arab World
332 a,b,c - Medieval History
334 a,b,c - History of China
335 - History of Modern Japan
338 a,b - History of Greece
340 a,b - History of American Diplomacy
341 a,b - History of Religion in Western Civilization
352 a,b,c - History of Latin America
355 - Italian Unification and World War I
358 - History of Science: 1300 to Present

372 a,b,c - History of Russia
377 a,b - History of American Business
390 - The Women's Rights Movement in the U.S.

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

401 a,b - History of the South
407 - The Black Urban Experience, 1820-1965
412 a,b - Intellectual History of the U.S.
414 a,b - History of Eastern Europe
415 a,b,c - Early Modern Europe
419 a,b,c - History of England: 1509-present
420 - The French Revolution
424 a,b,c - Modern European Thought
425 - American Colonial History
426 - The Revolution and the Constitution
427 - History of the Arab-Israeli Conflict
428 - The Age of Jackson
430 a,b,c - Late Modern Europe
433 - WWI and Its Aftermath: 1914-1921
434 - The Middle East in World Affairs
435 a,b,c - 20th Century American History
436 - Women in American Social History
437 a,b - American Military History
445 - The Russian Revolutions: 1900-1930
446 - The Grand Duchy of Moscow: 1450-1613
453 a,b - History of Modern France
454 - Biography in American History
455 - Men and Women of Modern Europe
456 a,b - Recent German History
460 a,b,c - Social and Intellectual History of the Middle Ages
465 - Chinese Communist Revolutions
471 a,b - History of Mexico
473 a,b - The Caribbean Area
485 - Origins and History of World War II

Psychology
201 - Child Psychology
203 - Adolescent Psychology
204 - Psychology of Maturity and Old Age
205 - Introduction to Personality Dynamics
206 - Social Psychology
212 - Methods of Psychological Inquiry
308 - Social Psychology of Non-Verbal Behavior
311 - Experimental Psychology: Learning
312 - Experimental Psychology: Perception
313 - Experimental Psychology: Motivation
314 - Physiological Psychology
320 - Introduction to Industrial Psychology
374 - Organizational Psychology

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

404 - Contemporary Theories of Learning, Perception, and Motivation
405 - Psychology of Women
409 - History and Systems
414 - Altered States of Consciousness
415 - Environmental Psychology
420 - Behavior Modification
430 - Applied Behavior Analysis
431 - Psychopathology
440 - Theories of Personality
451 - Advanced Child Psychology
461 - Advanced Social Psychology
465 - Group Dynamics and Individual Behavior
468 - Psychology of Human Sexuality
479 - Psychology of Industrial Conflict
487 - Psychology of Aging

Sociology
300 - Contemporary Social Problems
304 - Race and Ethnic Relations
308 - Women and Society
312 - Social Research Methods
321 - Individual and Society
331 - Professions and Modern Society
335 - Urban Sociology
338 - Industry and Society
362 - Social Movements
372 - Criminology
373 - Introduction to Criminal Justice
374 - Victims and Society
381 - Population and Migration
391 - Marriage

NOTICE: Please see cautionary note at the beginning of the Advanced course listing.

409 - Urban Social Problems
430 - Social Organization
431 - Complex Organizations
435 - Social Inequality
440 - The Family
441 - Health, Illness and Society
444 - Sociology of Law
451 - Classical Social Theory
456 - Contemporary Sociological Theory
461 - Social Change
470 - Sociology of Deviance

FINANCIAL INFORMATION

FINANCIAL ASSISTANCE

The financial aid program of the University is designed to assist students who may be financially unable to meet the expenses of attending college. Financial aid may be awarded in the form of grants, scholarships, and loans, and through student employment. Grants and scholarships do not have to be repaid. Loans normally carry low interest rates with repayment beginning after the completion of studies. A combination of scholarships, grants, loans, and/or work is referred to as a "package," and packages are designed to meet students' particular needs. While most financial aid is based on need, SIUE offers several types of financial aid based on other factors.

Student financial need is determined by subtracting from the college cost budget any resources available to students. Such resources include expected parental contributions, student assets, summer earnings, or other student benefits. For self-supporting students, the resources include personal income and any income earned by spouses. The analysis of need may vary slightly between federal, state, and institutional programs, but it is based on the general assumption that primary responsibility for the cost of education rests with the parents or with self-supporting students themselves. The ability of parents or self-supporting students to contribute toward educational costs is measured by need analysis systems, such as the Pell Grant Program, Illinois State Scholarship Commission Monetary Award (ISSC), or the American College Testing Family Financial Statement (ACT-FFS).

ELIGIBILITY FOR FINANCIAL ASSISTANCE

In general, eligibility for most federal and state student financial aid programs requires that:

Students enroll at least half-time. (Non-degree undergraduate students are not eligible.)

Students are U.S. Citizens or permanent residents. (Foreign students attending on student visas are not eligible.)

Students have financial need.

Students are making satisfactory progress in their course of study. (See policy statement.)

Male students are registered for the draft if born on or after January 1, 1960 and are not currently serving in the Armed Forces.

Students are not in default on a prior educational loan.

Students do not owe a refund for overpayment of a previous Pell or Supplemental Educational Opportunity Grant.

Students provide a financial aid transcript from each post-secondary school or college attended previously.

HOW TO APPLY FOR FINANCIAL ASSISTANCE

Students applying for all forms of financial aid should submit the SIUE Application for Financial Assistance and the ACT-Family Financial Statement as early as possible for the academic year for which aid is requested. The Family Financial Statement should be mailed to the American College Testing Program at least four weeks prior to the May 1st preferential filing date. Students wishing to receive maximum consideration for financial assistance should also mail the SIUE institutional application for financial aid to the Office of Student Work and Financial Assistance by May 1st. Applications received after May 1st will be considered only if funds are still available. Students must reapply each year for financial aid. All undergraduate students applying for financial aid should also apply to the Pell Grant Program; Illinois residents should apply for the Illinois State Scholarship Commission Monetary Award. Students may use the ACT financial statement to apply for the Pell Grant and the ISSC award by answering "yes" to the appropriate items.

Effective with the 1987-88 application year, students may also use the ACT-FFS to apply for a Guaranteed Student Loan. This procedure will replace the application process which typically began with the student contacting a lender for an application form.

Requests for applications and information about any of the programs may be obtained by contacting the Office of Student Work and Financial Assistance at (618) 692-3880 or Box 1060, SIUE, Edwardsville, Illinois 62026-1060.

TYPES OF ASSISTANCE

Scholarships

Scholarships generally pay all or part of tuition and fees and do not have to be repaid. Funding for scholarships comes from the federal and state governments, SIUE, and area business, civic, and community groups.

Illinois State Scholarship Commission Monetary Award

The Illinois State Scholarship Commission (ISSC) Monetary Award Provides for partial or full payment of tuition and fees to full- or half-time undergraduate students. The award is available to residents of the State of Illinois who demonstrate financial need.

Air Force ROTC Scholarships

The Air Force presently offers four-year, three-and-one-half year, two-and-one-half year, and two-year scholarships to qualified students. This scholarship pays for tuition, certain fees, and books. Scholarship recipients also receive $100 per month subsistence allowance. For more information, please refer to the section on Aerospace Studies under University College.

Illinois State ROTC Scholarships

SIUE provides forty scholarships, ten per academic year, to qualified full-time students who are Illinois residents. Scholarships are awarded on the basis of demonstrated leadership ability and performance in the corps of cadets. The scholarship waives tuition and activity fees for up to four years as long as students remain in good academic standing and are enrolled in Air Force ROTC. Contact Aerospace Studies (692-3180) for further information.

Illinois General Assembly Scholarship

These scholarships are awarded by members of the General Assembly to residents of their legislative districts. The award may be for varying lengths of time and provides for tuition and the activity fee.

To apply, contact a General Assembly representative directly.

Provost Scholarship

The Provost Scholarship provides tuition or partial tuition at the Illinois resident rate for one to three quarters. Continuing and transfer students who have a B average and newly entering freshmen who rank in the top ten percent of their high school class are eligible to apply. Provost scholars are required to maintain a B average each quarter. These highly competitive awards are based on both academic ability and financial need. Students may obtain an application by contacting the University College, Box 1221, SIUE, Edwardsville, Illinois 62026-1221.

Harbert Memorial Awards

A number of Harbert Memorial awards are available from a private endowment to eligible students who are graduates of Centralia High School. Those include undergraduate and graduate tuition waivers as well as other types of support. For more information, contact Harbert Scholarships, University College, Box 1221, SIUE, Edwardsville, Illinois 62026-1221.

Presidential Scholars Program

The Presidential Scholars Program, a scholarship program academically for talented freshmen, offers scholarships for up to four years, special academic status, and individualized educational opportunities to students designated Presidential Scholars. Since few scholars are selected each year, students applying for the program may wish to consider other forms of financial assistance as alternatives. In order to apply for a Presidential Scholar Award, students should contact the Presidential Scholar Program, University College, Box 1221, SIUE, Edwardsville, Illinois 62026-1221.

Athletic Scholarship

SIUE offers scholarships to talented athletes in accordance with National Collegiate Athletic Association rules and procedures. For more information, students should contact the Director of Intercollegiate Athletics.

Private Scholarships

Students are encouraged to work with high school or college counselors to secure information regarding private sources of scholarships. SIUE also has available an extensive bibliography of financial aid information in the reserve section of Lovejoy Library.

Grants

Grants are available to assist students with tuition and fees and with other educational expenses such as room and board or transportation. Grants do not have to be repaid.

Pell Grant

This federally-sponsored program is designed to aid eligible undergraduate students in meeting educational expenses and to fill the gap where parental or student resources fall short of meeting these expenses. The Pell Grant Program is used as the base in determining the total financial aid "package" of an undergraduate student.

Awards may range up to $2,100 per academic year. Most students utilize their full Pell Grant entitlement during the Fall, Winter, and Spring Quarters. However, those students who do not attend on a full-time basis during each of these quarters may have remaining eligibility for a Summer Quarter Pell Grant.

Supplemental Educational Opportunity Grant

The purpose of the Supplemental Educational Opportunity Grant (SEOG) program is to assist students with demonstrated financial need who would be unable to enter or remain in school without this grant. There is a self-help component which assumes that students will accept either work or other loans as part of the total financial aid package.

Student-to-Student Grant

The Student-to-Student Grant Program (STS) is provided for students attending the University. The Program is funded through a $1.50 per student fee assessed each quarter and through matching state dollars. Grants of varying amounts are made to students based on financial need.

Illinois Veterans Grant

Veterans who qualify for the Illinois Veterans Grant, which covers tuition, activity fee, and graduation fee, may use it concurrently with the GI Bill benefits. This grant is available to students who served honorably in the U.S. Armed Forces.

Any Veteran who was separated after August 11, 1967 must have served at least one year or have been separated for a disability directly related to such service. There is no minimum term of service requirement for Veterans separated prior to August 11, 1967. The Veteran must have been a resident of Illinois at the time of entering the U.S. Armed Forces, or a student at a State-controlled College, University, or Community College at the time of entering the U.S. Armed Forces. The Veteran must have returned to the State of Illinois within six months of separation from such service. Any resident of Illinois who is currently a member of the U.S. Armed Forces shall be entitled to receive the grant if they have served at least one year and would otherwise meet the eligibility and residency requirements if discharged from the service. Non-Illinois residents who meet the above requirements may qualify for the Illinois Veterans' Grant by attendance at an Illinois public university. Please contact the Office of Student Work and Financial Assistance for additional information.

Loans

Loans are available to SIUE students through federal, state, and institutional programs to assist with educational costs. Repayment of most loans begins six months after the student graduates or leaves SIUE.

National Direct Student Loan

Students who demonstrate financial need may qualify for a National Direct Student Loan (NDSL). The amount borrowed accrues no interest as long as the borrowers remain at least half-time students at any institution of higher education. Repayment begins seven months from the date the borrowers cease to attend school on at least a half-time basis. Interest at the rate of 5 percent begins to accrue at the time repayment begins. A ten year period in which to repay the loan may be available. Cancellation of the loan in consideration for full-time teaching may also be available to qualified students. Payment can be deferred under certain circumstances. For additional information, please contact the Office of Student Work and Financial Assistance.

Students eligible for the NDSL may receive up to $1,200 per academic year. The cumulative amount of all undergraduate loans may not exceed $6,000. Eligible graduate students may receive up to $2,250 per academic year. The cumulative amount of all loans, undergraduate and graduate, may not exceed $12,000.

Guaranteed Student Loan

The Guaranteed Loan Programs (GLP) are designed to make it possible for students who are enrolled at least half-time to borrow for their educational needs from private lenders, such as banks, savings and loan associations, and credit unions. All Guaranteed Student Loan applicants are required to file both the ACT-Family Financial Statement and the SIUE Application for Financial Aid to determine loan eligibility. Eligible undergraduates may borrow $2,500 per academic year at 8 or 9 percent interest. The total amount of all undergraduate loans may not exceed $12,500.

Effective with the 1987-88 application year, students may use the ACT-Family Financial Statement to apply for a Guaranteed Student Loan. This procedure replaces the application process which typically began with the student contacting a lender for an application form. Students are encouraged to submit the ACT-FFS well in advance in the term for which they plan to enroll.

Loans greater than $1,000 will be advanced in quarterly disbursements rather than in one lump sum.

PLUS (Auxiliary) Loan Program

PLUS loans are meant to provide additional funds for educational expenses. The interest rate for these loans is 12 percent. Like the Guaranteed Student Loan (GSL), loans are provided by banks, credit unions, or savings and loan associations. Parents of dependent undergraduate students may borrow up to $3,000 per year. Independent undergraduates may borrow up to $2,500 per year. However, the PLUS loan, combined with any GSL the undergraduate also may have, cannot exceed the yearly and total GSL undergraduate limits. Graduate students may borrow up to $3,000 per year. A borrower must begin repaying a PLUS loan within 60 days of receipt of the loan.

SIUE Foundation Loan

The SIUE Foundation has provided funding for loans to assist students in meeting educational expenses. Loans are based on financial need. Demonstrated academic achievement may also be required. Information regarding specific loans may be obtained by contacting the Office of Student Work and Financial Assistance.

Emergency Short-Term Loan

Funds are available to students through the Office of Student Work and Financial Assistance for emergency loans. Short-term loans are available for emergency situations only and are not for payment of tuition and fees. The maximum loan is

normally $150. Evidence of the emergency is required. A small charge is made for this loan. Repayment is due when financial aid is disbursed or in 60 days, whichever occurs first.

Employment

Part-time student employment is available at SIUE under both the regular student work program and the College Work Study program. SIUE also assists students in finding off-campus employment through the Job Locator Program.

Student Work

SIUE offers a broad range of part-time student work opportunities in almost every phase of University operation or service. Whenever possible, students are placed in positions which relate to their major field of study. Although the majority of the positions are in the clerical, maintenance, or food service areas, there are many challenging positions which develop the administrative, research, or technical skills of the employee.

Students usually work 15-20 hours per week as class schedules permit. Generally students begin working at the federal minimum wage and receive increases as total accumulated hours increase.

Students apply in person and are referred by the Student Employment Office to employing departments on campus for interviews.

College Work Study

The College Work Study Program is designed to assist students with financial need to secure employment and help defray costs. Students who qualify are awarded federal funds which pay 80 percent of their wages, with the department in which they work paying the remainder. College Work Study eligibility is awarded as part of a package of scholarships, grants, or loans. Students' maximum earnings are specified in the award letters.

Job Locator and Development Program

The Job Locator and Development (JLD) Program assists students seeking part-time jobs with employers in the communities surrounding SIUE. Designed to place SIUE students in part-time jobs related to their career and academic interests, the JLD Program provides financial assistance and job experience to students. Enrolled students who are not receiving monies through the SEOG, CWS, or NDSL programs may participate in the Job Locator Program. Employment opportunities are listed on the Job Board located outside the Student Employment Office.

GI Bill Information

Southern Illinois University at Edwardsville is approved by the State Approving Agency for Veterans Education. Veterans who qualify for the Illinois Veterans Scholarship may use this award concurrently with their GI Bill benefits. Veterans do not receive VA educational benefits for the grades of W, WP, No Credit, Audit, PR, No Entry, and Deferred. Graduate students who receive a Deferred grade in a thesis course, however, may receive benefits. Non-degree seeking students are not eligible for VA benefits. Veterans must make satisfactory academic progress to remain eligible for VA benefits.

Veterans applying for the GI Bill may obtain the necessary application forms from the Veterans Administration Office or the University's Veterans Certification Section which is located in the Office of Admissions and Records, Room 1207, Rendleman Building. These forms, along with a copy of the veteran's DD-214 (Report of Separation from the Armed Forces) and certified proof of any dependants, i.e., marriage certificate and/or birth certificates of children, should be provided to the Veterans Certification Section. This office in turn will complete the enrollment certification and mail it along with the application to the Veterans Administration in Chicago. Veterans who experience any changes in dependent status after receiving benefits must notify the Veterans Administration in Chicago immediately.

For undergraduate students qualifying under the GI Bill the following benefits apply as of 1986:

Academic Load	No Dependents	1 Dependent	2 Dependents	Each Additional Dependent
12 or more hours	$376	$448	$510	$32
9 - 11 hours	283	336	383	24
6 - 8 hours	188	224	255	17

Students attending under the GI Bill who find it necessary either to drop a class or to withdraw from school must indicate on the program or withdrawal form the last date of attendance.

Students who withdraw or leave the University are advised to refer to the Registration section of this catalog entitled Withdrawing From the University.

DEFERMENT OF TUITION AND FEES

Students unable to pay their tuition and fees by the published date may be able to qualify for financial aid or hardship deferments. To apply for a deferment, students should obtain an application during the registration process. Deferments are also available during the first week of classes, but students are encouraged to obtain the deferment during registration to avoid delays in obtaining textbooks. Students obtaining a deferment are required to sign a promissory note, which is a legal instrument.

Students receiving a deferment are subject to the University refund policy as determined by the formal withdrawal process. Withdrawal during the refund period (the first two weeks of the quarter) will cancel the deferment promissory note. Withdrawal **after** the refund date WILL NOT cancel the promissory note and the student will be obligated to the University for the deferred amount. Official program changes during the refund period will automatically reduce or increase the deferred amount; however, reduction of class load after the refund date has no effect on the promissory note.

Any questions about deferment procedures and/or application processing should be directed to the Office of Student Work and Financial Assistance at (618) 692-3880. A copy of the official University Tuition and Fee Deferment Policy is available for review upon request.

Southern Illinois University at Edwardsville accepts Master Card and Visa for payment of tuition and fees.

Financial Aid Deferment

Since Pell Grant and campus-based financial aid check payments are not made until the fifth week of the term, financial aid recipients without full tuition scholarships are encouraged to apply for financial aid defermants. Students with scholarships should be certain their tuition and fee assessment reflects the proper crediting of their scholarship amount before applying for a deferment. This is determined by reviewing the amount due on the fee assessment card.

Deferments are granted for a limited period of time and are due and payable during the sixth week of the quarter. Most financial aid payments are made prior to the due date of the deferment. Deferments may be approved if the financial aid expected covers the amount of tuition and fees due to the University. However, all **prior** debts (Accounts Receivable) must be paid.

In order to be eligible for a financial aid deferment, students must meet the following criteria:

1. Have verified financial aid at least equal to the amount of tuition and fees being deferred.
2. Have no unpaid debts to SIUE.
3. Have no default for a previous educational loan at SIUE.
4. Make satisfactory academic progress as required for all financial aid recipients.

Students with a history of receiving financial aid from a previous school or SIUE may qualify for a deferment in the fall quarter. Students who have not received results from Pell or ISSC or who have not completed the paperwork necessary to transfer the award to SIUE may apply for a deferment.

Financial aid deferment applications should be submitted to the Office of Student Work and Financial Assistance during registration.

Hardship Deferment

Students not receiving financial assistance may be considered for a deferment if they are experiencing an extreme personal or family hardship of an emergency nature. A hardship consists of a major **necessary** and **unexpected** expense or a **significant loss** of income which disrupts the student's or family's financial circumstances and makes it impossible to pay tuition and fee charges by the deadline. In order to be considered for a hardship deferment, students must meet the following criteria:

1. Have no unpaid debts to SIUE.
2. Have a record of payment for any previous deferments by the due date.
3. Maintain good academic standing at SIUE.
4. Provide documentation of the hardship in writing.
5. Provide documentation of the source or resources for payment of the balance of the deferment by the due date.

Students approved for a hardship deferment must make payment of the first installment or deposit equal to at least 25% or more of the total tuition and fees due. This payment is required to complete the deferment transaction.

FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS POLICY

In order to remain eligible for student financial assistance under federal, state, and most institutional programs, students must meet certain standards of academic progress; consequently, the policy below has been adopted to comply with state and federal regulations governing student financial aid programs. Regulations concerning State of Illinois aid programs are established by the Illinois State Scholarship Commission. Requirements concerning federal aid programs are established by the Department of Education pursuant to the Education Amendments of 1976 (P.L. 94-482) and amended by the Education Amendments of 1980 (P.L. 96-374).

Requirements: Undergraduate Students

All undergraduate students, in order to remain eligible for financial assistance, must demonstrate satisfactory academic progress by completing a minimum number of credit hours during each academic year of attendance at SIUE.

For purposes of this policy, at the undergraduate level, "financial aid" is defined as any of the Title IV federal programs and institutional programs, including National Direct Student Loan, Supplemental Educational Opportunity Grant, Pell Grant, College Work Study, Regular Student Employment at SIUE, Parental Loan for Undergraduate Students, Illinois Guaranteed Loan, Guaranteed Student Loan, Foundation Loans, Foundation Grants, Illinois State Scholarship Monetary Award, SIUE Tuition Waiver or Scholarship, and Student-to-Student Grant. As new federal, state, and institutional financial aid programs are implemented, such financial aid programs will also be covered by this policy.

The following policy model will be used to determine the minimum credit hours which students should have completed successfully at the end of each three quarters of full-time attendance. Students attending half-time are required to complete one-half of the full-time requirements. Students who have not earned the minimum cumulative hours required for

their length of attendance will not be eligible for financial aid though most students will achieve more than the minimum cumulative hours.

MINIMUM ANNUAL CREDIT HOURS REQUIREMENT

Attendance Year	Required Hours Per Term	Annual Requirement	Terms Enrolled	Cumulative Required Credit Hours
Year 1	6x3=	18	3	18
Year 2	6x3=	18	6	36
Year 3	8x3=	24	9	60
Year 4	8x3=	24	12	84
Year 5	10x3=	30	15	114
Year 6	12x2=	36	18	150
Year 7	14x3=	42	21	192

The following grades for coursework at SIUE shall constitute satisfactory completion of courses for the purposes of this policy: A, B, C, D, S, (Satisfactory), and Pass. The following grades issued for coursework at SIUE shall not constitute satisfactory completion of courses for the purposes of this policy: W (Withdrawal), INC (Incomplete), DEF (Deferred), U (Unsatisfactory), AU (Audit), NC (No Credit), and E. During the entire period of undergraduate study of a student, a maximum of 24 hours of "Progress" (PR) coursework will be accepted in meeting the requirements of "hours completed" under this policy.

Academic Standards and Receipt of Financial Aid

In addition to accumulating the credit hours indicated above, students must also comply with all institutional policies regarding academic standards. Students who are placed on scholastic warning or probation are normally eligible to continue receiving financial aid. Students who are academically suspended are not eligible for further aid until reinstated. Compliance with the academic standards requirements is checked quarterly before financial aid payments are made.

Review Procedures

In accordance with these guidelines, students' cumulative SIUE academic records are considered when evaluating satisfactory academic progress, including terms when no financial aid was received. Transfer credits, however, are not included in the evaluation.

An annual review of credit hours completed at SIUE is made for each student at the end of Spring Quarter to determine eligibility for continued receipt of financial aid.

Records of students who do not attend the full academic year will be reviewed for the terms they enrolled. Students applying for Guaranteed Student Loans will be reviewed each time a loan application is certified. Students who are declared eligible to receive financial aid through performance agreements by the Financial Aid Appeals Committee will have their records reviewed quarterly to determine their continued eligibility. (See section on Appeals.)

Requirements: Graduate Students

For the purposes of this policy, at the graduate level, "financial aid" refers to Title IV federal programs and institutional programs including College Work Study, Regular Student Employment, Auxiliary Loans to Assist Students, Foundation Loans, Foundation Grants, Student-to-Student Grant, and SIUE Tuition Waiver or Scholarship (except waivers given under the terms of a graduate assistantship or special graduate award).

Eligibility for financial assistance for graduate students is related to status (classified or unclassified), full-time or half-time enrollment, and maintenance of satisfactory academic progress. Classified students are those who have been admitted to the graduate school in a graduate degree program; unclassified students are those who have been admitted to the graduate school, but not to a graduate program. Full-time graduate enrollment is eight or more hours of graduate credit each quarter; half-time enrollment is four to seven hours of graduate credit each quarter. Unclassified graduate students are ineligible for federal student aid according to federal regulations; however, they are eligible for institutional financial aid programs.

To retain their eligibility for student financial assistance programs, graduate students both classified and unclassified must remain in good academic standing. Good standing is defined by the Graduate School as maintaining a cumulative grade point average of at least 4.0 in all coursework for graduate credit; an exception may ba made for one probationary quarter if recommended by the department and approved by the Graduate Dean.

The following annual minimum graduate credit hours are expected of full-time graduate students to remain eligible for financial aid. Half-time students will be expected to complete one-half of the cumulative hours indicated for periods of half-time enrollment.

This model matrix illustrates the minimum annual graduate credit hour requirement for this satisfactory academic progress policy.

MINIMUM ANNUAL CREDIT HOURS REQUIREMENT

Attendance Year	Required Hours Per Term	Annual Requirement	Terms Enrolled	Cumulative Required Credit Hours
Year 1	4x3=	12	3	12
Year 2	4x3=	12	6	24
Year 3	4x3=	12	9	36
Year 4	4x3=	12	12	48

Years of eligibility may be extended for students enrolled in masters programs with requirements that exceed 48 quarter hours, in specialist programs, and in doctoral programs.

Student records will be checked annually at the end of the Spring Quarter to determine if the minimum required graduate credits have been accumulated. Good standing requirements will be checked quarterly before aid payments are made.

Requirements: Environmental Resources Training Center (ERTC) Students

Students enrolled in the Environmental Resources Training Center are eligible to continue receiving student financial aid as long as they have completed successfully 50 percent of the total credit hours attempted (as of tenth day enrollment) each quarter. Compliance with this requirement is checked quarterly before financial aid payments are made.

The maximum time to receive financial aid in this program is two years or eight quarters; however, most students will normally complete the program in four quarters.

Students who are academically suspended are not eligible for financial aid until reinstated.

Requirements: Dental Students

Professional students enrolled in the School of Dental Medicine are eligible to continue receiving financial aid as long as they are making satisfactory academic progress as specified by the School of Dental Medicine policies.

Rationale for this standard is based on the School of Dental Medicine policy which states that a student cannot repeat a year more than one time and that a student must complete the DMD degree program requirements within six (6) academic years of initial matriculation. The academic progress of all students will be reviewed annually by officials at the School of Dental Medicine.

Records of any student who is placed in a special program category, or who takes a leave of absence, will be reviewed by the Student Affairs Officer at the School of Dental Medicine and the Dean of the School of Dental Medicine as well as by the Director of Student Work and Financial Assistance to determine continued eligibility for financial aid.

Additional Progress Requirements for Athletes and Veterans

Athletes receiving NCAA awards (or covered by NCAA policies) are also required to maintain minimum standards as required under NCAA and institutional policies governing athletes. Similarly, veterans receiving G.I. Benefits are required to meet guidelines established by Veterans Administration as well as the University.

Nothing in this policy shall be construed as an exemption to the requirements by another federal or state agency.

Promulgation

This policy shall be reviewed and published annually by the Office of Student Work and Financial Assistance. It will also be included in relevant University and/or financial aid brochures and publications.

Transition Policy Statement

Undergraduate students whose financial aid eligibility has been terminated under the prior policy for the maximum number of terms enrolled (17) may appeal for consideration for reinstatement of aid eligibility for an additional four terms under this policy.

Students who wish consideration to have the number of terms of financial aid eligibility extended under this policy shall follow the appeal procedures outlined below.

Appeals

Students who desire to appeal termination of their financial aid for whatever reason must make a written appeal to the Director of Financial Aid within 10 days of their notice of termination. Students who have never received financial aid and who are considered to be ineligible under these policies may likewise appeal for reconsideration.

The Director of Financial Aid will review such appeals for mitigating circumstances and may take action on such appeals or may forward the appeals to the Financial Aid Appeals Committee for review.

A Financial Aid Appeals Committee appointed by the Vice President and Provost, with faculty, staff and student representatives will consider such appeals in a timely manner. The Financial Aid Appeals Committee will normally review only written evidence and not conduct hearings unless unusual circumstances so require. Students are encouraged to submit third party written documentation to support their appeals.

The Financial Aid Appeals Committee may recommend continuation of financial aid and, as a condition of resumption, may require a student to obtain counseling or to attend developmental skills sessions or related academic services. In addition, the committee may require academic performance agreements.

Students reinstated or readmitted to the University after a period of absence whose financial aid eligibility had been previously terminated may appeal to the Financial Aid Appeals Committee for reinstatement of financial aid eligibility. If possible, such appeals should be supported by evidence of satisfactory progress in academic work completed externally to SIUE including on the job training or self-development activities.

Appeals of the committee's decision may be made to the Vice President and Provost and to the President.

Amendment to the Policy

This policy will be amended whenever applicable federal or state law or regulations are changed. Upon approval of the President, the Director of Student Work and Financial Assistance is authorized to incorporate and implement changes required in this policy by federal or state law or regulations. Other amendments to the policy, not required by changes in law or regulations, will be considered through the revision procedures of the Financial Aid Advisory Committee.

TUITION AND FEES[1]

The tuition and fees charged students are established by the University Board of Trustees and are subject to change without prior notice whenever conditions make such changes necessary.

In order to obtain rental textbooks from Textbook Service, students must have paid their fees or made arrangements for fee payment through a deferment.

Student fees and charges are payable during the first week of classes of each quarter without penalty. Payment of student fees and charges is permitted through the second week of classes of each quarter. A late fee of $10.00 will be assessed after the first week of classes. Payment after the second week is not permitted.

[1]Effective Summer 1986 and subject to change.

Qtr. Hrs.	Tuition	Athletic Fee	Textbook Rental Fee	University Center Fee	Student to Student[2] Grant Fee	Student Welfare and Activity Fee	Total
Undergraduate Students - Illinois Residents							
1	$ 29.00	$ 2.10	$ 1.85	$ 8.20	$ 0.00	$ 3.00	$ 44.15
2	58.00	4.20	3.70	16.40	0.00	6.00	88.30
3	87.00	6.30	5.55	24.60	0.00	9.00	132.45
4	116.00	8.40	7.40	32.80	0.00	12.00	176.60
5	145.00	10.50	9.25	32.80	0.00	15.00	212.55
6-11	232.35	14.35	14.00	36.50	1.50	20.40	319.10
12-18	348.55	20.35	20.00	40.00	1.50	20.40	450.80
19 & over	377.55	22.45	21.85	48.20	1.50	23.40	494.95

[2]Payment of the Student-to-Student Grant Fee is voluntary. Students may apply for a refund of the fee within the first two weeks of the quarter in the Office of Student Work and Financial Assistance.

Undergraduate Students - Out-of-State Residents							
1	87.00	2.10	1.85	8.20	0.00	3.00	102.15
2	174.00	4.20	3.70	16.40	0.00	6.00	204.30
3	261.00	6.30	5.55	24.60	0.00	9.00	306.45
4	348.00	8.40	7.40	32.80	0.00	12.00	408.60
5	435.00	10.50	9.25	32.80	0.00	15.00	502.55
6-11	697.05	14.35	14.00	36.50	1.50	20.40	783.80
12-18	1,045.65	20.35	20.00	40.00	1.50	20.40	1,147.90
19 & over	1,132.65	22.45	21.85	48.20	1.50	23.40	1,250.05
Graduate Students - Illinois Residents							
1	31.05	2.10	0.00	8.20	0.00	3.00	44.35
2	62.10	4.20	0.00	16.40	0.00	6.00	88.70
3	93.15	6.30	0.00	24.60	0.00	9.00	133.05
4	124.20	8.40	0.00	32.80	0.00	12.00	177.40
5	155.25	10.50	0.00	32.80	0.00	15.00	213.55
6-11	248.95	14.35	0.00	36.50	1.50	20.40	321.70
12-18	373.45	20.35	0.00	40.00	1.50	20.40	455.70
19 & over	404.50	22.45	0.00	48.20	1.50	23.40	500.05
Graduate Students - Out-of-State Residents							
1	93.15	2.10	0.00	8.20	0.00	3.00	106.45
2	186.30	4.20	0.00	16.40	0.00	6.00	212.90
3	279.45	6.30	0.00	24.60	0.00	9.00	319.35
4	372.60	8.40	0.00	32.80	0.00	12.00	425.80
5	465.75	10.50	0.00	32.80	0.00	15.00	524.05
6-11	746.85	14.35	0.00	36.50	1.50	20.40	819.60
12-18	1,120.35	20.35	0.00	40.00	1.50	20.40	1,202.60
19 & over	1,213.50	22.45	0.00	48.20	1.50	23.40	1,309.05

MISSOURI RESIDENTS' RATES

The following tuition schedule has been established for students who are legal residents of the State of Missouri. Students who live in Missouri and take no more than 9 credit hours each quarter are allowed to pay at the same tuition rate as Illinois residents. It is understood that Missouri residents registering for no more than 9 credit hours will take courses on a space available basis.

Qtr. Hrs.	Tuition	Athletic Fee	Textbook Rental Fee	University Center Fee	Student to Student[2] Grant Fee	Student Welfare and Activity Fee	Total
Undergraduate Students - Missouri Residents							
1	$ 29.00	$ 2.10	$ 1.85	$ 8.20	$ 0.00	$ 3.00	$ 44.15
2	58.00	4.20	3.70	16.40	0.00	6.00	88.30
3	87.00	6.30	5.55	24.60	0.00	9.00	132.45
4	116.00	8.40	7.40	32.80	0.00	12.00	176.60
5	145.00	10.50	9.25	32.80	0.00	15.00	212.55
6-9	232.35	14.35	14.00	36.50	1.50	20.40	319.10
10-11	697.05	14.35	14.00	36.50	1.50	20.40	783.80
12-18	1,045.65	20.35	20.00	40.00	1.50	20.40	1,147.90
19 & over	1,132.65	22.45	21.85	48.20	1.50	23.40	1,250.05
Graduate Students - Missouri Residents							
1	31.05	2.10	0.00	8.20	0.00	3.00	44.35
2	62.10	4.20	0.00	16.40	0.00	6.00	88.70
3	93.15	6.30	0.00	24.60	0.00	9.00	133.05
4	124.20	8.40	0.00	32.80	0.00	12.00	177.40
5	155.25	10.50	0.00	32.80	0.00	15.00	213.55
6-9	248.95	14.35	0.00	36.50	1.50	20.40	321.70
10-11	746.85	14.35	0.00	36.50	1.50	20.40	819.60
12-18	1,120.35	20.35	0.00	40.00	1.50	20.40	1,202.60
19 & over	1,213.50	22.45	0.00	48.20	1.50	23.40	1,309.05

Qtr. Hrs.	Tuition	University Center Fee	Resident Center Fee	Textbook Rental Fee	Total
Resident Center - Undergraduate - Illinois Residents					
1	$ 29.00	$ 8.20	$ 3.50	$ 1.85	$ 42.55
2	58.00	16.40	7.00	3.70	85.10
3	87.00	24.60	10.50	5.55	127.65
4	116.00	32.80	14.00	7.40	170.20
5	145.00	32.80	17.50	9.25	204.55
6-11	232.35	36.50	25.50	14.00	308.35
12-18	348.55	40.00	36.00	20.00	444.55
19 & over	377.55	48.20	39.50	21.85	487.10
Resident Center - Undergraduate - Out-of-State Residents					
1	$ 87.00	$ 8.20	$ 3.50	$ 1.85	$ 100.55
2	174.00	16.40	7.00	3.70	201.10
3	261.00	24.60	10.50	5.55	301.65
4	348.00	32.80	14.00	7.40	402.20
5	435.00	32.80	17.50	9.25	494.55
6-11	697.05	36.50	25.50	14.00	773.05
12-18	1,045.65	40.00	36.00	20.00	1,141.65
19 & over	1,132.65	48.20	39.50	21.85	1,242.20

Qtr. Hrs.	Tuition	University Center Fee	Resident Center Fee	Textbook Rental Fee	Total
Resident Center - Undergraduate - Missouri Residents					
1	29.00	8.20	3.50	1.85	42.55
2	58.00	16.40	7.00	3.70	85.10
3	87.00	24.60	10.50	5.55	127.65
4	116.00	32.80	14.00	7.40	170.20
5	145.00	32.80	17.50	9.25	204.55
6-9	232.35	36.50	25.50	14.00	308.35
10-11	697.05	36.50	25.50	14.00	773.05
12-18	1,045.65	40.00	36.00	20.00	1,141.65
19 & over	1,132.65	48.20	39.50	21.85	1,242.20
Resident Center - Graduate - Illinois Residents					
1	31.05	8.20	3.50	0.00	42.75
2	62.10	16.40	7.00	0.00	85.50
3	93.15	24.60	10.50	0.00	128.25
4	124.20	32.80	14.00	0.00	171.00
5	155.25	32.80	17.50	0.00	205.55
6-11	248.95	36.50	25.50	0.00	310.95
12-18	373.45	40.00	36.00	0.00	449.45
19 & over	404.50	48.20	39.50	0.00	492.20
Resident Center - Graduate - Out-of-State Residents					
1	93.15	8.20	3.50	0.00	104.85
2	186.30	16.40	7.00	0.00	209.70
3	279.45	24.60	10.50	0.00	314.55
4	372.60	32.80	14.00	0.00	419.40
5	465.75	32.80	17.50	0.00	516.05
6-11	746.75	36.50	25.50	0.00	808.75
12-18	1,120.35	40.00	36.00	0.00	1,196.35
19 & over	1,213.50	48.20	39.50	0.00	1,301.20
Resident Center - Graduate - Missouri Residents					
1	$ 31.05	$ 8.20	$ 3.50	$ 0.00	$ 42.75
2	62.10	16.40	7.00	0.00	85.50
3	93.15	24.60	10.50	0.00	128.25
4	124.20	32.80	14.00	0.00	171.00
5	155.25	32.80	17.50	0.00	205.55
6-9	248.95	36.50	25.50	0.00	310.95
10-11	746.85	36.50	25.50	0.00	808.85
12-18	1,120.35	40.00	36.00	0.00	1,196.35
19 & over	1,213.50	48.20	39.50	0.00	1,301.20

AUDITED COURSES

Students registering for courses on an audit basis are assessed tuition and fees on the same basis as when registering for credit.

REGISTRATION

Registration is conducted in the Enrollment Center, Room 1309, Rendleman Building, prior to the beginning of each quarter, usually commencing the last few weeks of the previous term.

Before registering for classes, students must complete the admission process and consult an adviser. More detailed information regarding registration dates is contained in the quarterly schedule of classes.

Only those students who have completed the admission process and the mandatory advisement procedure may register. To determine eligibility, students should refer to the admission and advisement procedures printed elsewhere in this catalog. Any registration may be declared invalid for scholastic, disciplinary, or financial reasons attested to by the Office of Admissions and Records, Dean of Students, or the Office of the Bursar.

Handicapped students should consult the quarterly schedule of classes for registration information.

CHANGES IN REGISTRATION

Students may seek changes in a schedule in the Enrollment Center, Room 1309, Rendleman Building. Students are officially registered for only those courses and sections appearing on their registration documents, as modified by any program changes which they may have made.

Students desiring to make program changes must go to the Enrollment Center, present a Student Schedule Form, and fill out a program change. THE CHANGE IS OFFICIAL ONLY WHEN THIS PROCEDURE IS COMPLETE. Students may add classes only if additions have been approved by their advisers and are shown on a signed Course Request Form (CRF) or program change form.

Adding Classes

Week 1: Students may add classes that are not filled. They may add "closed" classes only with a "Class Permit Card," signed by the instructor.

Week 2: Students must have a "Class Permit Card" or Program Change Form with signatures from the instructor and chairperson for any class they wish to add.

Week 3: Students may add only those classes that begin after the second week—workshops, independent readings, etc.

When students add classes that increase the amount of tuition and fees they are required to pay, the procedure is handled in one of two ways:

1. If the tuition and fees have not been paid, a new fee card is prepared to reflect the increased amount.
2. If the tuition has been paid, the additional hours will generate supplemental billings, which are mailed to students by the Enrollment Office.

Dropping Classes

Weeks 1 & 2: Students may drop classes without permission of their instructors and have no entry on their transcripts.

Weeks 3 - 5: Students may drop classes without permission of their instructors. The grade of W is automatically assigned.

Weeks 6 - 8: Students may drop classes after consultation with their instructors and advisers, but a grade of WP or WE must be assigned by instructors. A grade of WE will be computed as an E in the grade point average (GPA).

After Week 8: Students may not drop classes.

Students who drop a class or classes may be entitled to a refund and should file an application in the Enrollment Office.

Because STUDENTS WHO DROP ALL CLASSES are considered to be withdrawing from the University for that term, the transaction should be initiated according to the instructions below. Absence alone, however, does not constitute withdrawal, so students should follow these instructions to avoid the assignment of failing grades.

Similarly, attendance does not in itself constitute registration in a class, nor will attendance in a class for which a student is not registered be a basis for a program change.

WITHDRAWING FROM THE UNIVERSITY

Students who find it necessary to withdraw from the University during any quarter must report to the Enrollment Center, Rendleman Building, Room 1309, to initiate official withdrawal procedures. All withdrawals must be cleared by the Student Work and Financial Assistance office. Evening and weekend students who are unable to complete the procedures through the Enrollment Center may do so by contacting the Office of Academic Services, Peck Building, Room 1315. All withdrawals must be completed by the end of the eighth week of classes.

A refund of all tuition and fees (with the exception of the late registration fee) is possible only if withdrawal and refund requests are officially completed within the first two weeks of the quarter. All textbooks or library materials on loan must be returned before a withdrawal becomes effective and a refund is approved.

Please consult the registration calendar in the quarterly class schedule for deadlines concerning withdrawal and refunding of fees.

Students who receive notification of academic suspension after completing registration for the next quarter will be withdrawn automatically from the University. If suspended students have already paid tuition and fees for the next quarter, they may obtain a refund by contacting the Enrollment Center.

Withdrawing With Financial Assistance

Students currently receiving financial assistance must report their withdrawal to the Office of Student Work and Financial Assistance (SWFA). Students receiving NDSL, Nursing, or Foundation loans must also contact the Bursar's Office for an exit interview prior to withdrawal. Those receiving Guaranteed Student Loans must also notify the bank from which they obtained the loan. ISSC regulations require that all monetary award recipients withdrawing from school complete a formal withdrawal request. ISSC may apply a penalty of a year suspension of the award for failure to file a formal withdrawal request.

Withdrawal during the refund period (the end of the second week of the term) removes the obligation to pay deferred tuition and fees so long as the formal withdrawal procedure is followed. Withdrawal after the refund date still obligates students to pay the full deferred amount. This applies even though the financial aid payment was not received.

Students who have received financial aid and have officially withdrawn or otherwise separated from the University and are due a refund of tuition and fees may be required to apply that refund toward repayment of financial aid funds which have been received. Refunds for Guaranteed Student Loan recipients will be returned directly to the lender to reduce the balance on the student loan.

Those students who withdraw after the tuition and fee refund date but have received financial aid may be considered to have been "overpaid." The SWFA office will make this determination, taking into account the week of withdrawal, the students' college cost budget, and the amount of financial aid received in the payment period. Students who are in an overpayment status will be advised in writing of such overpayment and will be asked to repay immediately.

ACADEMIC SERVICES

ACADEMIC SUPPORT SERVICES

Students will find a complete range of academic support services in the Office of Academic Services, including academic, career, and personal counseling and advising; foreign student advising; academic enrichment courses and workshops; tutorial assistance; testing services; career planning and placement assistance; and evening and weekend services.

The Office of Academic Services is located in the Peck Building. For information, please call (618) 692-3701.

NEW STUDENT LIFE ORIENTATION

The Orientation and New Student Life Program is designed to help new students adjust to the campus community quickly and comfortably so that academic and social experiences at the University will be as rewarding as possible. The program provides information on procedures which new students must complete before they are permitted to attend classes. Such procedures include academic advising for both general education and departmental requirements, registration, vehicle registration, and identification cards. Information about special services provided for students by the University (tutoring, health service, student work and financial assistance, etc.) is also provided.

In order to assure new students the opportunity for Orientation, regularly scheduled orientation workshops are offered every quarter, prior to the quarter of matriculation. All undergraduate students admitted to the University are invited and strongly encouraged to participate in an orientation workshop. For more information about the orientation program, please call (618) 692-3705.

ACADEMIC COUNSELING AND ADVISING

Students who enter the University confer at least once each quarter with an academic adviser who provides advice regarding appropriate courses, career options, and related matters. Advising is mandatory for **all** students prior to registration each quarter.

Generally, students may declare a major at any time, but some schools have admission criteria which must be completed prior to declaration. All students must declare a major prior to their senior year; declarations are processed in the Office of Academic Services. After students have declared a major, they are advised by advisers in the major department.

During advising sessions, students obtain the signature of the adviser on the Course Request Form (CRF). The CRF is required for admission into registration. Students may register for only those courses listed on the signed CRF. For additional information, please refer to the section on registration.

Counselors and advisers are located in Peck Building 1315. Appointments are necessary and may be made by calling (618) 692-3701.

DECLARATION OF MAJOR

Students initiate the declaration-of-major process in person in the Office of Academic Services, after which they are classified in the academic unit which grants the degree sought. Students who wish to change their major or to declare or change a minor should return to the Office of Academic Services to initiate a new or supplemental declaration.

COUNSELING

Students wishing to obtain psychological, career, crisis, or personal counseling may contact the professional counselors in the Office of Academic Services, Peck Building 1306. Appointments may be made at the office or by calling (618) 692-3715. Confidentiality is assured.

FOREIGN STUDENT SERVICES

Foreign students are provided academic assistance throughout the period of attendance at SIUE by the Foreign Student Adviser, who is located in Room 1309 of the Peck Building, in the Office of Academic Services. Prior to arrival, students receive a complete financial evaluation of projected expenses. Upon admission, students receive information to familiarize them with the Metro-East and St. Louis areas. After arrival, students participate in orientation sessions. All foreign students must participate in the special orientation program for foreign students that coincides with the quarter they enter the University.

Students wishing information regarding immigration requirements should contact the Foreign Student Adviser. Assistance is offered regarding requirements and form verification for students. The Foreign Student Adviser can assist students in locating temporary housing, arranging transportation, and making the transition to a new culture.

Advisement for all students, including foreign students, is mandatory. The Foreign Student Adviser maintains liaison with academic departments to insure that students maintain satisfactory academic progress.

Events for foreign students are planned in cooperation with the International Students Council. Students wishing host families are assisted through the International Hospitality Program.

ACADEMIC DEVELOPMENT COURSES

Several courses are offered to students to enhance their academic preparation. Some of these courses serve as preparation for entry into General Education courses. Students whose placement test scores indicate a need for elementary mathematics, beginning algebra, college reading, and basic writing will be required to enroll in these courses in order to refine skills essential for academic success at SIUE. Because these courses are considered preparatory for other University courses, they carry institutional credit.

Students who desire assistance in developing other competencies such as sound study habits, note taking techniques, test taking skills, reading speed and comprehension, career decision making and other techniques essential for academic success may wish to take advantage of other Academic Development courses designed for such purposes. These courses carry elective credit.

SPECIAL ACADEMIC ASSISTANCE

All freshman and transfer students with 24 or fewer quarter hours or with an English, mathematics, social studies, or composite ACT score of 18 or below and students with no ACT scores are given placement tests in English, mathematics, and reading. Test results may indicate specific courses which students must take to enhance their academic preparation.

Through such courses, students may enhance their preparation in elementary mathematics, college reading, and basic writing. Because these courses are considered preparatory for other University courses, they carry institutional credit. Basic academic skills refined through these courses are essential for academic success.

Students who desire assistance in developing sound study habits, note taking techniques, test taking skills, improved reading speed and comprehension, and other techniques essential for academic success may wish to take advantage of other special courses.

TUTORIAL ASSISTANCE

The Office of Academic Services offers free tutorial assistance to students in math, chemistry, physics, statistics, biology, logic and foreign languages. Tutoring is conducted by qualified upper-class and graduate students in the Peck Building, Room 1414. Although tutoring is primarily given on an appointment basis, students will be helped on a first-come, first-served basis if a tutor is available. Small groups as well as individual students may schedule appointments in Peck 1414 or by phone at 692-3717. Microcomputers, tutorial software, and library and student aid material are also available for student use in the Tutoring Center.

Students who would like to improve their reading skills can receive tutoring in the Reading Lab in the Peck Building, Room 1412. Instructors will assist students in increasing their comprehension and in building vocabulary skills, increasing

reading rates, and developing techniques for reading textbook materials. Appointments can be made in person or by calling 692-3717.

Students who would like to improve their writing skills may receive assistance in the Writing Lab located in the Peck Building, Room 1404. Self-instruction materials in organization, paragraph writing, term paper writing, grammar, spelling, and vocabulary building are available. In addition, students can receive assistance in writing papers, reports, or theses. Instruction in the use of a computer word processing program is also available.

TESTING SERVICES

A complete range of testing services is available to students. The Office of Academic Services administers the Miller Analogies Test; the Graduate Record Examination; the Medical College Admission Test; the American College Test (ACT); the Proficiency Examination Program; the College Level Examination Program (CLEP); the Illinois Real Estate Licensing Examination; the Multistate Insurance Licensing Program; the Comprehensive English Language Test; and University placement tests.

Students can earn academic credit by taking CLEP tests and proficiency examinations. For more information, please refer to the section entitled Credit Earned by Examination, Extension and Correspondence.

Students who are required to complete placement tests prior to admission or advisement may obtain information from the Office of Academic Services by visiting Peck Building 1307 or calling (618) 692-3705.

CAREER DECISION MAKING

Students and graduates who wish to examine career options and opportunities may avail themselves of the services offered by the Office of Academic Services. Students may seek assistance from their academic counselors in exploring career possibilities and complementary majors by utilizing the Guidance Information System (GIS), a computer-based system containing information about careers, two- and four-year colleges and universities, and financial aid. Career Planning and Development, a 2-hour credit course, offers students an opportunity to explore different careers in a classroom setting and come to a better understanding of their own goals as well as the career opportunities available to them.

An extensive library of career information is available. Students who would like career assistance should contact an academic counselor in the Office of Academic Services in the Peck Building, Room 1315 or call (618) 692-3701.

CAREER PLANNING AND PLACEMENT SERVICES

Closely allied to the career decision-making services are the career planning and placement services offered by the Office of Academic Services. Students who are nearing graduation or who wish to gather information about careers and job search strategies may visit the Career Planning and Placement Office located in the Peck Building, Room 1312. A resource library provides information about opportunities in business, industry, government and education. Workshops on resumes, letters of application, interviewing skills, and job search strategies are offered at various times during the quarter. Weekly vacancy bulletins are issued each Wednesday for business, industry, and government openings and on each Friday for education openings. Employers from many businesses and organizations visit the office to interview students interested in employment. Credential files are maintained for students registered with the office and can be sent to prospective employers. Seniors desiring to participate in on-campus interviews through the Career Planning and Placement Office should register with the office at least three quarters prior to graduation. Students interested in learning more about the services offered by the Placement Office or those wishing to use these services should stop by Room 1312 in the Peck Building or call (618) 692-3708.

EVENING AND WEEKEND STUDENT SERVICES

Students desiring assistance in the evening and on weekends may utilize a range of services available through Evening and Weekend Student Services located in the Peck Building, Room 1315. Through this office, persons may obtain applications for admission, order and pick up transcripts, drop or add classes, and secure a housing application. Students may also obtain parking stickers and identification cards. The office is open from 4:30 p.m. to 8:00 p.m. Monday through Thursday throughout the quarter and from 8:00 a.m. to 2:00 p.m. **the first two Saturdays of each quarter** and Saturdays during registration. Students wishing assistance should call (618) 692-3701; those interested in additional weekend services should refer to the Week End University section of this chapter.

THE LIBRARY

Lovejoy Library maintains a collection of approximately 760,000 bound volumes and subscriptions to 3,800 periodicals. In addition, it maintains a microform collection of 600,000 items, an audiovisual collection of 33,000 titles, an extensive U.S. Government documents depository of 458,000 items, and other material in research and map collections numbering 300,000 items.

The library contains a complete reference collection. Staff members are on duty all hours the library is open to assist users in locating information and resources, either in Lovejoy Library or at other libraries. Basic telephone reference service is also available.

The library maintains direct access to 26 libraries in the State of Illinois, including that of the University of Illinois. This system provides access to over 10,000,000 titles. A user may search the catalogs of these collections by means of a computer terminal and order material through interlibrary loan. In

addition, a nationwide network offers access to over 6,000 libraries. Conventional interlibrary loan is available for libraries worldwide.

In addition to interlibrary loan, faculty have direct borrowing privileges at a number of libraries in St. Louis. University students may gain borrowing access through an Info Pass after exhausting the resources of Lovejoy Library. The reference librarian on duty can assist with procedures.

Lovejoy Library maintains an online computer search service to over 130 data bases. Included are data base equivalents for such titles as *Psychological Abstracts, Engineering Index,* and *Chemical Abstracts.* There is a charge for this service. The reference librarian can assist with instructions.

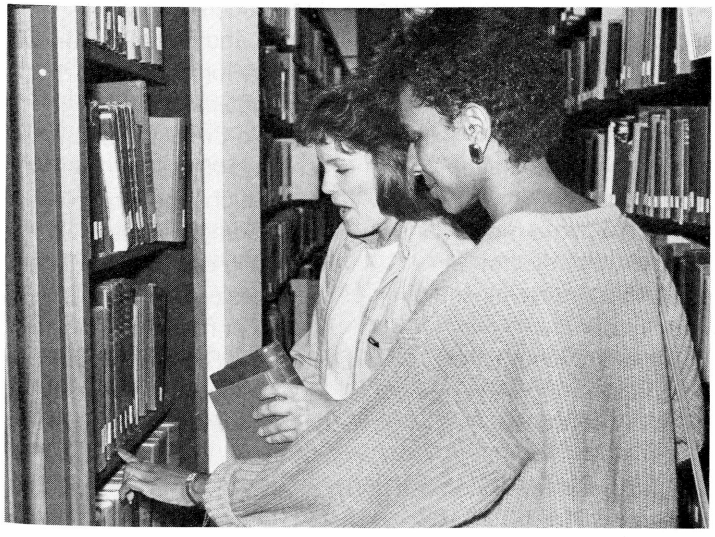
Audio-Visual Services, a department of Lovejoy Library, maintains a collection of films, video tapes, and other media formats, primarily for classroom instruction. Facilities are available for viewing and review of the media in the collection. In addition, Audio-Visual Services maintains production facilities for faculty for classroom instruction. Film scheduling and equipment set up are also provided.

Students may use audio-visual production equipment in the Self-Help area for classroom projects. A staff member is available for consultation. There is a charge for the cost of materials.

A Self-Instruction lab is maintained in Lovejoy Library. The lab contains viewing and listening hardware for all formats of media. Materials for the lab may be obtained from the collection, from faculty-produced programs, or borrowed. Day, evening, and weekend hours are maintained.

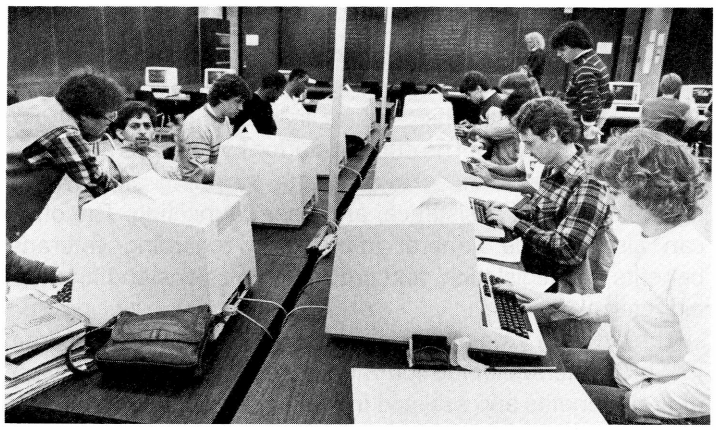
Lovejoy Library, in cooperation with the Central Affirmative Action Office, maintains a facility for visually impaired students, faculty, and other users. The area is equipped with a Visual Tek, Brailler, and other audio-visual equipment. In addition, a Kurzweil Reader is available. This machine will convert conventional printed material to speech. Other available equipment includes a braille dictionary.

The library is open approximately 90 hours a week during regular academic quarters. During quarter breaks the library is open 8:00 to 5:00, Monday through Friday. Library hours are posted at the beginning of each quarter. Information regarding hours may be obtained by calling (618) 692-2602.



UNIVERSITY BOOK SERVICES

The University, through a nominal rental fee, supplies basic texts for undergraduate courses (including 400-level courses) through Textbook Service, located in the basement of Lovejoy Library. In order to obtain rental textbooks from Textbook Service, students must have paid their fees or made arrangements for fee payment through a deferment. Supplemental texts are sometimes required for undergraduate courses; they may be purchased from the University Bookstore, located on the first floor of the University Center. The University Bookstore also provides textbooks for graduate classes; graduate students enrolled in undergraduate classes must purchase texts from Textbook Service. The store has evening as well as day hours for the convenience of students.



MICROCOMPUTER LABORATORIES

The University provides four microcomputer laboratories for students, faculty, and staff. Three of the laboratories are located on the Edwardsville campus, while one is located on the East St. Louis campus.

The main campus laboratories are located in Peck 1410 and Lovejoy Library basement 0054. The Peck laboratory and one of the Lovejoy laboratories provide open access opportunities to students, faculty, and staff possessing current SIUE identification cards. Students, faculty, and staff interested in the open access laboratories may reserve user time up to 48 hours in advance by signing a reservation sheet. The third main campus microcomputer laboratory, also located in the Lovejoy Library basement, is used primarily for classroom instructional purposes.

All microcomputer laboratories are equipped with Apple IIe microcomputers; all units in the Lovejoy Library and Peck are fully equipped with CP/M capability. Some IBM microcomputers are also available in the laboratories. For more information, please call (618) 692-3050 and 692-3717, respectively.

Students registered for computer classes may utilize the microcomputer facilities in Room 1008 at the East St. Louis campus by seeking approval through the Director's office. For information, please call (618) 271-3000.

SERVICES FOR DISABLED PERSONS

The Disabled Student Adviser in the Office of Academic Services is responsible for the implementation and coordination of many of the programs, activities, and services for persons with disabilities. The adviser offers guidance and counseling, referrals to related offices and departments, and assistance in obtaining specialized equipment or supplies, support services, and special accommodations.

All disabled persons should visit the Office of Academic Services, located in Peck 1315, at their earliest convenience to meet the Disabled Student Adviser and to discuss available services. Individuals may contact the adviser by calling (618) 692-3701 (voice or TDD).

SERVICES FOR VETERANS

The Office of Veterans Affairs is located in Room 1207, Rendleman Building. The office is staffed by veterans and offers comprehensive services to veterans including employment referrals, tutorial assistance, and peer counseling. The office can also provide general information regarding veterans' benefits and legislation, and provide admissions and financial aid referral.

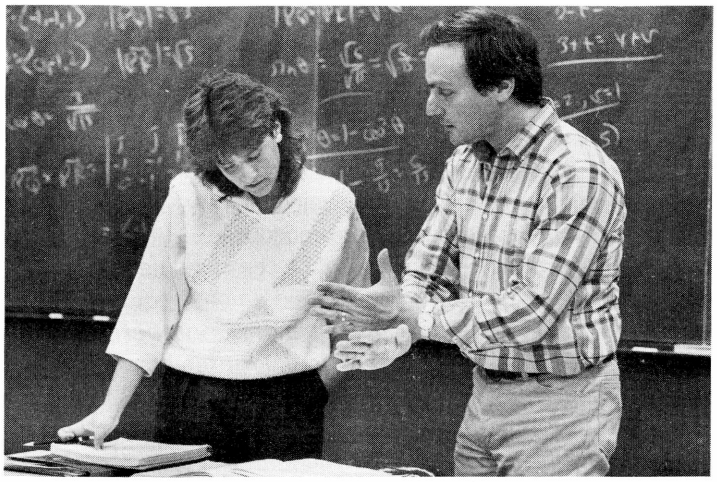
The Office of Veterans Affairs conducts an outreach program in which veterans in the community are contacted and advised of their benefits and assisted in making application for such.

OFFICE OF CONTINUING EDUCATION

The Office of Continuing Education provides support services to departments offering classes at SIUE's Resident Centers and other off-campus locations and assists students who participate in off-campus classes. Staff from the Office of Continuing Education attend the opening session of classes to assist students with admission, registration, fee payment, financial aid inquiries, and textbook distribution. Faculty and students may contact this office for help with matters related to instruction and attendance at off-campus classes.

For schedules of classes being offered off campus and for information about enrolling in these classes, students may contact the Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1084, or phone (618) 692-3210. Information about classes at the Scott Air Force Base Resident Center may also be obtained directly from the SIUE Resident Center Office at Scott Air Force Base, (618) 256-4169 or (618) 692-2630.

In addition to providing services for off-campus classes, the Office of Continuing Education, through the Office of Conferences and Institutes, assists University departments in the coordination of meetings, seminars, workshops and other activities. The professional staff may be contacted by calling (618) 692-2660.



WEEK END UNIVERSITY

The Week End University (WEU) Office, located in the Rendleman Building, Room 1330, maintains regular University weekday business hours. In addition, the WEU Office is open from 8:00 a.m. to 3:00 p.m. on Saturdays and from 12:00 noon to 3:30 p.m. on Sundays when classes are in session. On the first Saturday of each quarter, the office is open until 4:00 p.m.

On weekends, the WEU Office is a source of up-to-date information regarding University activities, policies, and procedures. The office serves as a liaison between weekend students and other University offices normally open only during weekday hours. Week End University staff assist weekend students by personally pursuing answers and solutions to students' questions or problems during the week and by following up directly with students by telephone.

Services provided by the Week End University Office include:

- Admission change forms
- Application for Refund of Registration fees
- Applications - Undergraduate, Graduate, Non-Degree, also admission and registration information
- Bus passes for East St. Louis campus
- Car Pool Coordination (WEU students only)
- Catalogs
- Child Care information
- CRF Forms
- EDUCARD information and Noncredit registration
- Financial Aid forms and information
- Full-time student letter request
- GMAT information
- Grade change request
- Graduation applications
- Housing Information
- ID card processing
- Illinois Veteran's Scholarship information
- Message center for students
- Name, address, marital status and Social Security change forms
- Parking decals (red only)
- Pass/No Credit declarations (credit change)
- Program change (dropping and adding classes)
- Returning books to Textbook Services (when closed)
- Transcript request
- Weekend Student class roster
- Withdrawing from school

For further information call (618) 692-3775 or from St. Louis, Missouri (314) 621-5168, extension 3775.

STUDENT ACTIVITIES AND SERVICES

DEAN OF STUDENTS

The Dean of Students has administrative responsibility for various student support services. Students may appeal to the Dean for help with problems of any nature arising within the University environment. The Dean can be particularly helpful in the resolution of problems involving more than one office or agency of the University. Students should not hesitate to seek such assistance when any difficulty arises.

The Dean of Students is also concerned with student responsibilities in the University community and functions as chief officer in the adjudication of matters involving violation of the Student Conduct Code.

STUDENT ACTIVITIES AND ORGANIZATIONS

Southern Illinois University at Edwardsville recognizes that strong academic programs must be balanced with cultural, social, and recreational opportunities. The University offers many services to students and encourages them to participate in campus government, student activities such as journalism and theater, social organizations, and sports. Because SIUE has a diverse student population, it offers many opportunities to meet and exchange points of view with people of different nationalities, ages, and cultural and socioeconomic backgrounds. The University provides both structured and casual programs.

Involvement in student activities and organizations provides experiences that augment the educational program. Currently there are approximately ninety recognized student organizations on the SIUE campus. Besides honorary organizations which stimulate and recognize academic achievement, groups address the educational, religious, social, recreational, and political interests of students. All registered students may participate in the activities and organizations.

Throughout the year, students have many opportunities to participate in a variety of seasonal activities, including Welcome Week, Homecoming, and Springfest. A quarterly film series provides popular, and educational films. Guest lecturers, art exhibits, travel programs, craft classes, and a host of recreational and leisure activities extend the diversity of opportunities.

The Student Development Leadership Training Program assists students in becoming prepared to be effective members of organizations. Approximately 100 positions exist on campus committees and governance councils for students interested in curricular matters, allocation of fees, parking and transportation, students' rights and grievances, minority affairs, affirmative action, related areas affecting the welfare of students, and campus publications.

The Student Activities Office participates in Elderhostel, a series of one-week workshops in the summer during which senior citizens live on campus. It also co-sponsors an annual one-day Senior Fair that brings to campus governmental agencies, civic groups, and medical and dental personnel for services and workshops. The Fair features craft shows, entertainment, recreational programs, and dances. The Student Activities Office maintains a list of student volunteers who provide special services to senior citizens.

Students interested in particular activities and organizations should contact the Student Activities Office located in the University Center. The Office assists students in contacting organizations and activity chairpersons, in establishing new organizations, and in sponsoring special activities and workshops.

Recognized student organizations are listed below.

All University Organizations

Alestle
Cougar Guard (Campus Mascot)
Fraternity-Sorority Conference
Student Government
Student Program Board
University Ambassadors
University Center Board
University Dance

Fraternities

Alpha Phi Alpha
Iota Phi Theta
Kappa Alpha Psi
Phi Beta Sigma
Sigma Phi Epsilon
Sigma Pi
Tau Kappa Epsilon

Sororities

Alpha Kappa Alpha
Alpha Phi
Alpha Sigma Tau
Delta Sigma Theta
Gamma Sigma Sigma
Sigma Gamma Rho
Zeta Phi Beta

Frasorities

Epsilon Beta Gamma

Special Interest Groups

African Student Association
Art Therapy Association
Black Student Association
Bowling Club
Chinese Student Association
Coalition of Young Democrats
Graduate Urban Affairs and Policy Analysis Association
Gay and Lesbian Student Organization
International Student Council
Malaysian Student Council
Men's Volleyball Club
Moslem Student Association
National Town Meeting
Pakistan Student Organization
Parent-Student Organization
Public Relations Student Society of America
Recreation Club
SIUE Gospel Choir
SIUE Cheerleaders
Student Planning Association
Talent Clinic
Wagner Potters Association
Weavers at Wagner
Women for Women

Religious Organizations

Baptist Student Union
Christian Student Fellowship
Intervarsity Christian Fellowship
Knights of Columbus
Newman Student Union
Wesley Student Fellowship

Departmental Organizations

Accounting Club
Aerospace Club
American Society for Personnel Administrators
Angel Flight
Association for Computer Machinery
Chemistry Club
Data Processing Management Association
Financial Management Association
Graduate Association of Students in Psychology
Lambda Alpha
Marketing Association
Metalsmiths at Wagner
Mu Pi Epsilon
Physics Club
Pi Mu Epsilon
Sculptors at Wagner
SIUE Institute of Electrical and Electronics Engineers
SIUE Opera Players
SIUE Philosophy Club
Student Chapter of Industrial Engineers
Student Experimental Theater
Student Nurse Association
Student Social Work Association

Professional and Honorary Organizations

American Society of Civil Engineers
Arnold Air Society
Biology Honor Society
Civil Engineering Honor Society
Constructors (SIUE)
Dean's College Honors Club
Delta Pi Epsilon
Eta Kappa Nu
National Art Education Association (N.A.E.A.)
National Association of Jazz Educators
National Student Speech, Language, and Hearing Association
Phi Eta Sigma
Pi Kappa Delta
Psi Chi
Sigma Delta Chi
Student Council for Exceptional Children

The Student Volunteer Program is a non-salaried opportunity for students to gain experience related to several career fields. The Volunteer Program may also enable students to explore employment opportunities. Experience in career fields such as geriatrics, special education, arts, crafts, music, family services, recreation, counseling, and child care is provided. For more information regarding the Student Volunteer Program, please contact the Student Activities Office at (618) 692-2686.

BURSAR

The Office of the Bursar, located on the first floor of the Rendleman Building, provides a variety of services to students and other members of the University community. Students may pay their tuition and fees, have identification cards prepared, and pick up student work paychecks and financial aid disbursements. In addition, the office also cashes checks and accepts payments related to on-campus housing and other outstanding debts owed to the University. Many transactions can be made by mail. For further information about the services available, please call (618) 692-3122.

CAMPUS RECREATION

Campus Recreation seeks to provide all students, faculty, and staff of Southern Illinois University at Edwardsville with a multi-faceted leisure and sports program. The diverse interests of the University community are met through Intramural Sports, Club Sports, Special Events, Aquatics, Drop-in Recreational Periods, Fitness Activities, Instructional Workshops and Outdoor Recreation. Among the programs and activities offered are the following:

Intramural Sports

The intramural program consists of a variety of activities for students, faculty, and staff. The goal of the program is to provide an opportunity for participation in individual or team activities on a level of competition which is enjoyable and challenging. Activities include Flag Football, Soccer, Volleyball, Basketball, Inner Tube Water Polo, Softball, Badminton, Tennis, and Racquetball.

Drop-In Recreation Periods

Between classes, after work, or on the weekend, both the Bubble Gym and Vadalabene Center are available for drop-in recreation. The Bubble Gym has Basketball, Volleyball, Badminton, Video Exercise, and Weight Training machines available. Racquetball, Aquatics, Nautilus Weight machines, Basketball, and Volleyball can be found at the Vadalabene Center.

Sports Clubs

Sports Clubs at Southern Illinois University at Edwardsville provide opportunities for students, faculty, and staff who desire challenging sports experiences. Sports Clubs blend opportunities for learning new skills, practicing with fellow participants, and competing with other clubs. Club activities include Fencing, Karate, Volleyball, Water Polo, and Gymnastics.

Special Events

During each quartar special activities such as fun runs, festivals, and tournaments will be held for all students. These activities provide opportunities for recreation.

Activities for Fitness

Scheduled activities in aerobics, strength training, flexibility, and endurance are designed to assist individuals to maintain physical fitness. Classes are scheduled throughout the quarter at convenient times. In addition, many drop-in hours are available in the Vadalabene Center's weight room. The Bubble Gym "Fitness Corner" is available all hours the Bubble Gym is open and contains Universal weights and Monarch exercycles.

Aquatics

The Vadalabene Center Swimming Pool provides opportunities for early morning lap swimming, inner-tube water polo, family pool parties, drop-in swim periods, and scuba diving.

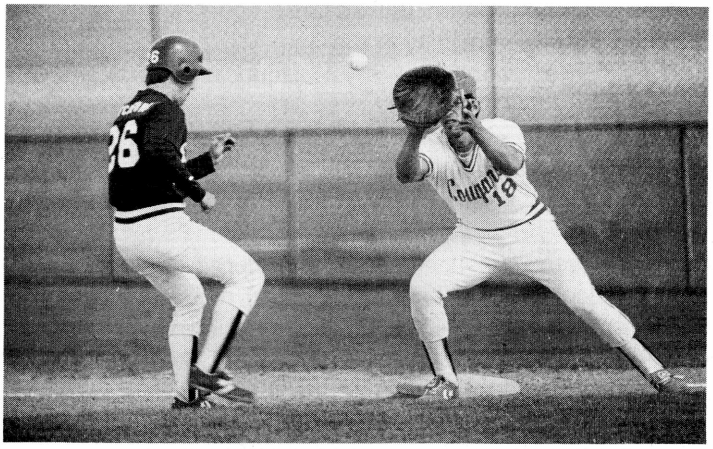
Outdoor Adventure Program

The outdoor adventure program consists of three aspects—equipment rental, the resource center, and organized outdoor trips. Through the program, students are offered the opportunity to participate in outdoor recreational activities such as canoeing, fishing, backpacking, and skiing.

Tower Lake Recreation Area

During the spring and summer months, Campus Recreation operates the University's scenic outdoor recreation area. Located between the main campus and the Tower Lake Housing complex, the Tower Lake Recreation area includes a 77 acre lake complete with marina, numerous shaded individual picnicking sites, a six lane, 25 meter swimming pool, and a children's wading pool.

For information regarding Campus Recreation programs and activities, please call the Office of Campus Recreation at (618) 692-3984.



INTERCOLLEGIATE ATHLETICS

Intercollegiate athletics, as an adjunct to the educational program, is designed to provide challenging educational and competitive experiences for both participants and spectators. The program comprises thirteen varsity sports—eight for men, consisting of baseball, basketball, cross country, golf, soccer, tennis, track and wrestling—and five for women, including basketball, soccer, softball, tennis and track.

As a member of the National Collegiate Athletic Association (NCAA), SIUE is classified as a Division II program for legislative and competitive purposes. However, the men's soccer team competes in Division I.

A scholarship program is available to student athletes; this program assists them in completing their college careers while participating in the intercollegiate athletic program.

Cougar athletic teams compete in a tradition of excellence. In 1972, the men's soccer team captured the National College Division Championship, and in 1979, the NCAA Division I crown. The men's tennis team has captured six consecutive Division II titles, an achievement unmatched by any other NCAA school. SIUE baseball and wrestling teams are perennial

contenders for regional titles and both have reached the championship round on numerous occasions. The Golf team has qualified for NCAA championship play ten times over the last eleven years.

Still relatively new to the intercollegiate family, women's athletics has already made its mark. The tennis and softball teams are annual contenders for regional championships. The tennis team has repeatedly been ranked among the top ten nationally in Division II and in 1983 qualified for the national tournament. The softball squad has qualified for two national championship tournaments and finished second in 1982. Women's soccer is only one year old, but already the team is a regional contender. Several individual women have qualified for national competition in track, and two have received All-American honors.

Facilities for home contests include a 4,000-seat lighted field for the soccer teams, a 1,500-seat baseball complex with practice and varsity fields, a quarter-mile track, a cross country course ranked as one of the finest in the region, a 200-seat softball complex with practice and lighted varsity fields, and twelve tennis courts which serve as the home site for tennis matches. The golf team utilizes area courses for its home matches. Other teams play in the Sam M. Vadalabene Center for Health, Recreation and Physical Education, which seats approximately 5,500.

STUDENT GOVERNMENT

Student Government (located in the Student Activities area on the first floor of the University Center) offers students the opportunity to become involved in the decision-making processes of the University. The primary goal of Student Government is to serve the needs of the students as well as to represent the interests of the student community to the administration. The services provided by Student Government include allocation of student funds, appointment of representatives to the various University and student committees, recognition of student organizations, and reviews of student fees and benefits.

Student Government is comprised of three executive officers: the Student Body President, the Vice President, and the Student Trustee. In addition, there is a twelve member Student Senate, and a Student Government staff. Elections are held twice yearly; six Senators are elected each fall and spring. The executive officers are elected in the spring.

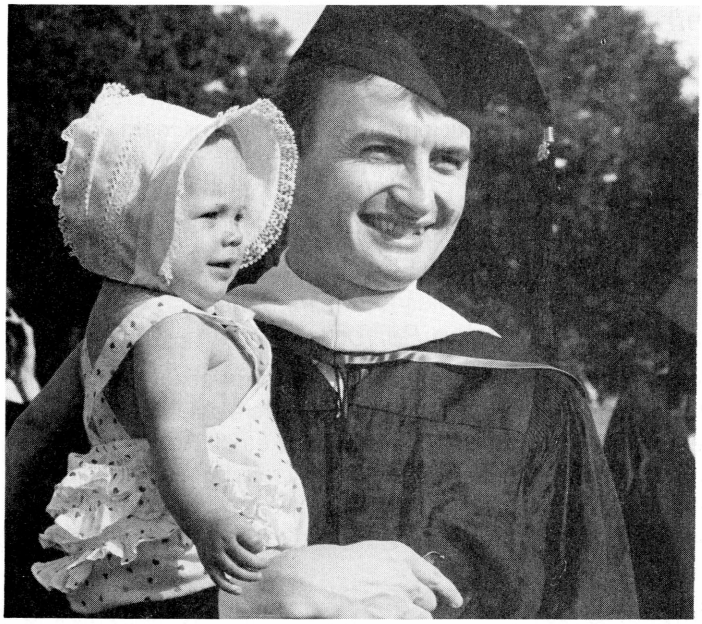
In order to represent the student body, Student Government is always in need of students who are willing to serve and to share their ideas. Interested students are invited to come to the Student Government Office or to phone 692-3818 for more information.

HEALTH SERVICE

The SIUE Health Service is staffed by a physician, nurse practitioners, a pharmacist, nurses, and a technician to provide emergency care, general outpatient care, laboratory diagnostic tests, and pharmaceutical needs. Health Service cooperates closely with the counseling staff of the Office of Academic Services. In addition, the Health Service staff works closely with local and St. Louis metropolitan area health care agencies.

A medical history form must be completed by each person utilizing Health Service at the time of, or prior to, the initial visit. Physical examinations for special University health requirements are provided in Health Service (i.e., food service, varsity athletics, and disability parking certification).

Confidentiality with respect to all personal medical problems is a priority and is assured.



EARLY CHILDHOOD CENTER

Located in a newly constructed facility designed exclusively for child care, the Early Childhood Center offers a comprehensive program of day care services for the children of SIUE students, employees, and parents from the surrounding communities. The primary objective of the Center is to promote the continuous well being of the children it serves through a program that offers excellent physical, intellectual, social, and emotional care.

The services of the Center are available to all children between two (if toilet trained) and eight years of age. Enrollment priority is given to the children of currently enrolled SIUE students and to children continuing in the Center's programs. The Center provides services from 7:30 a.m. to 5:30 p.m. Monday through Friday, from 8:30 a.m. to 5:00 p.m. on Saturday, and from 11:30 a.m. to 6:00 p.m. on Sunday. Children may be enrolled in Full Day Care, Half Day Care, Flex-time Care, or Weekend Care programs. Children may be registered for participation in these programs by contacting the Coordinator of the Early Childhood Center at (618) 692-2556.

University students interested in early childhood education may utilize the Center for observation, practicum, or student teaching requirements. Students interested in pursuing this opportunity should contact their Academic Adviser and the Coordinator of the Early Childhood Center.

STUDENT PROGRAM BOARD

The Student Program Board (SPB) is the major student programming organization, which provides a wide variety of activities and opportunities for the University community.

Eight committees within the SPB plan, execute, and evaluate events including lectures, concerts, films and dances, as well as SIUE's annual Homecoming and Springfest activities.

The SPB also enhances each member's educational experience by developing leadership, management, and administrative skills.

The main goal of the SPB is to provide for the educational, recreational, cultural and social enrichment of the University community. The SPB seeks to accomplish this goal through the programs it sponsors each year.

STUDENT LEGAL SERVICES

Student Legal Services, through a resident attorney, assists students with legal matters. The office provides students with sources of legal advice and referral and serves as a focal point for the development of services which will allow students to gain a better understanding of legal processes and the law. The attorney has counseled students on landlord/tenant disputes, contracts, consumer rights, family matters, bankruptcy, small claim matters, traffic matters, and wills. Besides legal consultation, the office provides referrals to other attorneys and notary service. It maintains an extensive law library for legal research and offers law school information, study guides for the Law School Admission Test, Illinois and national legal directories, and brochures on various topics of law.

The services are available to students at the East St. Louis and Alton campuses as well as to those at the Edwardsville campus. The attorney will make evening appointments for students on a pre-arranged basis. Since this office is funded through a student fee, access is available to any student who is currently enrolled at Southern Illinois University at Edwardsville. For more information, please call (618) 692-3355.

HOUSING

The University's housing facilities, Tower Lake Apartments, provide housing for approximately 1,400 single students and 110 families. The units are furnished two- and three-bedroom co-op apartments designed for three or four single students. Students with families have the option of two- or three-bedroom apartments, furnished or unfurnished. Resident staff members are available to assist in problems residents may encounter. The Commons Building provides meeting rooms, a lounge area, social facilities, a snack bar, and administrative offices.

The Programs Committee, which any Tower Lake resident may join, arranges such activities as film screenings and float trips for residents. The Tower Lake Resident Association is elected each spring. This group advises the Director of Housing on housing operations.

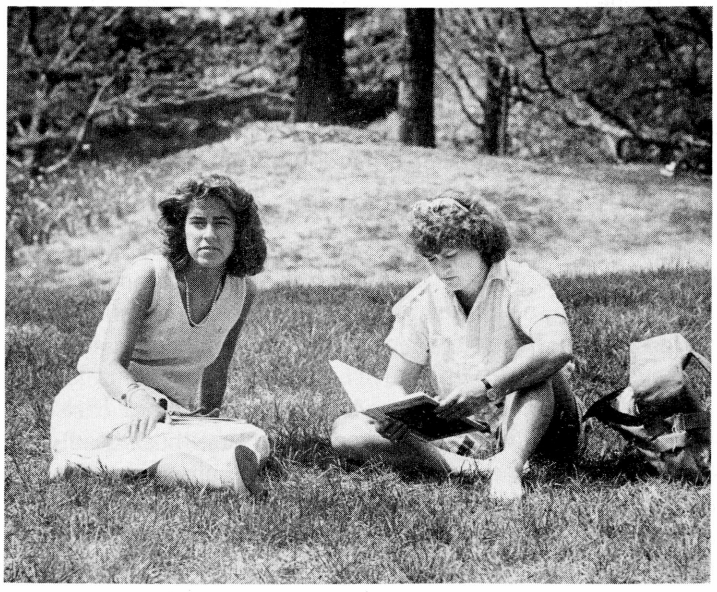
Students should apply for housing as early as possible. Students living outside a specified radius of campus will be given priority for on-campus facilities. However, such priority does not guarantee on-campus housing.

Rates

Rates for family housing range from $315 to $365 per month. Current rates for single student housing range from $122 to $205 per month ($1,098 to $1,845 per academic year). All utilities except telephone are included in the rent. Application for University Housing requires a $50 deposit from single students, and a $100 deposit from families. Deposits are refundable after 30 days and before a housing contract is signed. The application deposit becomes a damage deposit when a contract is signed. For additional information regarding University Housing, contact the Housing Office, Box 1056, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1056. Inquiries may be made by calling the Housing Office at (618) 692-3931.

Off-Campus Housing

Off-campus housing services include listings of available off-campus facilities, informational booklets and brochures, telephone services, and model rental agreements to assist students, faculty, and staff in locating suitable accommodations. Owners of off-campus facilities may use the University's contract form for student rental housing. The University reserves the right to deny the privilege of listing off-campus accommodations with the Housing Office if landlords do not comply with the Civil Rights Act of 1968, other laws governing discrimination, and governmental health and safety standards. Experience has indicated that attempting to obtain off-campus facilities by mail is generally unsatisfactory. Prospective students are urged to visit the campus and personally seek desirable living accommodations.



UNIVERSITY CENTER

The University Center is a focal point for campus programs and services. The Goshen Lounge is frequently the forum for noon-hour debates, special events, exhibits, and entertainers. Most students and staff pass the lounge on their way to other points in the building: cafeteria, restaurant, bookstore, art gallery, recreation center, television lounge, video lounge, bank center, ticket office, craft shop, meeting rooms, or the Barber and Beauty Shop. Building facilities are as varied as the individuals being served. While groups meet in the second floor conference rooms, a band may play in the Goshen Lounge and pinball and video game wizards may compete in the basement game area. The University Center provides services, activities and space for the entire University community and for many off-campus groups. Space for group recreation and reduced rates for bowling, table tennis and other activities are provided for senior citizens.

In conjunction with the University Center Board, an advisory body of students, faculty, and staff, the management of the University Center establishes policies and procedures for the Center.

A wide variety of FOOD SERVICES is available in the University Center. The Cafeteria, located on the ground floor, offers hot breakfasts, luncheons, a large salad and dessert selection, and specialty items. The Sub-Meridian Dock provides fast food service adjacent to the Cafeteria; it offers hamburgers, french fries, shakes and other snack items. The University Club Restaurant, located on the second floor, offers complete table service in a relaxed atmosphere with a variety of menus at modest prices.

Bowling, billiards, table tennis, and many other activities, including electronic games, air hockey, foosball, and pinball, are available in the facilities of the RECREATION AREA of the University Center. Regular leagues and tournaments are also available.

UNIVERSITY CENTER CRAFT SHOP facilities and workshops are available to all students, faculty, staff, and surrounding community groups. The Craft Shop offers six-week, noncredit workshops on such skills as photography, acrylic painting, macrame, and ceramics. It also conducts mini-workshops for such projects as candle making and cake decorating. In addition, the Shop offers its facilities for laminating, photocopying, making transparencies or brochures, and developing film. Supplies are available at modest cost.

UNION STATION, located on the first floor of the University Center, sells tickets for on-campus sponsored programs including films, lectures, athletic events, dance, music and theater performances. Tickets to many major St. Louis area events are also available.

A wide variety of other services including check cashing, campus and U.S. Mail pickup, maps, brochures, bus schedules, athletic game schedules, and calendars of campus events are available. Ye Olde Sweet Shoppe, located at Union Station, offers various sundry items, candies, cigarettes and area newspapers.

THE BANK CENTER, located across from Union Station on the first floor of the University Center, offers remote banking services of both checking and savings withdrawals and deposits. The service is provided through the Bank of Edwardsville. For information, call (618) 656-0057.

POST OFFICE

The SIUE Branch Post Office, located in the basement of the Rendleman Building, is open daily from 7:30 a.m. to 4:30 p.m., Monday through Friday. Mail is dispatched at 7:30 a.m. and 4:00 p.m. daily. The services offered by the Post Office include domestic and international mail; parcel post; stamps; postal money orders and registered mail (accepted up to 3:45 p.m. daily); certified mail; insured mail; federal income tax forms; and rental of postal lock boxes.

RELIGIOUS SERVICES

Six campus ministers representing eight different denominations present an ecumenical approach to campus ministry. Worship is conducted in the Religious Center daily.

The Religious Center is open for a variety of activities to all members of the University community, regardless of religious affiliation. Professional assistance is provided through personal, group, religious, marital, and premarital counseling. A religious library containing books on these subjects is available.

OFFICE OF UNIVERSITY MUSEUMS

The Office of University Museums has stewardship of the University's many collections of art objects. These collections include pottery, prints, sculpture, paintings and drawings, as well as musical instruments and anthropological artifacts.

The Louis H. Sullivan Architectural Ornament collection is the most comprehensive collection of ornaments by one of America's most noted architects.

One of the more unusual and interesting of the collections is the Stroup Pottery Collection, consisting of examples of historic Korean pottery dating from the Silla Dynasties to the 20th Century. There is also a sizable collection of ancient and modern musical instruments from Western and Oriental cultures.

The collections of the University are on continuous display throughout the campus, both inside classroom and office buildings and in courtyards and patios. The Sullivan collection is housed primarily in Lovejoy Library and the basement corridor of Classroom Building III.

In cooperation with the Department of Art and Design and the Department of Anthropology, the Office of University Museums conducts internships for advanced undergraduate and graduate students interested in programs in museum administration, conservation, curatorship, and restoration.

UNIVERSITY THEATER AND MUSICAL EVENTS

The University Theater offers all students the opportunity to work with SIUE's theater and dance faculty in at least five mainstage productions during the academic year and three productions in the Summer Theater. Students not only perform onstage under faculty supervision; they may also design and construct sets, choreograph, or serve as assistant directors. The Student Experimental Theater is a student-operated enterprise open to all student applicants. An executive committee screens proposed plays, including new experimental works, and produces several each year. Students interested in dance train under professional choreographers and appear in the Dance in Concert series and mainstage productions.

More than ninety concerts and recitals are given each year at SIUE. Each quarter the Department of Music sponsors band, orchestra, choral, and jazz concerts. There are weekly Faculty and Student Recitals; each music student presents at least one public recital during his or her career at SIUE. Faculty and students also hold quarterly benefit concerts for scholarships. Students not enrolled in music courses may join ensembles open to non-majors.

PARKING

SIUE's parking system is based on color-coded lots with corresponding decals. ALL VEHICLES MUST HAVE A CURRENT DECAL. Red decals are free and may be obtained at Vehicle Registration, located on the lower level of the Rendleman Building.

Night students have the option of purchasing night green decals, which are issued on a quarterly basis for the fee of five dollars. These decals permit parking in the green lots after 4 p.m.

Weekend parking at SIUE is free and unrestricted. However, the general requirement that all vehicles used on campus must display current vehicle registration decals remains in effect at all times.

Brochures giving the complete motor vehicle regulatory policies are available at Vehicle Registration.

PARKING FOR DISABLED STUDENTS

Spaces have been designated for parking for handicapped persons. These spaces are clearly marked with the international handicapped symbol. Any vehicle parked in these signed spaces must be identified with either handicapped license plates or other accepted handicapped decals. Any vehicle not bearing such identification is subject to a State citation and towing. This regulation is rigorously enforced. Information on obtaining handicapped decals is available from the Vehicle Registration Office.

STUDENT IDENTIFICATION CARDS

Students receive an identification card which bears their photograph and serves to identify them while they are enrolled at Southern Illinois University at Edwardsville. ID cards may be obtained in the Office of the Bursar in the Rendleman Building.

A Student Schedule form is issued each quarter at the time of registration. When officially validated by the Office of the Bursar, it enables students to have I.D. cards validated. The identification card is used for the current quarter to identify students who have paid the student activity fee and are eligible to use University facilities.

The identification card and the Student Schedule form are legal documents. Students who loan, borrow, or alter these cards are subject to disciplinary action; in addition, such action may be considered a criminal offense, as well as an infraction of University regulations. It is important to obtain a new certificate of registration each quarter and to carry both the identification card and the current certificate of registration at all times. These cards are also used to borrow books from the University libraries and for other situations on the campus where student identification is required. In special cases, the identification card, the certificate of registration, and other corroborating evidence may be requested to verify identification.

ACADEMIC POLICIES AND REQUIREMENTS

CLASSIFICATION OF STUDENTS

Students are classified according to the number of credit hours they have earned.

Class	*Quarter Hours Earned*
Freshman	0-41
Sophomore	42-89
Junior	90-137
Senior	138 or more

One quarter hour of credit is equivalent to two-thirds of one semester hour; one semester hour equals one and one-half quarter hours. One quarter hour represents the work completed in a lecture course that students attend for fifty minutes each week for ten weeks; laboratory courses may require more than fifty minutes each week for one quarter hour.

CLASS ATTENDANCE

Upon registration, students accept the responsibility for attending classes and completing course work. It is the responsibility of students to ascertain the policies of instructors with regard to absence from class, and to make arrangements satisfactory to instructors with regard to missed course work. Students are advised that it is particularly important to attend the first meeting of a course. Failure of a student to attend the first session of a course could result in his or her place in class being taken by another student.

B.A. FOREIGN LANGUAGE REQUIREMENT

In addition to the University's general requirements for a bachelor's degree, persons working toward a Bachelor of Arts degree must demonstrate, either by examination or by college courses, proficiency in a foreign language equivalent to a year of college level work. Some academic units may require more than one year's work for their degrees.

CONSTITUTION REQUIREMENT

The State of Illinois requires that "American patriotism and the principles of representative government, as enunciated in the American Declaration of Independence, the Constitution of the United States of America and the Constitution of the State of Illinois, and proper use and display of the American flag, shall be taught in all public schools and other educational institutions supported or maintained in whole or in part by public funds" (Section 27-3 of The School Code of Illinois). Students may demonstrate their knowledge in these areas by examination administered by the Office of Academic Services or by satisfactorily completing one of the following courses: Government 112, or History 200, 201, 202, or 426. Students seeking teacher certification must complete one of the required courses.

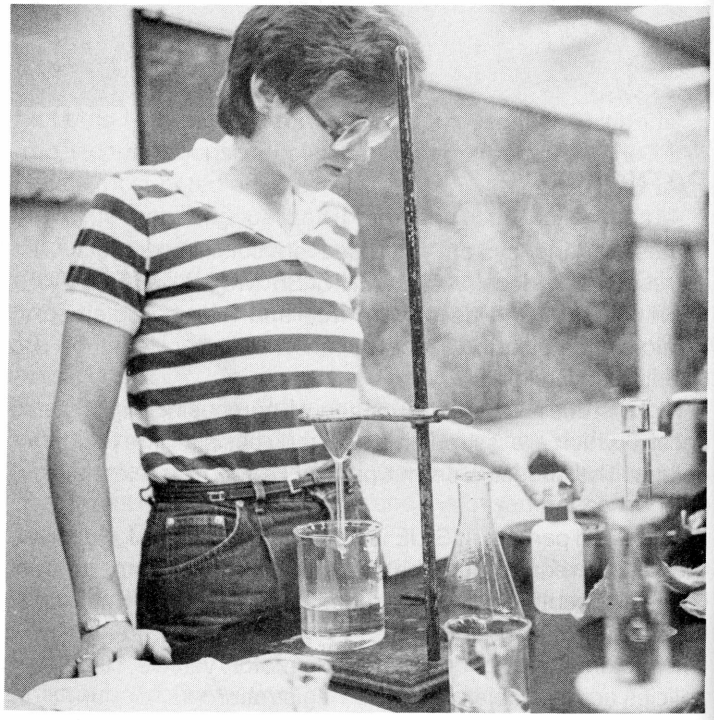
ACADEMIC LOAD

The normal academic load for students is 16 hours. The maximum is 18 hours. Students with a 4.25 grade point average or above for the preceding quarter may be permitted to take as many as 21 hours with the approval of an adviser.

Students on scholastic probation may not take more than 14 hours without approval of the adviser. Students employed full-time should not register for more than 8 hours.

Ordinarily, a student must carry 12 or more hours per quarter to be considered a full-time student. However, students attending the University under scholarships, loans, or other types of programs requiring full-time enrollment should check to make certain that they are meeting the requirements of their specific program.

With some exceptions, undergraduate students are expected to spend at least two hours in preparation for every hour in class.



GRADING SYSTEM

The following grading symbols are used by the University:

A—Excellent ..... 5 credit points
B—Good ..... 4 credit points
C—Satisfactory ..... 3 credit points
D—Poor ..... 2 credit points
E—Failure, or unauthorized withdrawal ..... 1 credit point
W—Withdrawal. Authorized withdrawal. Work may not normally be completed.
WP—Withdrew Passing.
WE—Withdrew Failing. WE is calculated as E in grade average.
INC—Incomplete. All work required for the course during the term was not completed; students have the permission of the instructor to do so within a specified time period. (NOTE: See the details of the policy on "INCOMPLETE" grades, following.)
DEF—Deferred. Used only for graduate courses of an individual continuing nature such as thesis or research.
S—Satisfactory. Used for noncredit courses and thesis.
U—Unsatisfactory. Used for noncredit courses and thesis.
AU—Audit. No grade or credit hours earned.
PASS—Used for courses taken under Pass/No Credit option and Pass/No Entry grade. Hours may count toward graduation.
NO CREDIT—Used for courses taken under Pass/No Credit option. No credit hours earned.
NO ENTRY—Used for courses taken under Pass/No Entry grade. No credit hours earned.
CREDIT—Used for graduate students only for courses taken under Credit/No Entry option. Hours earned, but may not be applied.
PR—Progress. Awarded only for skills courses. PR grades are not included in grade point average calculations. (To earn credit for a course in which he or she obtained a PR grade, the student must repeat the course and earn a passing grade.)

All complete grades for courses taken at this University are included in determining students' grade point averages for academic progress purposes.

INCOMPLETE AND DEFERRED GRADES

Unless instructors have specified a shorter period of time, incomplete grades not completed within one year will automatically be changed to E (graduation notwithstanding). Instructors who specify a shorter period of time must communicate that stipulation in writing—with copies to the Admissions and Records Office and the department chairperson—to students at the time the incomplete is granted. Any students who feel that mitigating circumstances justify an extension of the time limit beyond one year for completion of an incomplete grade may petition the faculty member who granted the grade. Faculty members who agree to grant extensions must inform the student, the department chairperson, and the Office of Admissions and Records. Students and their advisers will be notified of outstanding incompletes and of the due dates on which the incompletes will be changed to an E.

A DEF grade for course work of an individual nature such as research, thesis, or dissertation is changed to a completed grade when the project has been completed.

PASS/NO CREDIT

Under the Pass/No Credit option students receive a Pass for grades A, B, C and a No Credit for grades D or E. At the time of declaring Pass/No Credit, students may stipulate that they would rather receive the grade of D than No Credit when appropriate.

Taking courses on a Pass/No Credit basis is limited to courses outside general education requirements and major and minor requirements. Students may enroll in no more than 12 hours of undergraduate coursework under the Pass/No Credit option. These limitations do not apply to courses which are offered only for Pass/No Credit.

Decisions to take a course on a Pass/No Credit basis must be declared no later than the sixth week of the quarter and must be approved by the adviser. Thereafter no change may be made.

Students should be aware that some graduate schools and employers consider Pass as equivalent to a C grade.

PASS/NO ENTRY

Certain courses offer only Pass/No Entry grades. A grade of Pass provides that the hours of credit may count toward graduation; a grade of No Entry carries no grade and no credit hours. Pass/No Entry courses will not satisfy either major or minor requirements.

AUDIT COURSES

Students may register for courses in an "audit" status. No letter grade and no credit is given for such courses. Students pay the same fees as though registering for credit. If auditing students do not attend regularly, instructors may determine that the students should not have audited courses placed on their record cards maintained in the Office of Admissions and Records. Students registering for a course for credit may change to an audit status or vice versa during the first four weeks of a quarter; thereafter the change may not be made. Veterans attending under the GI Bill do not receive benefits for audited classes. ISSC Monetary Award and Pell (Basic) Grant recipients may not include audit classes as part of the total to qualify for payment.

REPEATED COURSES

In the event of repeat courses, or whenever an undergraduate student at Southern Illinois University at Edwardsville takes the same course more than once and receives a grade each time, all grades will be recorded on the transcript, but only the last

grade is used in computing the grade point average. Students may repeat a course originally taken at another school by taking the same course at SIUE. It should be determined in advance by the appropriate Department that the SIUE course is a repeat. Students who repeat SIUE courses at other schools will have only the SIUE course grades counted in their grade point average. However, the hours of only the last completed course will count toward graduation.

PROBATION

1. When students' cumulative grade point averages fall below 3.00, they are placed on Scholastic Warning. They will be returned to Good Standing at such time as their cumulative average is raised to 3.00 or higher.

2. If, while on Scholastic Warning, students' term averages fall below 3.00, they will be placed on Scholastic Probation and made subject to the restrictions imposed on probationary students.

3. Students on Scholastic Probation will not improve their status until:
   a. They complete three successive quarters with a C average or above, at which time they will be returned to Scholastic Warning; or
   b. They raise their cumulative average to the 3.00 level, at which time they will be returned to Good Standing.

4. In the event students on Scholastic Probation fail to attain a 3.00 average for their next quarter of attendance, they will be placed on Scholastic Suspension.

5. Students placed on Scholastic Suspension may appeal to the appropriate dean or director for possible reinstatement.

APPLICATION FOR GRADUATION

Candidates for a baccalaureate degree should file an Application for Graduation with the Office of Admissions and Records at the beginning of their senior year. Applications are mailed routinely to students when they reach this level (140 quarter hours), but students are advised to consult with the Office of Admissions and Records if they have not received their applications by the time they have reached 160 quarter hours. Application forms are also available in the Office of Admissions and Records.

Once the completed applications are received by the Office of Admissions and Records, graduation evaluations are performed. The Office of Admissions and Records determines completion of general education and University degree requirements, while the major and minor requirements are established and reviewed by the academic departments through which the degree is being sought.

In addition to completing the steps for graduation, students must meet all University requirements and satisfy all outstanding financial obligations.

In no case will an application be processed after the announced final deadline, which will be three months prior to graduation. All deficiencies for graduation (incompletes, etc.) must be made up within two weeks following graduation; otherwise, the students will be graduated at the end of the next quarter.

Students are graduated at the end of the quarter when they complete their requirements, and that fact is indicated on their academic record.

Commencement ceremonies are held each year in June at the end of the spring quarter. Attendance at the exercises is voluntary.

A fee of $10.00, established for all persons receiving degrees, is payable at the time of application. The fee does not cover the rental fee for the cap and gown. These items are ordered through the University Bookstore in the University Center. Questions regarding the cap and gown and invitations should be referred to the University Bookstore.

GRADUATION APPEALS COMMITTEE

The University has a Graduation Appeals Committee whose function is to hear students' petitions to be permitted to graduate even though they have not satisfied all University graduation requirements. The committee hears only those cases involving University requirements for a baccalaureate degree. Appeals relative to a major or academic unit requirement are made through the appropriate administrative official. Ordinarily, the Graduation Appeals Committee will give consideration to an appeal only if there is tangible evidence that the matters at issue are of an unusual nature and that they have resulted from conditions beyond the control of the students. Appeals are initiated through the Office of Admissions and Records.

GRADUATION

Bachelor's degree candidates are expected to fulfill the requirements of their academic unit and to maintain a minimum grade Point average of 3.00 for work completed at SIUE.

Candidates for the degree must also complete a minimum of 192 hours of credit in approved courses. Students transferring from an accredited two-year institution must earn at SIUE, or at any other accredited four-year institution, at least 96 of the quarter hours required for the degree. Candidates for the degree must complete a minimum of 48 quarter hours in residence at SIUE and meet all degree program requirements. Any exceptions must be applied for by the students and submitted to the Graduation Appeals Committee.

Students seeking a second baccalaureate degree must complete a minimum of 48 hours subsequent to completion of the first degree and must satisfy the requirements of their primary concentration. At least 32 of these hours must be in residence at SIUE.

TRANSCRIPTS

Students are entitled to transcripts of their University academic record provided they have fulfilled all their financial obligations to the University.

Transcripts are released only with the student's written consent. Telephone requests for transcripts cannot be honored.

CREDIT EARNED BY EXAMINATION, EXTENSION, AND CORRESPONDENCE

Extension and Correspondence

While the University does not maintain a correspondence school or extension courses, courses of this nature taken from institutions which are accredited by appropriate regional accreditation associations are regularly accepted, if the grade earned is C or above. A maximum of one half the number of hours required for a bachelor's degree, or 96 quarter hours, may be completed through correspondence and extension courses; of this total, not more than 48 hours may be taken through correspondence.

Proficiency Examinations

Students may earn course credits by demonstrating their proficiency in certain subjects. The Office of Academic Services (Peck Building 1307) maintains a list of those courses for which proficiency examinations are regularly available and provides information regarding time and place of testing and other detailed instructions. Tests are given by the academic departments and by the testing service of the Office of Academic Services.

The proficiency examination program (including non-general education courses, as well as general education courses) is administered by the Office of Academic Services. Students who desire to take a proficiency examination in any course should initiate the procedure with the Office of Academic Services. In many cases course guides and reading lists are available from academic departments.

Students may take any available proficiency examination subject to the approval of the department and/or the following limitations: (1) a maximum of 48 hours may be gained through proficiency examination; (2) a proficiency examination for a specific course may not be taken more than once, nor for a course for which a grade has been earned.

After students have completed a proficiency examination, credits and grade points shall be granted according to the grade achieved on the test as follows: (1) if a student receives a grade of A or B on a proficiency examination, the record shows the name of the course, hours of credit granted, the grade earned, and a notation "credit granted by proficiency examination"; the grade earned counts in the grade point average; (2) if a student receives a grade of C on a proficiency examination, the record shows the name of the course, the hours of credit granted, "Pass" in the grade column with a notation "credit granted by proficiency examination"; the grade earned does not count in the student's grade point average; (3) if a student receives a grade of D or E on a proficiency examination, he or she receives no credit. The record shows nothing regarding the proficiency examination. However, the proficiency examination grade report forms are filed in the students' folders for reference.

Proficiency examinations are also available for some general education classes in which students are currently enrolled. The examinations are administered without charge to interested students in the class early in the quarter. The examinations are graded in sufficient time for those who pass the test to add another course. The names of the students who have passed the early examinations are carried on the class roll and they receive credit for the course at the end of the quarter. Students may elect to take these in-class proficiency examinations on a Pass/No Credit basis. Students who fail the in-class proficiency examinations continue in the course as regular students.

College Board Advanced Placement

High school students who wish to qualify to seek advanced placement may apply for advanced placement and college credit through the Advanced Placement Program of the College Board, 475 Riverside Drive, New York, New York 10027.

Advanced classes which qualify for this purpose are offered in many high schools in subjects such as English composition, foreign language, history, biology, chemistry, mathematics, and physics. A national examination administered through the Educational Testing Service is given in each subject. Each examination is intended to measure the achievement of students and to determine at what point students should begin college study of that subject. Each examination is prepared by a national committee of high school and college teachers. Grades are assigned as follows: 5, high honors; 4, honors; 3, creditable; 2, pass; and I, fail. To receive credit, students must normally earn grades of 5, 4, or 3, except in chemistry, which accepts only grades of 5 or 4 for credit.

Ordinarily, the maximum credit granted through Advanced Placement Examinations is 16 hours; this credit is not used in computing the grade point average. A maximum of 16 hours of credit granted at another accredited college or university under this plan is transferable to this University. Students may appeal to the appropriate academic dean if they wish to be granted more than 16 hours.

Courses for which credit may be earned through advanced placement include:

Physics: 206a—5, 206b—5, 206c—5.
Chemistry: Chemistry 111—4; 115—4; 125a—4; 125b—4.
Biology: Biology 111—4, 205—4.
History: European: History 111a,b—4, 111c,d—4;
American: History 200—4, 201—4, 202—4.
English: English 101—4.
Foreign Languages:
French: 101, 102, 103—12; 201, 202—8;
German: 101, 102, 103—12; 201, 202—8;
Spanish: 101, 102, 103—12, 201, 202—8.
Mathematics: 150a—4, 150b—4.
Music: Music 236—4.

The results of advanced placement examinations should be sent to the Office of Admissions and Records.

College Level Examination Program

Southern Illinois University at Edwardsville will grant credit to students for successful completion of College Level Examination Program (CLEP) Tests under the following conditions:

1. A maximum of 48 hours can be earned through CLEP by means of General and/or Subject Examinations. This credit is applicable toward a baccalaureate degree.
2. The score on each General Examination must equal or exceed the 50th percentile on the national college sophomore norm, which is a scaled score of approximately 500. Separate scores are reported for each of the tests comprising the General Examinations. As determined by the appropriate department, credit will be granted for the successful completion of the General Examination.
3. Credit will be awarded for a CLEP Subject Examination when approved by the department offering a comparable course.
4. Test credit will not be allowed when students previously have received credit in comparable courses. In addition, test credit will not be granted when students are currently enrolled in a comparable course.
5. Regardless of the total amount of credit earned, students will be permitted to take examinations for which comparable credit has not been established previously.
6. Students may take the tests prior to enrollment at SIUE. Final recording of credit upon the Permanent Record Card, however, is contingent upon matriculation at SIUE with acceptable scores.
7. When approved, credit will normally be awarded for Subject Examinations on the basis of the number of credit hours in the pertinent courses.

The tests are administered locally at the Office of Academic Services.

Individuals who take the tests and who wish to apply for credit through SIUE should have tha results sent to Records Department, Office of Admissions and Records.

Military Experience Credit

Students who have completed military basic training may be eligible for 3 credit hours for physical education and 3 for health education. Students who have served six months or more of active duty may receive an additional 3 hours of credit for aerospace studies. Applications for credit for military service as well as for academic credit for work done in military service schools may be made through the Office of Admissions and Records. College or university credit earned prior to or during military service takes precedence over military experience credits; therefore, military experience credit is not applicable in all instances.

In evaluating credit possibilities based upon formal service-school training programs, the recommendations of the American Council on Education as set forth in the U.S. Government bulletin, *Guide to the Evaluation of Educational Experience in the Armed Forces,* are followed.

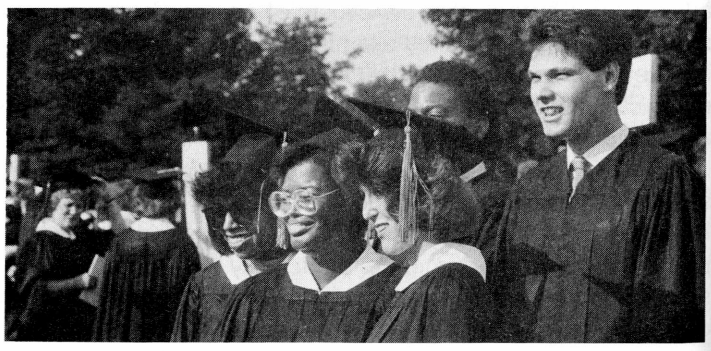
No credit is allowed for college-level GED tests.

ACADEMIC RECOGNITION

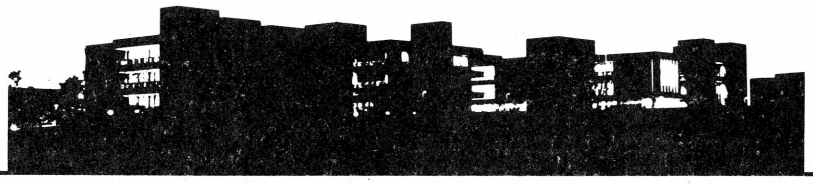
Students who demonstrate outstanding scholarship may be included on the Dean's List and recognized through Honors Day and Commencement activities. In order to be included on the Dean's List, students must have a minimum of 12 quarter hours calculated and earn a minimum grade point average of 4.50 for the quarter. The Dean's List is published at the end of each quarter.

Honors Day Convocation, held each spring, recognizes students who received undergraduate degrees the previous August, December, or March and attained an SIUE grade point average of 4.50 or higher or who are candidates for Bachelor of Arts or Science degrees in June and have an SIUE grade point average of 4.50 or higher. Additionally, students who are enrolled for the spring quarter and who have the following SIUE grade point average are recognized: Seniors—4.50 or higher; Juniors—4.50 or higher; Sophomores—4.25 or higher; Freshmen—4.25 or higher. In order to be eligible for Honors Day recognition, students must have passed 24 hours at Southern Illinois University at Edwardsville. Courses taken on a Pass/No Credit basis will not apply.

Graduating seniors who have achieved outstanding scholarship are recognized at Commencement on the graduation program; their diplomas designate Highest Honors (4.90 or higher), High Honors (4.75-4.89), or Honors (4.50-4.74).



School of



Business

SCHOOL OF BUSINESS

DAVID WERNER, DEAN

The School of Business offers undergraduate programs to: (1) develop students' understanding of the theory and techniques of management, with emphasis on analytical processes and decision making, to prepare them for professional careers in business; (2) provide a stimulus to lifelong study and learning and a foundation upon which a student can build advanced degrees; (3) prepare teachers of business subjects in secondary schools and community colleges.

Four degree programs are offered at the undergraduate level to achieve the above objectives. The four programs are the Bachelor of Science in Accountancy, Bachelor of Science in Business Administration, the Bachelor of Science in Business Economics, and the Bachelor of Science with a major in Business Education, which is offered in cooperation with the School of Education.

The School of Business is accredited by the American Assembly of Collegiate Schools of Business.

FACULTY

Professors:
Aucamp, D. C.; Ault, D. E.; Blackledge, W. L.; Fogarty, D. W.; Harrick, E. J.; Hoeke, R. S.; Hollenhorst, J. J.; Jain, S. K.; Kaikati, J. G.; King, T. E.; Kohn, R. E.; LaGarce, R. F.; Levin, S. L.; Lin, A. Y.; Lindsay, V. J. (Dean, Graduate School); Luan, D. C.; Miller, B. B.; Pyke, W. O.; Rutman, G. L.; Schultheis, R. A.; Schwier, A. S.; Steffen, H. H.; Sultan, P. E.; Virgo, J. M.; Wait, W. B.; Werner, D. J. (Dean, School of Business)

Associate Professors:
Barringer, R. L.; Benjamin, J. E.; Blount, D. F.; Campbell, W. L.; Carver, M. R.; Edmonds, R. G. Jr.; Elliott, D. S. Jr.; Franke, A. G.; Hashimi, R. M.; Hirsch, M. L.; McKinney, R. N.; Meisel, J. B.; Nyerges, R. T.; Patsloff, P. K.; Schrage, J. F.; Segal, M.; Strickland, D. E.; Sumner, M. R.; Wilson, G. T.

Assistant Professors:
Ahadiat, S. N.; Bosse, D. B.; Evans, R. C.; Frankel, S.; Hansel, W. M.; Klepper, R. W.; Lynch, J. M.; Michlitsch, J. F.; Miller, J. F.; Ortegren, A. K.; Puro, M. B.; So, Y. C.; Statlar, L. D.; Tarpey, P. R.; Thomann, D. A.

Instructors:
Biederman, D. K.; Dougherty, J. P.; Erthal, M.; Herberts, J. J.; Krawczyk, K. A.; Myer, F. L.; Sharp, J. F.; Small, E. W.; Sitek, J. F.; Sturdivant, C. A.; Ulmer, D. K.

ADMISSION

The Bachelor of Science degree programs in the School of Business are upper division programs. Students are admitted as pre-business students after admission to the University and after attaining the following:

1. Completion of Mathematics 120 and Statistics 244 (or their equivalents) with a C or better in both courses
2. Cumulative grade point average of 3.00
3. Completion of the General Education Skills requirements

In order to be fully admitted to the business program, students must complete the following with a grade of C or better:

1. Accounting I & II: ACCT 201 and 202
2. Micro and Macro Economics: ECON 111 and 112
3. Management Information Systems: MIS 108
4. Business Statistics: MS 251
5. Business Communication: MGMT 290

After satisfactorily completing the above courses, students must submit a Business Admission Request Form for review by the Undergraduate Admission Committee. Students may request an exception to the admission requirements by writing to the School of Business Undergraduate Scholastic Review Committee.

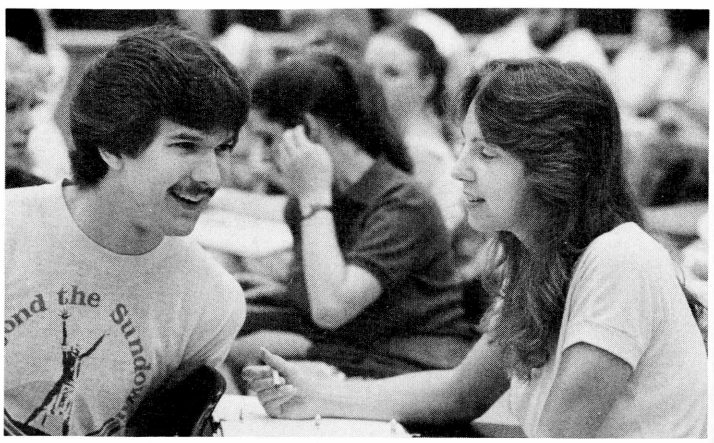
Transfer students who have earned an associate degree in arts or sciences are admitted only when they have completed Speech (Speech Communication 103 or 104 or 105) and Critical Thinking (Philosophy 106 or Mathematics 106) requirements in addition to the courses listed above. Other transfer students should contact the School of Business Advisement Office concerning the transferability of previous course work.

The School of Business limits the transfer of business courses taken at the lower division at another institution to lower division credit (100- and 200-level courses) at SIUE. Prospective transfer students should contact the School of Business Advisement Office concerning the transferability of previous course work.

ACADEMIC REQUIREMENTS

Students must fulfill the following requirements to obtain a Bachelor of Science in the School of Business: (1) maintain a C average in all courses and in all business courses; (2) take all business courses in regularly scheduled classes (not by extension); (3) take the senior year requirement of 48 credit hours in residence; (4) take a minimum of 76 hours in courses outside of business and economics.

Each School of Business program requires 192 quarter hours of acceptable credit for graduation. Once credit has been earned for a given course (by taking the course, proficiency, transfer or CLEP), additional credit may not be applied towards the graduation requirement by taking similar or lower level courses in that area at SIUE or elsewhere.



ADVISEMENT AND COUNSELING

The School of Business Advisement Office assists students in scheduling courses to meet program requirements and provides guidance and counseling to students with academic problems.

ACCOUNTANCY

The degree program in Accountancy is intended as preparation for entry into a professional career in Accounting in either the private or public sector. The program is designed to provide students with an educational foundation upon which they can build professional growth in the practice and study of Accounting as they pursue their chosen careers. Students seeking admission to the program must have a 3.5 grade point average in all Accounting courses taken, which must include Accounting 201, 202, 301, and 311 or equivalents, and must have a cumulative grade point average of at least 3.5. Once admitted, candidates who fail to maintain these standards will be dropped from the program. Upon admission, students should contact the School of Business Advisement Office for consultation with an undergraduate adviser to plan a program of study. Students will be assigned an adviser from the Accounting faculty.

CAREER OPPORTUNITIES IN PROFESSIONAL ACCOUNTING

There are several career paths possible for the student of professional accounting. The possibilities include employment with public accounting firms, private industry, and governmental institutions. Public accounting offers the opportunity to gain exposure to a wide variety of clients and their accounting methods. Professional certification as a Certified Public Accountant is achieved by passing all four parts of the Uniform AICPA Examination: theory, practice, auditing, and business law. The examination is administered by the American Institute of Certified Public Accountants (AICPA) in May and November of each year. Three different avenues may be pursued within public accounting: auditing, tax, or management advisory services. Graduates are employed in private industry and government agencies as managerial accountants and internal auditors. Appropriate professional designations within this segment of the accounting profession include the Certificate in Management Accounting (CMA) and Certified Internal Auditor (CIA).

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE IN ACCOUNTANCY

Total Program Requirement: 192 quarter hours

General Education
Students should consult the section of the catalog regarding general education requirements and may elect option A or B in that program. Some required courses listed below also may be used to satisfy general education requirements.
- Mathematics 120
- Statistics 244
- Philosophy 106 or Mathematics 106
- Speech 103 or 104 or 105

General Business Requirements 60
- Accounting 201, 202
- Finance 320
- Economics 111, 112, 343
- Management 340, 440, 441
- Marketing 371
- Management Information Systems 108, 342
- Management Science 251, 320
- Production 315

Accounting Degree Requirements 40
- Accounting 301, 302, 303, 311, 312, 315, 321, 342, 401, 431
- Specified Business Electives 12
  1. At least 4 hours must be elected from the following courses: Accounting 322, 390, 403, 411, 433, 490
  2. No more than 8 hours may be elected from:
     Economics 401, 415, 417
     Management Information Systems 466, 472, 474, 480
- Communication Electives (as approved by adviser) 12

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE IN ACCOUNTANCY, EMPHASIS IN MANAGEMENT INFORMATION SYSTEMS

Total Program Requirement: 192 quarter hours

General Education
Students should consult the section of the catalog regarding general education requirements and may elect option A or B in that program. Some required courses listed below also may be used to satisfy general education requirements.
- Mathematics 120
- Statistics 244
- Philosophy 106 or Mathematics 106
- Speech 103 or 104 or 105

General Business Requirements 60
- Accounting 201, 202
- Finance 320
- Economics 111, 112, 343
- Management 340, 440, 441
- Marketing 371
- Management Information Systems 108, 342
- Management Science 251, 320
- Production 315

Accounting Degree Requirements 44

Accounting 301, 302, 303, 311, 312, 315, 321, 342, 401, 411, 431
Specified Business Electives 16
1. Management Information Systems 270, 480, and 474
2. One of the following: Management Information Systems 260a, 466, or 472
Communication Electives (as approved by adviser) 12

BUSINESS ADMINISTRATION

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE IN BUSINESS ADMINISTRATION

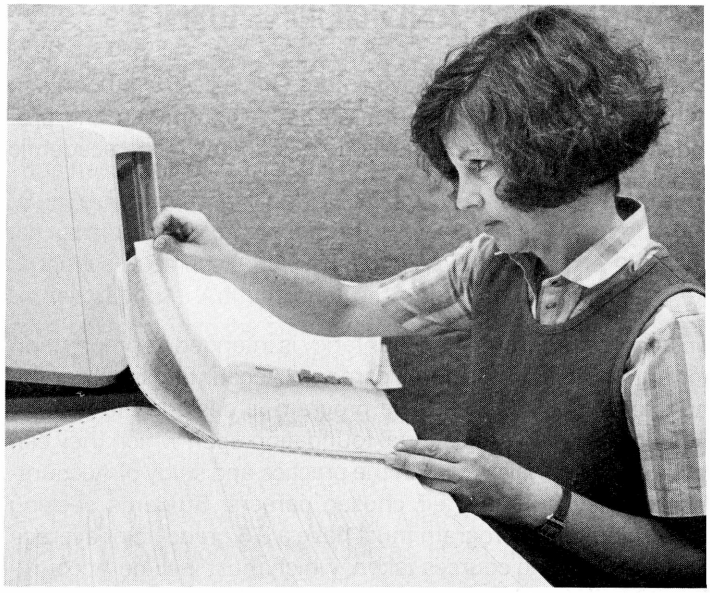
Total Program Requirement: 192 quarter hours

General Education
Students should consult the section of the catalog regarding general education requirements and may elect option A or B in that program. Some required courses listed below also may be used to satisfy general education requirements.
Mathematics 120
Statistics 244
Philosophy 106 or Mathematics 106
Speech 103 or 104 or 105

PROGRAM CORE REQUIREMENTS 76
Accounting 201, 202, 210
Economics 111, 112, 343
Finance 320
Management 290, 340, 341, 440, 441
Management Information Systems 108, 342
Management Systems 251 and either 312, 314, or 320
Marketing 370, 371
Production 315

Specialization Requirements 20-28
(in one of 10 specializations)

The core curriculum provides students with a basic understanding of the major functions and processes of business and administration. It encompasses the common body of knowledge in business as defined by the American Assembly of Collegiate Schools of Business (AACSB), including the following areas: (a) the concepts, processes, and institutions in marketing, distribution, and production, and financing functions of business enterprise; (b) the economic, legal, social, and political environment of business; (c) the concepts of organization theory, interpersonal relationships, control and motivation systems; and (d) interrelationships involved in analysis and policy determination.



AREAS OF SPECIALIZATION AND CAREER OPPORTUNITIES

Each BSBA student must complete one of the following specializations. Students are encouraged to discuss their career objectives and the various specializations with the academic advisers and faculty in the School of Business before making a choice.

ECONOMICS

The specialization in economics provides students with knowledge of analytical methods for solving basic problems affecting profit and growth of the business organization. In addition, economics offers courses in national income determination and functioning of the economic system that are fundamental to forecasting, planning, and budgeting. Graduates of the program are qualified for careers in administration and management of business firms, in banking and insurance, and in federal, state, and local government agencies.

Course requirements: Economics 401, 402, two electives in economics, and one additional approved elective in business or economics.

FINANCE

The finance specialization prepares students for decision-making positions in private industry and government service. Courses in finance are designed to develop the student's analytical ability and understanding of financial problems as encountered in business and industry.

Course requirements: Finance 420, three 400-level finance electives, and one additional approved elective in business or economics.

GENERAL BUSINESS ADMINISTRATION

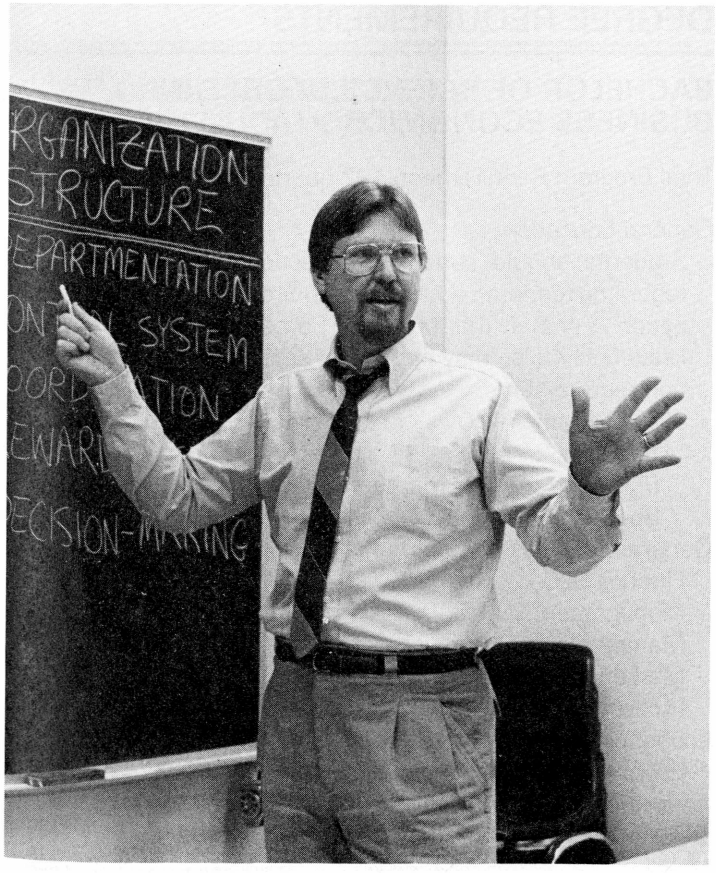
The specialization in general business administration provides students with an opportunity for further study in related subjects offered by the other Schools: government, mathematics, psychology, and sociology. Other areas may be approved upon application to the Director of the BSBA Program.

Course requirements: 20 quarter hours to be planned on an individual basis; requires prior approval of the program director.

MANAGEMENT

The management specialization is designed to develop the background and skills essential to the effective administration of formal organizations. The courses in this specialization emphasize the roles of planning, organization, staffing, supervision, control, and innovation in the development of management systems. In addition to study of management processes, the specialization stresses the use of groups in the identification and resolution of organization problems, design of effective systems, and coping with changes in the internal and external environment.

Course requirements: Management 430, 431, 432, a management elective, and one additional approved business or economics elective.



MANAGEMENT INFORMATION SYSTEMS

The management information systems (MIS) specialization is designed to prepare students to develop business-related information systems. Students learn to design information systems to support decision making and operations of businesses and other organizations. The design process includes specification of hardware, software, and personnel.

Students completing the MIS area are well prepared for initial positions as business computer programmers or as systems analysts for business, government, and service organizations.

Administrative Policy for Courses: Students need a grade of C or higher in specialization courses to be used to meet graduation requirements for the MIS specialization. A student who does not earn a grade of C or better after three registrations in such a course will be dropped from the specialization.

Course requirements: MIS 260A, MIS 270, MIS 360, MIS 466, MIS 480, and two 400-level MIS electives.

MANPOWER AND INDUSTRIAL RELATIONS

The specialization in manpower and industrial relations is designed to prepare students for entry-level positions in industrial relations, private industry, government, or service-oriented industries. Students study manpower planning, collective bargaining, industrial relations law, and government policy as well as contemporary issues, such as equal opportunity employment, discrimination, and safety.

Graduates from this specialization frequently enter advanced programs in business, industrial relations, economics, law, and psychology.

Course requirements: Economics 331, 431, 432, and one from Economics 401, Management 434, Management 437, and one additional approved business or economics elective.

MARKETING

The marketing curriculum is designed to enable students to analyze the problems inherent in providing consumer and industrial goods and services to a wide variety of markets. The curriculum prepares students for positions in sales, advertising, promotion, research, product management, and marketing management. Further, the study of dynamic problems that affect all enterprises in communicating with their constituencies helps prepare students for careers in commercial, governmental, and service organizations that serve the public in ways other than producing tangible goods.

Course requirements: Marketing 377, 480, and three from 470, 471, 472, 474, 475, 476, 478.

OFFICE INFORMATION SYSTEMS

The office information systems specialization is designed to prepare students for positions in a technology-based office environment, product marketing, automated office design, and general office administration. A minimum grade of C is needed in each specialization course to meet graduation requirements.

Course requirements: MIS 452, MIS 454, and two of the following three sequences:
Technical Skills: Office Information Systems 250, 350;
Technical Concepts: Management Information Systems 466, 467;
Office Management: Office Information Systems 450, 472;
And one additional approved business or economics elective.

PERSONNEL ADMINISTRATION

The specialization in personnel administration is designed to prepare students for entry-level positions in personnel. Courses are offered in such functional areas as personnel planning and selection, training, compensation and benefits, performance appraisal, health and safety and labor relations. The curriculum prepares students to enter private industry, government or service-oriented industries.

Course requirements: Management 430, 435, 436; one of Management 434, 437, Economics 331, 432; and a Psychology elective.

PRODUCTION AND OPERATIONS MANAGEMENT

The planning and control of operations, inventory, purchasing, and quality are concerns of all organizations including those involved in transportation and services, as well as manufacturing. Emphasis is on the analysis and design of management systems utilizing quantitative techniques in the design and measurement of work, inventory control, manpower planning, scheduling work activities, space utilization, and quality control. The relationships of these areas and the necessity of integrating corresponding subsystems are stressed.

Professional career examinations are offered by the American Production and Inventory Control Society (APICS), the National Association of Purchasing Management (NAPM), and the American Society of Quality Control (ASQC). The production and operations management program is designed for students preparing to take these examinations.

Students with a specialization in production and operations management are prepared for entry-level positions with career growth capability in the organization functions of inventory control, purchasing, production control, and quality control. Graduates are prepared to serve as assistants to plant managers, hospital administrators, transportation managers, or any managers whose duties involve scheduling, quality control, cost control, or inventory management.

Course requirements: Production 410, 461, 462, 463, and 468

MINOR FOR NON-BUSINESS MAJORS

A minor in business consists of 28 hours which must include courses from at least three of the following areas: accounting, economics, finance, manpower and industrial relations, management information systems, management science, marketing, management, office information systems, personnel administration, and production. A minimum of 12 hours must be taken in residence, and a C average must be maintained. Accordingly, such students will not be permitted to enroll in more than 11 hours in business and economics.

Students must contact the School of Business Advisement Office for planning and approval of a minor program.

BUSINESS ECONOMICS

This degree is recommended for students interested in the study of economics who plan either to seek employment in business or government upon graduation or to do graduate work in one of the business disciplines. Students interested in advanced graduate work in economics and those who intend to seek admission to a professional school, such as law, may be advised to enroll in the economics degree program offered through the School of Social Sciences. (See Social Sciences section of this catalog.) Students seeking admission to the program must have met the general admission criteria of the School of Business. All potential students should contact the Department of Economics for consultation with an undergraduate adviser to plan a specific program of study.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE IN BUSINESS ECONOMICS

Total Program Requirement: 192 quarter hours

General Education
Students should consult the section of the catalog regarding general education requirements may elect option A or B in that program. Some required courses listed below also may be used to satisfy general education requirements.
Mathematics 120
Statistics 244
Philosophy 106 or Mathematics 106
Speech 103 or 104 or 105
General Business Requirements 44 Accounting 201, 210
Finance 320
Management 290, 340, 440 (or Economics 435), 441
Management Information Systems 108, 342
Marketing 371
Production 315
Economics Requirements 48
Economics 111, 112, 321, 343, 401, 402, 417
(prerequisite to 417 is MS 251 or equivalent)
Economics Electives (5 courses, 20 quarter hours)

MINOR IN ECONOMICS

The minor in economics or business economics consists of 28 hours and must include 111, 112, 401, 402. The remaining 12 hours shall consist of electives in economics chosen in consultation with an adviser from the Department of Economics.

BACHELOR OF SCIENCE AND BACHELOR OF ARTS DEGREE, SCHOOL OF SOCIAL SCIENCES

Please refer to the School of Social Sciences section of this catalog for a description of the Bachelor of Science and Bachelor of Arts Degree requirements and career opportunities for graduates. A minimum of 12 hours must be taken in residence and a C average maintained.

BUSINESS EDUCATION

The business education curriculum is designed to prepare teachers of business subjects for secondary schools and community colleges. Students in the program complete a core of business administration and education courses and specialize in one area of business administration. Students interested in business teacher education should promptly contact the business education adviser and enroll in Secondary Education 215.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, SCHOOL OF EDUCATION

Total Program Requirement: 192 hours

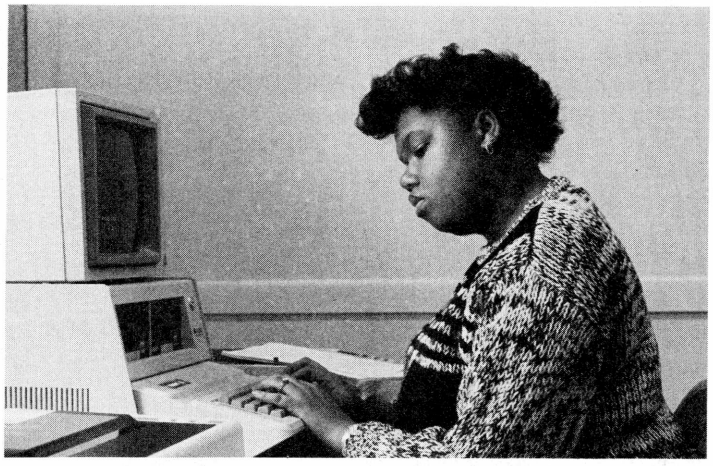
General Education
Students should consult the section of the catalog regarding general education requirements and may elect option A or B in that program. Some required courses listed below also may be used to satisfy general education requirements.
- Mathematics 120
- Statistics 244
- Philosophy 106 or Mathematics 106
- Speech 103 or 104 or 105
- Psychology 111

Health and Physical Education 6
- HPED 201, 3 hours HPED electives

Business Teacher Education Core 56
- Accounting 201, 202
- Office Information Systems 350, 450
- Business Education 411B
- Economics 111, 112
- Finance 320
- Management 290, 340, 342, 441
- Management Information Systems 108
- Management Science 251
- Marketing 371, 475

Subject Matter Specializations (choose one) 12
- ACCOUNTING-DATA PROCESSING
- Accounting 210 (or other accounting elective)
- Business Education 411B
- Management Information Systems 260A
- SECRETARIAL ADMINISTRATION
- Management Information Systems 452
- Business Education 324A, 411A
- MARKETING AND DISTRIBUTIVE EDUCATION
- Marketing 472 or 474
- Business Education 414, 416
- ECONOMICS
- Management 440
- Economics 401 or 402, 425

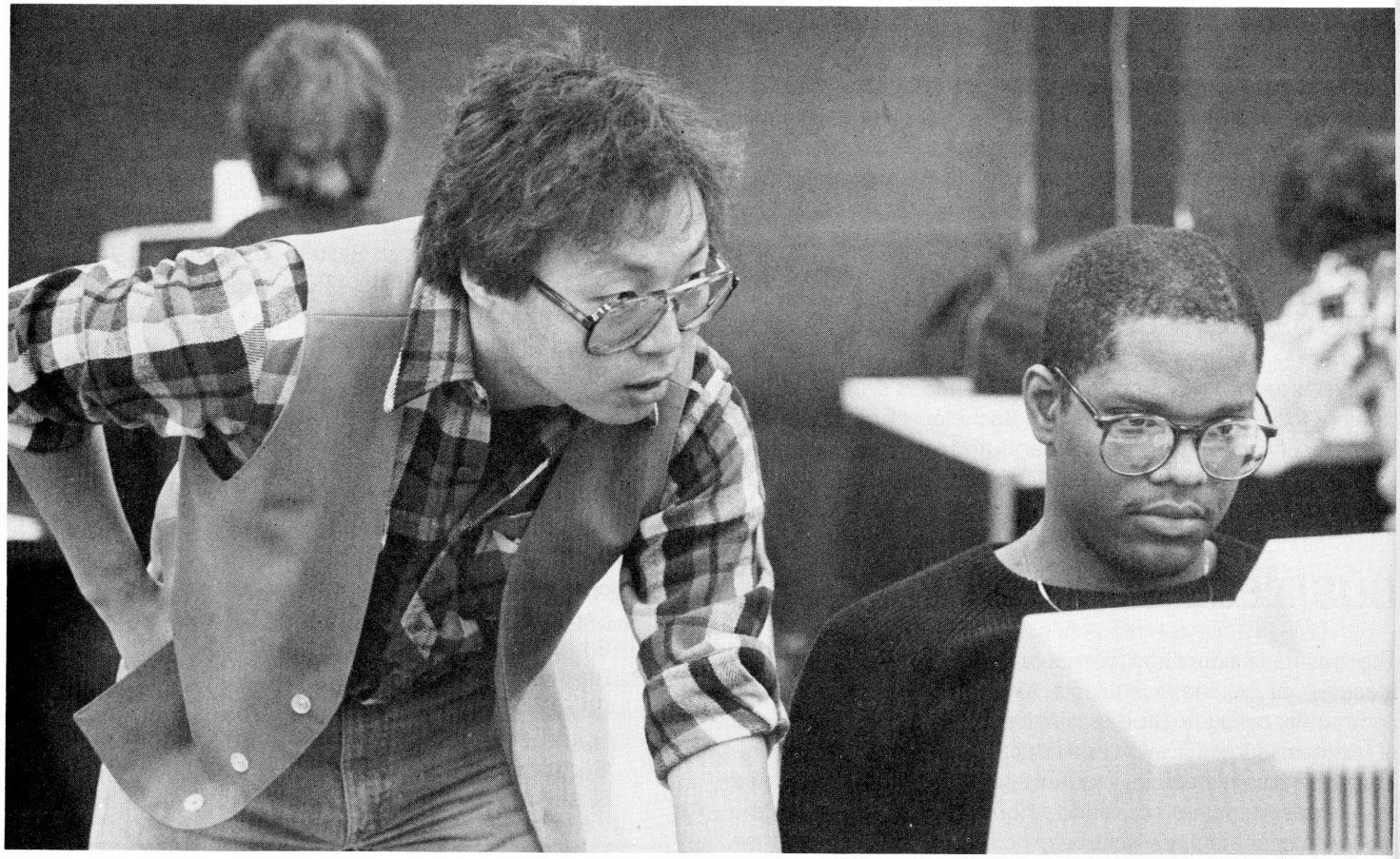
Professional Development Sequence 37-41
(Choose either A or B)
- A. Secondary Education 215, 401a,b,c, Business Education 411B
- B. Secondary Education 215, 315
  Education 305
  Foundations of Education 355
  Secondary Education 352c (12-16 hours)
  Business Education 411B

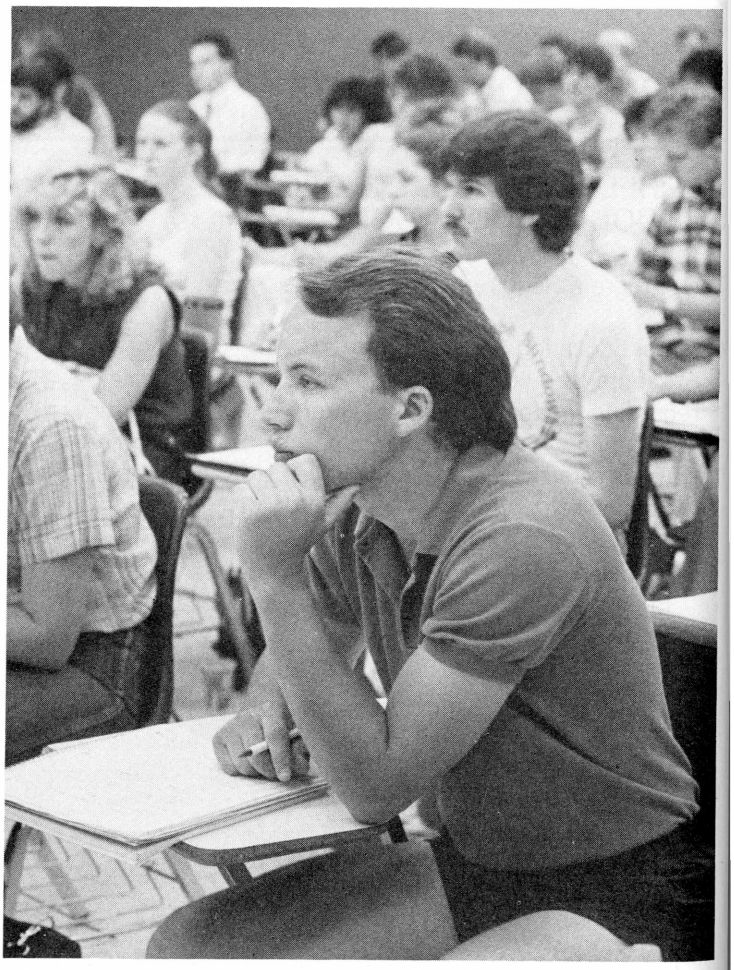


OTHER PROGRAMS

PROFESSIONAL EXPERIENCE PROGRAM

The School of Business administers the Professional Experience Program (PEP) for students interested in combining academic and work experiences. After achieving sophomore standing, PEP students alternate six months of academic work with six months of work in industry. Although five years are needed to complete this program, PEP students derive valuable experience and financial support. Interested students should contact the PEP Office in the School of Business at (618) 692-3840.



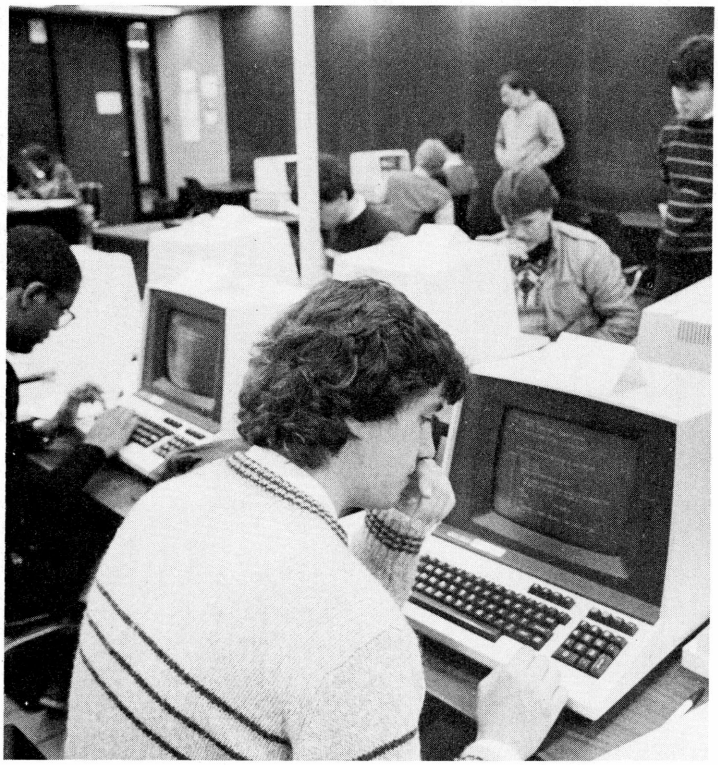


School of Education

SCHOOL OF EDUCATION

JOSEPH GORE, DEAN

The School of Education offers undergraduate programs in professional education and in psychology. Professional education programs prepare students for teaching positions in early childhood, elementary, health education, secondary, special, and physical education. In addition, a program in recreation is available for students interested in becoming recreation directors in a variety of public and private agencies. The psychology program offers both a nonprofessional bachelor of arts major and a preprofessional program for students who wish to pursue careers as psychologists. Through any of the undergraduate programs students may also become qualified to enter graduate studies in the School of Education.



ADMISSION AND ADVISEMENT

Procedures for admission to different programs in the School of Education vary; therefore, students should consult the appropriate department chairperson for specific information. Teacher education students must be officially admitted to a program in the appropriate department in order to secure a student teaching assignment, be graduated in teacher education, and qualify for a teaching certificate. For admission to any program in teacher education, a student must present a grade point average of at least 3.5, must receive a grade of C or better in both English 101 and 102, and must pass a test in basic skills.

Undergraduate advisers work with students interested in pursuing any of the programs offered by the School of Education. Students should consult with advisers to obtain information about employment opportunities, courses in their field, certification requirements, and aptitudes associated with successful professional practice. Students may arrange to see advisers by requesting appointments in the office of the appropriate department in the School of Education.

DEGREES AND CERTIFICATES

The School of Education grants the Bachelor of Science degree in Education, the Bachelor of Science degree in Recreation, and the Bachelor of Arts or Bachelor of Science degree in Psychology. Upon successful completion of a teacher education program, students qualify for the teaching certificate in the State of Illinois and may also qualify for teaching certificates in other states. Students taking degrees in other majors may qualify for a secondary teaching certificate by completing an approved program in teacher education.

ACCREDITATION

The following undergraduate teacher education programs have received approval from the Illinois State Board of Education and are accredited by the National Council for the Accreditation of Teacher Education (NCATE).

Elementary Certificates

Early Childhood[1]
Elementary (K-9)

Secondary Certificates (6-12)

Art
Biology
Business Education
Chemistry
Earth Science[2]
English
French
General Science and Mathematics
Geography
German
Government
History
Mathematics
Physical Education
Physical Science
Physics
Spanish

Special Certificates (K-12)

Art
Music
Physical Education
Educable Mentally Handicapped
Emotionally Disturbed[3]
Learning Disabilities[3]
Speech and Hearing Impaired

[1]Approved November, 1975
[2]Approved December, 1968
[3]Approved June, 1973

CURRICULUM AND INSTRUCTION

The Department of Curriculum and Instruction offers programs leading to the Bachelor of Science Degree in Education which fulfill requirements for certification of entitlement in Elementary Education, Early Childhood Education, and Secondary Education. Elementary Certification includes kindergarten through grade nine. With the Illinois Early Childhood Certificate, students are certified to teach children through age six, but excluding public school kindergarten. The Secondary Certificate covers grades six through twelve.

Professors:
Ahlbrand, W. P.; Baden, D. J.; Carpenter, R.; Comer, J. M.; Gore, J. (Dean, School of Education); Harmin, M.; O'Brien, T. C.; Rockwell, R. E.; Starr, D. F.; Wehling, L.

Associate Professors:
Boss, H. T.; Brown, W. L.; Bruker, R. M.; Darnell, D.; Jordan, A. E.; Keefe, D. R.; Meyer, V. E.; Nall, S. M.; Patty, D. L.; Turner, C. J.; Williams, R. A.; Wilson, R. (Chairperson)

Assistant Professor:
Owens, J. L.

Instructor:
Havis, B. J.

ELEMENTARY EDUCATION

The program in Elementary Education requires 116 hours of general education and 76 hours of professional education. Transfer students may be required to complete additional hours in general education to meet certification requirements. Elective hours may apply toward a second major, such as early childhood education or special education.

To be admitted, students must:

1. Complete 64 quarter hours of course credit with a grade point average of 3.50 or higher;
2. Demonstrate competence in basic skills;
3. Receive a grade of C or better in both English 101 and 102; and
4. Successfully complete the introductory course, Elementary Education 200.

Requirements 1, 2, and 3 above must be met before enrolling in the introductory course. Competence tests in the basic skills are given several times each year. Students should consult the Office of Student Teaching and Advisement for specific dates and times. Although no other professional course requirement may be taken prior to Elementary Education 200, students may take Psychology 301 concurrently.

The elementary education program is field based, involving both students and professors in regular participation in public school classrooms. Students participate in the schools one-half day per week, thereby meeting the state requirement of at least 100 hours of clinical experience.

Courses are grouped into three field experiences. Students must pre-register for all field experience courses in the Student Teaching and Advisement Office. Field Experience I is a group of classes in which students spend the major part of two days each week in a public school and other days in campus classes. Students study techniques of teaching in content areas (e.g., reading, etc.) and learning theory.

Field Experience II is a group of specialized methods courses (e.g., science, language arts) organized in much the same manner as Field Experience I.

Field Experience III, student teaching, is the culminating experience. In this experience, students intern in a school and, under guidance of a cooperating teacher and University supervisor, gradually assume the role of a regular teacher.

The Reading Center is a well-equipped laboratory of diagnostic and instructional materials and equipment used in diagnosing and correcting reading deficiencies. Students enrolled in the sequence of reading courses get practical experience in the Center working with pupils who are transported to campus from the surrounding elementary and secondary schools. The Reading Center also serves public and parochial schools of the area by providing current materials for study and evaluation.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, ELEMENTARY EDUCATION

General Education Requirements ..... 72 or 76
- Written Expression: Both are Required 8
  - English 101 - English Composition I
  - English 102 - English Composition II

  and
  - Option A - Skills 12
    Oral Communications, Critical Thinking, and Statistics or Computer Programming

  or
  - Option B - Foreign Language 12
    Critical Thinking or Statistics or Computer Programming 4
- Natural Science and Mathematics 16
  (including 12 hours of Mathematics and 12 hours of Sciences)
- Social Sciences 16
  (Students must satisfactorily complete the Constitution requirement)
- Humanities and Fine Arts 16
  (to include a course in Art, Music, Philosophy and Literature)
- Interdisciplinary 4

Additional General Education Requirements 44-40
- Fitness and Leisure Skills 8
  (to include HED 201)
- Natural Science and Mathematics 8
- Humanities and Fine Arts 8

(two courses in Literature)
One course in American History 4
Electives in General Education 12-16
Professional Education Requirements 76
Pre-Admission Courses 6
Ed. El. 200-2
Psych. 301-4
Field Experience I 16
Ed. El. 314, 337, 343, 365
Field Experience II 16
Ed. El. 338, 415, 442, 445
Additional Courses 22
Ed. El. 413-4
Sp. Ed. 400-4
Art 330a-3
Music 200-3
P.E. 350-4
Ed. Fd. 380-4
Field Experience III 16
Ed. El. 451-16

192

EARLY CHILDHOOD EDUCATION

The Early Childhood Program consists of 116 hours of general education, 54 hours of professional education, and 22 hours of electives. Elective hours may be taken in course work that would apply toward a second major, such as elementary education or special education.

Policies and procedures relative to admission and retention explained in the previous elementary education section apply to students in the early childhood program as well.

Students regularly participate in nursery schools and day care centers throughout the program. The early childhood program provides opportunities for students to accumulate at least 100 hours of pre-student teaching clinical experience.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, EARLY CHILDHOOD EDUCATION

General Education Requirements ..... 72 or 76
Additional General Education Requirements 44-40
(See Elementary Education Section)
Professional Education Requirements 54
(Elementary Education 200-(2), 201-(4), 202-(4), 317-(4), 412-(4), 420-(4), 421-(4), 422-(4), Special Education 400-(4), 440-(4), 441-(4), Speech Pathology and Audiology 312 or Special Education 498-(4), and Elementary Education 450-(16)
Electives 22

192

The Instructional Center, located in Classroom Building I houses materials, equipment, resource books, periodicals, an journals pertaining to early childhood education, special educa tion, and secondary education.

SECONDARY EDUCATION

The Secondary Education Program is a four-year professiona program leading to a teaching certificate for junior high schools middle schools, and secondary schools. The program include work in general education, teaching fields, and professiona education.

In the first two years students complete a program of genera education in Natural Science and Mathematics, Social Sci ences, Humanities and Fine Arts, and Skills. During this time students also enroll in an introductory Education course.

During the third and fourth years, students normally com plete work in the major teaching field. The remainder of the program involves professional education courses which may be taken in a two- or three-quarter sequence and are usually completed during the fourth year. Students must complete a least 100 pre-clinical hours PRIOR TO STUDENT TEACHING.

For admission to the Secondary Education program, students must present an overall grade point average of 3.5, must receive a grade of C or better in both English 101 and English 102, and must pass a basic skills test. In addition, they must successfully complete the introductory course in education and must receive recommendations from the advisers in Education and their teaching field.

Upon completion of the program, the student is granted the bachelor's degree and is eligible for a grades 6-12 teaching certificate in the teaching field(s) in which work was done. It is also possible to obtain a "broad field" certificate in Art, Music, and Physical Education, which would qualify the individual to teach these subjects in kindergarten through grade 12.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, HEALTH EDUCATION

General Education ..... 72 or 76
(including BIOL 111, CHEM 111, IS 342)
Written Expression: Both are required 8
English 101 - English Composition I
English 102 - English Composition II
and
Option A - Skills 12
Oral Communications, Critical Thinking and Statistics or Computer Programming
or
Option B - Foreign Language 12
Critical Thinking or Statistics or Computer Programming 4
Prerequisites to the Major 6

(including Health Education 201, 3 hours of Physical Education Activities)
Health Education Major Concentration 45
(including Health Education 205, 250, 300, 334s, 355, 360, 470, 471, Nursing 170, Biology 240a, Special Education 400)
Electives[1] 8
2 or more courses selected from the following: Health Education 313s, 350, 410, 462, 463, 464, 465
Professional Education 32
(including Health Education 460, Secondary Education 215, 352, Education 305, and Foundations of Education 380)
Electives or Second Teaching Field 29-25

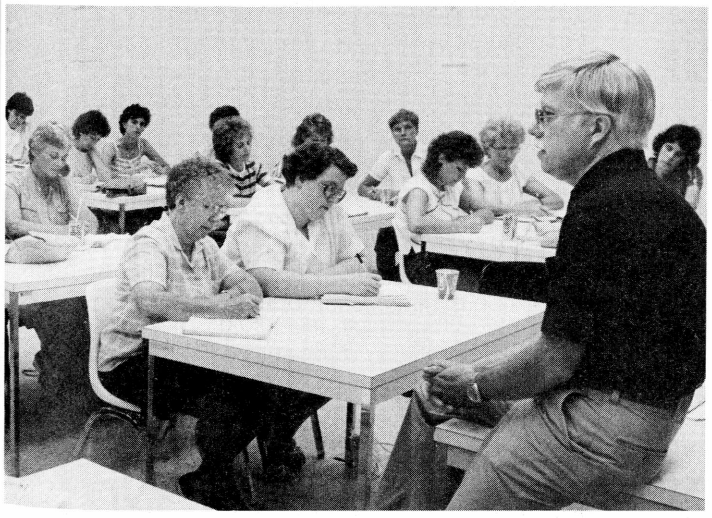
192

[1]Substitutes allowed with adviser's consent

MINOR REQUIREMENTS

In addition to its degree program, the Department of Health, Recreation and Physical Education offers a minor in health education. This minor is available to majors in any field and is not restricted to those in physical education or recreation.

A minor in health education is available for those who wish to receive teacher certification at either the elementary or secondary level. It consists of 30 hours and includes Health Education 201, 205, 300, 334s, 350 or 460, 355, 410, 471, and one of the following: Health Education 313s, Psychology 301, 303, 432.



RECREATION

The program in recreation consists of 47 hours in the recreation major, plus 44-45 hours of supporting work in related fields such as health education and physical education. In addition, students complete 60 hours in general education and 40-41 hours of electives. The program leads to the Bachelor of Science in Recreation.

CAREER OPPORTUNITIES

Graduates are prepared for employment as recreation specialists in a variety of settings, including community agencies, parks, educational institutions, and industry.

Interested students should contact a recreation adviser in the Department of Health, Recreation and Physical Education located in the Sam M. Vadalabene Center for Health, Recreation and Physical Education.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, RECREATION EDUCATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Written Expression: Both are required 8
English 101 - English Composition I
English 102 - English Composition II
and
Option A - Skills 12
Oral Communications, Critical Thinking and Statistics or Computer Programming
or
Option B - Foreign Language 12
Critical Thinking or Statistics or Computer Programming 4
Professional Courses 27
Recreation 150, 200, 348, 349, 365 16
Recreation 390, 410, 420 11
Professional Experiences 20
Recreation 389 (must be taken after sophomore year) 4
Recreation 400 16
Interdisciplinary Requirements 44-45
Accounting 201 4
Health Education 201, 334s 7
Nursing 170 4
Physical Education 117a, b, or 302a, 117c, 118z, 305, 350 or 383, 384, 402, 427 21-22
Psychology 303 or 304, 307 8
Electives 27-28

192

PHYSICAL EDUCATION

The major in physical education requires a minimum of 48 hours, including 26 hours in the theory core, 16 hours in activities courses, and 6 hours of electives. However, students who plan to obtain a teaching certificate must complete additional courses, the number varying according to whether they are interested in the secondary (6-12) or special (K-12) certificate.

To be admitted, all students must submit the results of a recent Physical examination. In addition, students not seeking teacher certification must present a grade point average of at least 3.00. Students seeking teacher certification must present a grade point average of 3.40, must receive a grade of C or better in both English 101 and 102, and must pass a test in basic skills. Specific programs impose additional admission requirements. For that information, students should contact their adviser in the department.

Two minors are also available, one for the general student who wishes to study physical education as a matter of personal interest, the other for any student who plans to coach in either a school or non-school setting.

In addition to the major and minors, the Department of Health, Recreation and Physical Education offers a variety of physical activity courses to general students. These courses, numbered PE 112 through 200, are open to men and women and may be taken on a Pass/No Credit basis.

TEACHING FIELDS

Through the cooperation of other departments in the University, a wide range of teaching fields is available to students in secondary education. Students may obtain assistance in making a choice between these fields from a secondary education adviser in the Office of Teacher Education. The adviser also provides students with career guidance, describes the details of the teaching field programs, and directs them to a teaching field adviser.

Students who are preparing to teach at the junior or senior high school level may select the first teaching area from the following:

Art
Biology
Chemistry
Earth Science
English
Foreign Languages
Geography
Government
Health Education
History
Mathematics
Physical Education
Physics
Speech

The number of academic hours required for a first teaching field is stated by academic field elsewhere in this catalog.

The second teaching major consists of at least 27 hours, unless specified otherwise, and may be selected from any of the following:

Art
Biological Sciences
Chemistry
Driver Education
Economics
English
Foreign Languages:
  French, German, or Spanish
Geography
Government
Health Education
History
Instructional Materials:
  Library Science or
  Audio-Visual Option
Mathematics
Music
Physical Education
Physics
Psychology
Sociology
Speech

Broad teaching areas (those not requiring a second area) may be selected from the following:

Art Education (K-12 or 6-12 certification) 70
Business Education (6-12 certification) 75
General Science and Mathematics
  (junior high school) 85
English 72
Music Education (K-12 certification) 78-93
Physical Education (K-12 certification) 72
Physical Science Education 75

The program outline for secondary education students is as follows:

General Education Requirements 72-76
  Written Expression: Both are Required 8
    English 101 - English Composition I
    English 102 - English Composition II
  and
    Option A - Skills 12
      Oral Communications, Critical Thinking, and
      Statistics or Computer Programming
  or
    Option B - Foreign Language 16
      (Critical Thinking or Statistics or Computer
      Programming)
Professional Education Requirements 39-43
  Secondary Education 215
  Education 305
  Foundations of Education 380
  Secondary Education 401b, 401c
  Special Education 400
  It is recommended that all secondary education
  students also elect at least one course in the
  teaching of reading.
Teaching Area Requirements and Electives 75
  A minimum of 48 hours is required for the principal
  teaching field; if a student prepares for a second
  teaching field, at least 27 hours may be required in
  that area.
Health Education 201 3
Physical Education Activity Courses 3
(One course in general psychology and in U.S. History must be taken, in addition to satisfaction of the Constitution requirement.)
192-194

HEALTH, RECREATION AND PHYSICAL EDUCATION

Professors:
Archangel, R. (Associate Dean of the Graduate School); DeLong, B. J.; Herrold, Z. C.

Associate Professors:
Buddell, W.; Goldsmith, M.D.; Grist, A. L.; Kristoff, L. D.; Luedke, G. C.; Sappington, V.E. (Acting Chairperson)

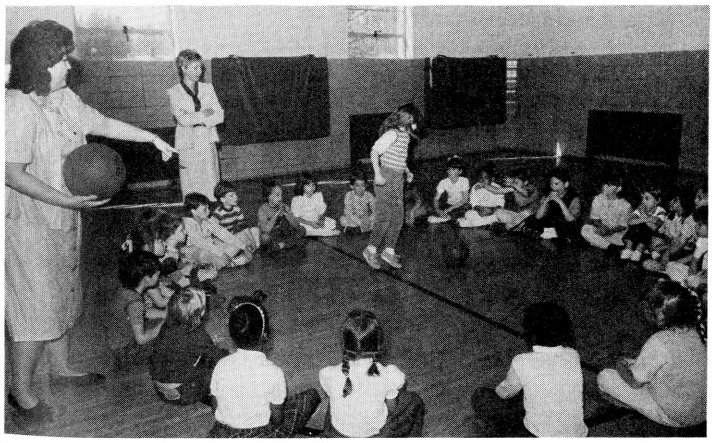
Assistant Professors:
Bobka, L. A.; Gallatin, H. J.; Gunsten, P. C.; Moehn, L. N.; Schild, M. M.

Instructor:
Bigham, E. M.; Whitted, J. J.

The Department of Health, Recreation and Physical Education offers undergraduate programs for students interested in careers in health education, recreation education, or physical education. Students interested in careers as physical education teachers have three special options from which to choose. Courses available in health education and driver education enable students to seek certification through transcript evaluation by the Illinois Office of Education.

Prior to fulfilling any major area requirements, students must be admitted to the major area program. A transcript of previous college work and an application for admission must be on file with the department. Admitted students will be notified by letter from the department.

The specific degree programs available through the Department of Health, Recreation and Physical Education are outlined below. Interested students should contact a departmental adviser in the appropriate field.



HEALTH EDUCATION

Drawing from the biological, social, and behavioral sciences, the program in health education provides knowledge and skills essential for positions in schools and in other community settings. For those planning to teach, the program leads to the Illinois Secondary Teaching Certificate, which applies to the teaching of health education in grades six through twelve. For students interested in careers oriented toward community health education, the program provides preparation for positions in public and private agencies, including hospitals, clinics, and neighborhood health centers. Students seeking careers in nutrition, drug counseling, and sexuality services will find health education an excellent background preparation.

Interested students should contact a health education adviser in the Department of Health, Recreation and Physical Education, located in the Sam M. Vadalabene Center for Health, Recreation and Physical Education.

DEGREE REQUIREMENTS

PHYSICAL EDUCATION MAJOR: 48 HOURS

General Education Requirements ..... 72 or 76
- Written Expression: Both are required 8
  - English 101 - English Composition I
  - English 102 - English Composition II

  and
  - Option A - Skills 12
    - Oral Communications, Critical Thinking and Statistics or Computer Programming

  or
  - Option B - Foreign Language 12
    - Critical Thinking or Statistics or Computer Programming 4

Physical Education Theory Core 26
- Health Education 334s 4
- Physical Education 303a, 303b, 304a, 304b, 410, 420 22

Physical Education Activities 16
- Fitness - Select 2
  - Physical Education 300b, 300g, 301h 4
- Team and Individual - Select 2
  - Physical Education 300f, 300h, 300i 4
- Rhythms - Select 1
  - Physical Education 301g, 302a 2
- Field Sports - Select 1
  - Physical Education 301a, 301i 2
- Individual - Select 2
  - Physical Education 302e, 302f, 302g 4

Electives 6
- Select from 300/400-level Physical Education courses (Students seeking teacher certification must take three additional activity courses as the electives.)

Second Major or Electives 72-68

192

SECONDARY (6-12) CERTIFICATION: 105 HOURS

General Education Requirements ..... 72 or 76
- Written Expression: Both are required 8
  - English 101 - English Composition I
  - English 102 - English Composition II

  and
  - Option A - Skills 12
    - Oral Communications, Critical Thinking and Statistics or Computer Programming

  or
  - Option B - Foreign Language 12
    - Critical Thinking or Statistics or Computer Programming 4

Physical Education Theory Core 26
- Health Education 334s 4
- Physical Education 303a, 303b, 304a, 304b, 410, 420 22

Physical Education Activities 16

Fitness - Select 2
Physical Education 300b, 300g, 301h 4
Team and Individual - Select 2s
Physical Education 300f, 300h, 300i 4
Rhythms - Select 1
Physical Education 301g, 302a 2
Field Sports - Select 1
Physical Education 301a, 301i 2
Individual - Select 2
Physical Education 302e, 302f, 302g 4
Electives 6
Physical Education 22
Physical Education 305, 350, 382, 470 16
Physical Education 389 6
Professional Education 35
Education 305 4
Foundations of Education 380 4
Health Education 201 3
Secondary Education 215 4
Secondary Education 352p 16
Special Education 400 4
Electives 15-11

192

K-12 CERTIFICATION: 124 HOURS

General Education Requirements ..... 72 or 76
Written Expression: Both are required 8
English 101 - English Composition I
English 102 - English Composition II
and
Option A - Skills 12
Oral Communications, Critical Thinking and Statistics or Computer Programming
or
Option B - Foreign Language 12
Critical Thinking or Statistics or Computer Programming 4
Physical Education Theory Core 26
Health Education 334s 4
Physical Education 303a, 303b, 304a, 304b, 410, 420 22
Physical Education Activities 16
Fitness - Select 2
Physical Education 300b, 300g, 301h 4
Team and Individual - Select 2
Physical Education 300f, 300h, 300i 4
Rhythms - Select 1
Physical Education 301g, 302a 2
Field Sports - Select 1
Physical Education 301a, 301i 2
Individual - Select 2
Physical Education 302e, 302f, 302g 4
Electives 10-6
Select from 300/400-level Physical Education courses
Physical Education 37
Physical Education 305, 350, 382, 383, 384, 387, 388, 389, 390, 470 33
Health Education 350 4
Professional Education 35
Education 305 4
Elementary Education 351d 8
Foundations of Education 380 4
Health Education 201 3
Secondary Education 215 4
Secondary Education 352p 8
Special Education 400 4

196

PHYSICAL EDUCATION MINOR REQUIREMENTS

Physical Education Theory Core 14
Physical Education 303a, 304a, 304b 10
Health Education 334s 4
Physical Education Activities 10
Physical Education 300g, 300h, 300i, 302a 8
Physical Education 302e or 302f 2
Electives 8
To be selected from the following:
Physical Education 400a, b, c, d, e, f, g, 476 ... each 2
Physical Education 402, 420, 425 ..... each 4

COACHING MINOR REQUIREMENTS

General Education Requirements 72
Written Expression: Both are required 8
English 101 - English Composition I
English 102 - English Composition II
and
Option A - Skills 12
Oral Communications, Critical Thinking and Statistics or Computer Programming
or
Option B - Foreign Language 12
Critical Thinking or Statistics or Computer Programming 4
Physical Education 32
Physical Education 323, 389, 402, 425, 473, 476 22
Physical Education 400a, b, c, d, e, f, g—each 2 6
Health Education 334s 4
Electives 88

192

DRIVER EDUCATION CERTIFICATION

Students may seek certification in Driver Education through transcript evaluation by the Illinois Office of Education. Courses offered by the Department towards this certification are: Health Education 302s, 313s, 443s, 445s.

In addition, 12 quarter hours must be taken from among the following areas: Advanced Psychology and Sociology, Health Education, and Instructional Technology. These courses must be approved by the University Driver Education Coordinator. For further information contact the Department of Health, Recreation, and Physical Education.

MINOR IN INSTRUCTIONAL TECHNOLOGY

The Department of Educational Leadership offers courses in the utilization and management of teaching and learning materials. Programs may be designed to prepare either audio-visual coordinators or school librarians. A minor consisting of 28 hours is available for both secondary education students and non-education majors. Elementary education majors may also elect to pursue selected coursework in instructional technology.

The required courses for a minor are Instructional Technology 401, 417, and 445. Additional courses to fulfill the 28-hour requirement may be scheduled with the assistance of the appropriate adviser.

PSYCHOLOGY

Professors:
Brinkmann, E. H.; Daugherty, R. A.; Engbretson, R. O.; Ferguson, E. D.; Kleinman, K. M. (Chairperson); Kohfeld, D. L.; Lamp, R. E.; McCall, J. N.; McLaughlin, R. J.; McMahon, F. B.; Russo, J. R.; Taliana, L. E.; Traxler, A. J.

Associate Professors:
Hatfield, J. L.; Skinner, K. K.

Assistant Professor:
Rogers, B. J.

Visiting Assistant Professor:
Krohn, E. J.

Assistant in Psychology:
Ruhl, R.

Undergraduate courses in psychology acquaint students with both the methods used and the knowledge gained by psychologists in their continuing efforts to understand behavior. Students study basic psychological processes such as learning, perception, and motivation; the development of behavior, personality, and coping skills from conception through old age; human interaction in social settings; and the effects of physical and psychological stress upon coping skills and mental health.

Psychology is at the same time both a scholarly scientific discipline which seeks to understand and explain behavior and an applied profession which seeks to alleviate psychological problems and enhance human potential.

The psychology major prepares students for a variety of occupations at the bachelor's level and serves as preprofessional training for students wishing to attend graduate school and pursue careers as psychologists. The psychology major is also valuable preparation for other professional careers such as medicine, dentistry, and law.

The psychology major provides a high degree of flexibility. It is designed to provide students both with practical career-oriented skills and a theoretical foundation on which psychological processes can be understood. Elective courses are open to all undergraduate students, regardless of major.

PSYCHOLOGY DEPARTMENT FACILITIES

The Psychology Department has extensive laboratory, classroom and supporting facilities. Ample space and equipment for a wide variety of student and faculty research are available. Individual research cubicles, electrically shielded and sound shielded rooms, and large (group) and small (individual) areas are available for observations which may be made by utilizing mirrors and intercoms. Facilities exist for studying children, adults, and laboratory animals.

Computers connected to many of the laboratory rooms can be used for presenting stimuli and for collecting and analyzing behavioral responses. An extensive and sophisticated videotape system allows student and faculty researchers to collect data in both laboratory and non-laboratory situations. The Psychology Department Test Center contains a large library of psychological tests; it exists both to serve appropriate courses and to provide help to student and faculty researchers desiring to employ these measures.

CAREER OPPORTUNITIES

Graduate training (at least at the master's level) is a prerequisite for a career as a psychologist. However, students obtaining an undergraduate major in psychology will find themselves well prepared to pursue a variety of careers in which basic knowledge of psychological processes is valuable. Students with an undergraduate major in psychology may consider employment as personnel officers, insurance specialists, laboratory technicians, sales or public relations specialists, suicide prevention workers, family planning counselors, mental health or corrections workers, youth counselors, child care workers, drug counselors, occupational therapists, and statisticians/research analysts.

PROGRAMS IN PSYCHOLOGY

Following their declaration of a major in psychology, students will be assigned to a psychology faculty adviser. Students should contact their faculty advisers as soon as possible so that academic programs can be developed which most satisfies their interests and needs. Students are encouraged to use their faculty advisers as resources for questions about the department and the University.

All students declaring a major in psychology are strongly advised to take Psychology 111 as a first course in psychology. Majors are expected to complete the core sequence of Psychology 111, 211 and 212 sequentially (not concurrently) within the first three quarters after declaring their major. Psychology 211 must be successfully completed before students may enroll in 212. Majors and minors who desire to transfer credit from other colleges or universities are advised to have their transcripts evaluated as soon as possible by the psychology undergraduate adviser.

While only the sequence of Psychology 111, 211 and 212 is required of psychology majors, the department has recommended programs for students (a) wishing to obtain a general

background in psychology; (b) interested in working in a community service agency; (c) interested in working in business and/or organizations; or (d) planning graduate training in psychology, law, medicine, dentistry, and other professions. Students are encouraged to construct a program which best meets their needs in consultation with their faculty advisers.

Other aspects of the psychology curriculum which may be of interest are: (a) an honors program in which selected students will be given the opportunity to attend special seminars and to work closely with faculty in a variety of applied and research settings, (b) a portfolio plan in which the department will maintain files containing examples of students' academic work that they select for inclusion in the portfolio, and (c) an independent projects course in which students may work either in the laboratory or in a field setting under the supervision of a faculty member.

DEGREE REQUIREMENTS

BACHELORS OF ARTS DEGREE, SCHOOL OF EDUCATION

General Education Requirements ..... (Option A) 72
or (Option B) 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Psychology 61
Foreign Language 12
Psychology 111, 211, 212 plus electives 49
Psychology 11, 211, 212 should be completed within three quarters after declaration of major. Psychology 432 does not count toward major.
Minor 28
Electives ..... (GE Option A) 31
or (GE Option B) 27

Total 192

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, SCHOOL OF EDUCATION

This degree program is identical to the Bachelor of Arts degree program with the exception of the foreign language requirement. For the Bachelor of Science degree no foreign language is required, thus allowing for 55 hours of electives. All students should plan their programs in consultation with the psychology adviser.

General Education Requirements ..... (Option A) 72
or (Option B) 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Psychology 49
Psychology 111, 211 and 212 should be completed within three quarters after declaration of major. Psychology 432 does not count toward major.
Minor 28
Electives ..... (Option A) 43
or (Option B) 39

Total 192

All psychology majors must have a cumulative GPA of at least 3.00 in Psychology courses to be recommended for graduation.

MINOR REQUIREMENTS

A minor in psychology consists of a minimum of 28 hours. Psychology 111 is required in addition to 24 hours of psychology electives. Psychology 432 does not count toward a psychology minor. Students intending to pursue an occupation related to psychology (e.g., counseling or personnel work) should also include in their program Psychology 211 and 212 and psychology electives to meet minimum hour requirements.

Students who have completed Statistics 107 or Sociology 308 should not include Psychology 211 in their program of study for a minor in psychology.

SPECIAL EDUCATION

Professors:
Shea, T. M.; Wagner, R. M. (Chairperson)

Associate Professor:
Whiteside, W. R.

Assistant Professors:
Brimer, R. W.; Horner, C.M.

Instructor:
Sims, P. J.

The Department of Special Education offers preparation programs at the undergraduate level for teaching behavior disordered children, those with learning disabilities, and the mentally retarded. The Department also offers coursework directed toward, as well as courses in, teaching the socially maladjusted or severe/profoundly handicapped (TMH-Autism), pre-school education, high school teaching, and career/vocational education of the handicapped.

Students majoring in the study of mental retardation, behavior disorders, or learning disability may seek certification in all three areas.

The Special Education Instructional Materials Center provides assessment and methodology materials for use in Special Education and related fields.

ELIGIBILITY FOR ADMISSION

To be eligible for admission to the Special Education Department, students must:

A. Pass a basic skills test.
B. Complete 90 hours of coursework with a cumulative grade point average of 3.4 or higher.
C. Attain a grade of C or higher in English Composition, ENG 101 and 102, or the equivalent for a transfer student.
D. Attain a grade of C or higher in Speech Communications 103, or 104, or 105 and Math 106 or Philosophy 106, or the equivalent for a transfer student.
E. Attain a grade of B or higher in the Exceptional Child, Special Education 400, or the equivalent for a transfer student. (Only upper level courses are accepted.)
F. Complete and submit to the Special Education Undergraduate Adviser's Office all forms and documents listed in the handbook entitled Procedures for Advisement.

(Note: Except for Special Education 400, only students who have passed the TAP test may take course work in Special Education.)

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, SPECIAL EDUCATION

Single Certification

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Humanities and Fine Arts Courses 16
Art 111, Music 111, any two 200 or 300 level literature courses
Interdisciplinary Course 4
Any interdisciplinary course
Natural Sciences and Mathematics 16
Biology 111, Biology 202, 203, 204, 205, or 207, Math 111, Earth Science 200
Social Sciences Courses 16
Geography 111, Psychology 111, Government 112, Anthropology 305a, and Constitution Test
Skills Courses ..... 20 or 24
Written Expression: Both are Required 8
English 101 - English Composition I
English 102 - English Composition II
and
Option A - Skills 12
Oral Communications, Critical Thinking, and Statistics or Computer Programming
or
Option B - Foreign Language 16
(Critical Thinking or Statistics or Computer Programming)
Health and Physical Education 6
Health Education 201
Three 1-hour physical education activity courses
Professional Education Requirements 44
Education 305
Education Foundation 380
Elementary Education 314, 337, 338, 415
Physical Education 350
Instructional Technology 417, 445
Psychology 421 or Counselor Education 422
Special Education Requirements 56
Special Education 400, 410a, 410b, 410g, 411, 420a, 420b, 430, 470, 481, 499 (16)
Electives 16-12

Total 194

MINOR REQUIREMENTS

Students wishing a minor in special education must complete 28 hours in one or more of the areas of specialization.

STUDENT TEACHING

Student teaching is the culminating experience in all professional teacher education programs. It is needed in order to meet the degree requirements of the School, the certification requirements of the states of Illinois and Missouri, and the standards of the National Council for the Accreditation of Teacher Education.

Student teaching requires full-day involvement in a public school. Therefore, students should avoid taking other courses or employment during student teaching and should schedule it at a time when they will be free of other demands upon time and energy. Requests for an overload during student teaching must be approved by the Department Chairperson and the Associate Dean. Student teaching is not available during the summer quarter.

How to Apply

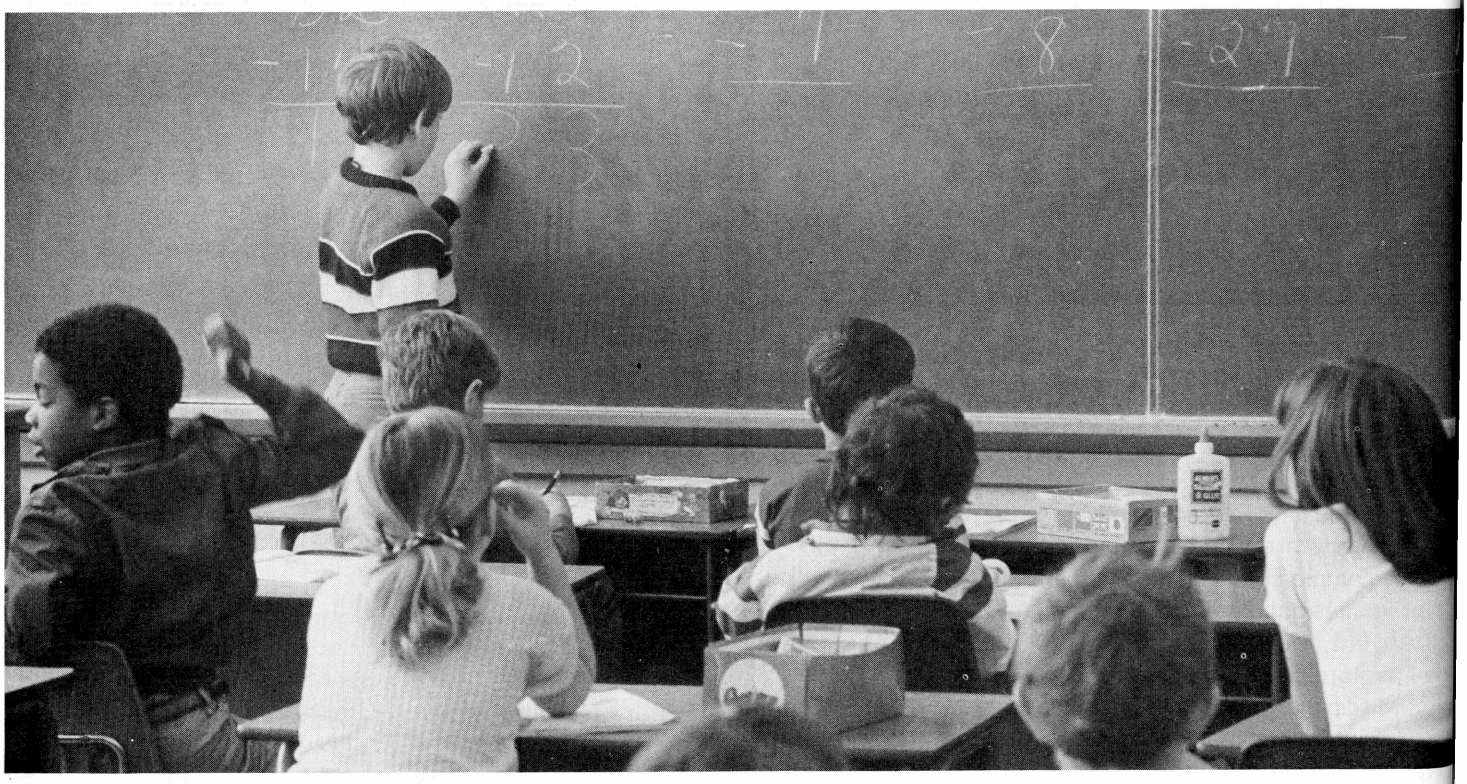
The student teaching application procedure begins during the year prior to the assignment. Each department has established policies regarding application for student teaching. Students should secure student teaching information from an adviser in the appropriate department of the School of Education. Junior and senior transfer students should contact an adviser during or before orientation week for application information.

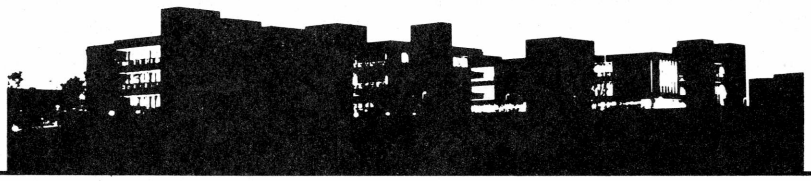
Prerequisites

The following are prerequisites to registering and receiving an assignment for student teaching:

1. All prospective teachers, regardless of teaching field or academic major, must follow an approved teacher education program. Students must, therefore, consult with a School of Education adviser to make sure they are meeting requirements of an approved program well in advance of student teaching.
2. Student teaching assignments are made after admission to the School of Education and the completion of at least 144 hours. Students must have a minimum overall 3.4 grade-point average two quarters in advance of the teaching assignment. This grade-point average must be maintained for the assignment to be allowed. Transfer students must be in residence for a quarter prior to student teaching.
3. In compliance with University policy, record of a physical examination taken no more than ninety days prior to the student teaching assignment must be on file in the University Health Service. A report of a tuberculosis skin test or X-ray taken within the same period is also required.

The School maintains several video recording studios which afford students opportunities to practice specific teaching skills under specified conditions. Typically, students present short lessons to small groups of pupils. Subsequently, tapes of the lessons are analyzed and evaluated by the students and their instructors. Laboratory assignments comprise part of the requirements in teacher education courses. In addition to the training function, the laboratory facilities enable faculty and students to study the teaching process.





SCHOOL OF ENGINEERING

NORVAL WALLACE, DEAN

The School of Engineering offers the Bachelor of Science in Engineering degree with majors in Civil Engineering, Electrical Engineering, and Industrial Engineering. The Civil Engineering and Electrical Engineering programs are accredited by the Accreditation Board for Engineering and Technology (ABET), the only nationally recognized agency for accrediting engineering curricula in the United States.

The School also offers the Bachelor of Science degree with a major in Construction. The construction program is designed to provide graduates with the knowledge and skills necessary to coordinate the multifaceted aspects of the construction industry.

Students who are interested in any of the majors offered by the School should seek advisement from the School when they initially enroll in the University. Enrollment in 300- or 400-level engineering courses is limited to engineering majors who have completed the pre-engineering program described below. Students wishing to enroll in 300- or 400-level engineering courses may do so only with the permission of the Dean of the School of Engineering.

Students enrolled in pre-engineering or one of the engineering fields must purchase a scientific pocket calculator, drafting instruments, and technical textbooks.

ADMISSION TO PRE-ENGINEERING

Students admitted to the pre-engineering program shall have met University admission requirements and the following minimum School of Engineering requirements:

1. Completion of Math 120, College Algebra (or high school equivalent), with a grade of C or better, with current enrollment in Math 125 (Pre-Calculus) or a higher mathematics course.
2. Cumulative grade point average of 3.0 (on a 5.0 scale).

PRE-ENGINEERING

The first five quarters of all engineering programs offered by Southern Illinois University at Edwardsville are common to all engineering disciplines and form the basis of the pre-engineering program. Successful completion of the pre-engineering program allows students to select a major in one of the engineering disciplines. Although students are not required to select a specific major until late in the sophomore year, entering freshmen and transfers should declare a pre-engineering major immediately upon entry to the University. The pre-engineering program is composed of the courses listed below:

Communications Skills: English 101, 102, Speech Communications 103 or 104 or 105, Computer Science 172
Engineering Science: Civil Engineering, Electrical Engineering, or Industrial Engineering 112; and Civil Engineering 260, Industrial Engineering 262, Electrical Engineering 210
Mathematics: Math 150a,b, 260a,b,c, 305
Physical Science: Chemistry 125a,b, 126a,b, Physics 211a,b,c, 212a,b

Although humanities and social sciences courses are not part of the pre-engineering program, they complement the education of an engineer. Thus, to receive the Bachelor of Science in Engineering degree, students must complete 72 or 76 hours of General Education courses, of which 52 hours are in the skills, fine arts and humanities, and social sciences. Some of the General Education requirements are satisfied by courses normally taken during the first two years of study.

SAMPLE PROGRAM: PRE-ENGINEERING

FRESHMAN YEAR

FALL		WINTER		SPRING	
Eng 101	-4	Eng 102	-4	SPC 103 or 104	
Math 150a	-4	Math 150b	-4	or 105	-4
Chem 125a	-4	Chem 125b	-4	Math 260a	-4
Chem 126a	-1	Chem 126b	-1	Phys 211a	-4
Gen Ed Elec	-4	CE 114	-2	CS 172	-4
Freshman Seminar	-0				
	17		15		16

SOPHOMORE YEAR

FALL		WINTER		SPRING	
Math 260b	-4	Math 260c	-4	Math 305	-4
Phys 211b	-4	Phys 211c	-4	EE 210	-4
Phys 212a	-1	Phys 212b	-1	(See below)	-7
CE 260	-4	IE 262	-4		
Phil 106	-4	Econ 111	-4		
	17		17		15

During the spring quarter of the sophomore year, pre-engineering students interested in Civil Engineering should enroll in CE 263 and CE 270; students interested in Electrical Engineering should enroll in Physics 302a and a General Education elective; students interested in Industrial Engineering should enroll in CE 270 and Economics 112.

ADMISSION TO ENGINEERING MAJOR

Admission to an engineering major (Civil Engineering, Electrical Engineering and Industrial Engineering) requires satisfactory completion of the pre-engineering program as described above. A student information handbook and application forms for admission to the major are available in the School of Engineering office. Applications should be filed in the School office no later than April 15 for Summer or Fall quarter admission, and no later than October 15 for Winter quarter admission.

The usual requirements for admission to an Engineering Program at SIUE are:

1) Admission to the University

2) Satisfactory completion of the 78 quarter hours of the Pre-Engineering Program courses, with a grade point average of at least 3.0 on a scale of 5.0 for students enrolled at SIUE, students in articulated programs, and Illinois resident transfer students. A Pre-Engineering grade point average of at least 3.25 is required for other non-resident transfer students. In addition to the above, all students must have a minimum grade point average of 3.0 in the 14 quarter hours of Engineering designated courses in the Pre-Engineering program. For admission to an Engineering major only, when courses are repeated, both the original and repeat grade will be computed in the grade point average.

3) Special Program Requirements:
Civil Engineering - Students must have a minimum grade of C in CE 260 or its equivalent.
Electrical Engineering - Students must have a minimum grade of C in EE 210 or its equivalent.
Industrial Engineering - Students must have a minimum grade of C in IE 262 or its equivalent.

4) An application for admission to a specific engineering program must be received and accepted by the Undergraduate Admissions Committee. The application and transcript may be submitted at the School of Engineering office or mailed to:

Chairman, Undergraduate Admissions Committee
School of Engineering
Southern Illinois University at Edwardsville
Edwardsville, Illinois 62026-1275

This application is not to be confused with an application for admission to Southern Illinois University at Edwardsville. Admission to the University must be obtained through the Office of Admissions.

Transfer Students

Transfer students wishing to enter one of the School of Engineering programs must contact the School of Engineering for a transfer credit evaluation at least 30 days prior to the beginning of the quarter for which entry is desired. Students must supply copies of the pertinent transcripts and any other materials, such as course descriptions or syllabi, that may be needed for the evaluation. Those students transferring at the junior and senior level in the engineering curriculum must meet the April 15 deadline to apply for admission to an engineering major in Summer or Fall quarter and the October 15 deadline for Winter quarter and must be in good standing in the program from which they are transferring.

Only courses passed within the last 10 years will be considered for transfer credit. In addition, courses not part of an ABET accredited engineering program will normally not be considered for transfer credit toward any 300 or 400-level engineering course requirement. The final decision as to allowing transfer credit for engineering courses shall be that of the faculty of the School of Engineering.

Admission Categories

The Undergraduate Admissions Committee will determine whether an application is acceptable. A student whose application is rejected may not register for upper division Engineering courses. If the rejection was based upon enrollment limitations, the student may re-apply for a different Engineering major or for later entry. If the rejection is based on failure to complete Pre-Engineering courses, the student may apply for entry when the requirements are completed.

Enrollment Limitation

The applications of all SIUE students (who have 16 or fewer Pre-Engineering transfer hours), of Illinois transfer students, and of students from local community colleges for which articulation programs have been approved will be given first review according to the criteria stated below. Remaining openings will then be allocated to other transfer students who have a minimum Pre-Engineering grade point average of 3.25 (A=5.00) according to the same criteria. (A transfer student is defined as a student who has more than 16 hours of pre-engineering transfer credit from institutions other than those indicated above).

Applications meeting the deadline and the usual minimum requirements for admission to a major, along with those received in the preceding quarters for which upper level courses were not available, will be ranked according to grade point averages in Pre-Engineering courses. If there are more applications than openings in a particular Engineering major, priority will be established by Pre-Engineering grade point ranking.

Academic Status

Students may be suspended from the major in the School of Engineering in any of the following circumstances:

a) a grade point average of 2.0 or below in any quarter;
b) a drop of the cumulative grade point average in the major to below 3.0;
c) a drop of the cumulative grade point average to below 3.0 in all courses in the major area numbered above 299;
d) any combination of three withdrawal, incomplete, or failing grades in a single course required by the major.

Students who fail to meet these academic standards are placed on *probation in the major* and given the conditions which must be satisfied for removal of the probation. If the conditions are not met, students are *suspended from the major.* Students suspended from the major may not enroll in upper-division engineering courses. After one year, students are eligible to reapply for admission to one of the majors in the School of Engineering. Any appeal of a suspension from an

engineering major must be directed to the School of Engineering Undergraduate Retention Committee.

Students are bound by the Student Conduct Code. Violations of the Student Conduct Code will result in disciplinary action which may include dismissal from the major in the School of Engineering. Students preparing for a career in engineering should conform to the same code of ethics as practicing engineers. Copies of the engineering code of ethics are available in the School of Engineering Office.

Graduation Requirements

1. Graduation from the School of Engineering requires at least 192 hours of credit acceptable to the School. Unacceptable credit includes, but is not limited to:
   a) credit received (through CLEP or from a course) after credit has been received for more advanced work in the subject;
   b) CLEP or transfer credit which duplicates SIUE credit; and
   c) credit for two or more SIUE courses with similar or equivalent content.
2. Candidates for the Bachelor of Science degree or the Bachelor of Science in Engineering degree must meet the following requirements:
   a) at least 48 hours of credit in one major with a grade point average of 3.0 or higher for all work in the major;
   b) a grade point average of 3.0 or higher in all courses in the major area numbered above 299.

CIVIL ENGINEERING

Professors:
Bengtson, H. H.; Cote, D. N.; Duffey, H. J. (Chairperson); Hanna, S. J. (Assistant Dean, School of Engineering); Korn, A.; Rossow, M. P.

Assistant Professor:
Lin, C.

Instructor:
Pierce, R. G.

Civil engineering is the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied to develop ways to utilize the materials and forces of nature for the well-being of society. Since civil engineering is an extremely broad discipline, a limited degree of specialization in the fields of environment, structures, and transportation is allowed through the choice of senior electives. Brief descriptions of these fields of civil engineering are provided below.

Environmental engineers strive to improve the community by planning and designing facilities, treatment plants, and structures requiring the specialized knowledge of both environmental engineers and chemists, particularly in the control of water and air pollution.

Structural engineers are employed by a wide range of industries and agencies, primarily in the planning and design phase of projects. Strength and safety are the main concerns of the structural engineer. Typical projects include the design of buildings, bridges, dams, containment vessels, and power plants. Academic preparation includes studies in design (efficient and safe utilization of engineering materials, such as steel and concrete) and analysis (prediction of the structural forces and deformations caused by imposed loadings) in addition to studies in the physical sciences and mathematics.

Transportation engineers are involved in planning, designing, and constructing the nation's transportation systems. Transportation engineers assist in the local and regional transportation planning Processes and are assuming an increasing role in the operation and maintenance of these systems. Diverse factors, such as structural design of pavements, vehicle operational characteristics, geometric design, traffic control, and site selection, are major concerns to transportation engineers, who also consider how transportation facilities affect environmental factors, including air and noise pollution.

CAREER OPPORTUNITIES

Civil engineers are engaged in administrative, commercial and technical work with manufacturing companies, construction companies, transportation companies, and power companies, as well as with consulting engineering offices in city and state engineering departments and in many branches of the federal government.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE IN ENGINEERING DEGREE, CIVIL ENGINEERING

Fine Arts and Humanities Courses	32
English 101* and 102*	8
Fine Arts and Humanities (Introductory Courses*)	8
Fine Arts and Humanities (Advanced Course*)	4
Philosophy 106* and 311*	8
Speech 103*, 104* or 105*	4
Natural Science and Mathematics Courses	55
Chemistry 125a*, 126a, 125b*, and 126b	10
Computer Science 172*	4
Earth Science 230*	3
Mathematics 150a*, 150b*, 260a*, 260b*, 260c*, and 305*	24
Physics 211a*, 211b*, 212a, 211c* and 212b	14
Social Science Courses	16
Economics 111* and 112*	8
Social Science (Introductory Course*)	4
Social Science (Advanced Course*)	4
Engineering Sciences Courses	33
Civil Engineering 112, 114, 260, 263 and 270	13
Electrical Engineering 210	4
Industrial Engineering 262, 305, 315 and 319	16
Civil Engineering Courses	52

Civil Engineering 314, 315, 316, 340, 370, 376, 380, 440, and 442 36
Civil Engineering Electives 16
Other Courses 4
Interdisciplinary Course* 4

Total 192

*This course may be used in partial fulfillment of the University General Education requirements. Students must also satisfy the State of Illinois requirement regarding the Constitution.

SAMPLE PROGRAM: CIVIL ENGINEERING

JUNIOR YEAR

FALL		WINTER		SPRING	
ESci 230	-3	CE 314	-4	CE 340	-4
CE 315	-4	CE 316	-4	CE 376	-4
CE 370	-4	IE 319	-4	CE 380	-4
Econ 112	-4	Gen Ed Elec	-4	IE 305	-4
	15		16		16

SENIOR YEAR

FALL		WINTER		SPRING	
IE 315	-4	CE 442	-4	CE Elec	-4
CE 440	-4	Phil 311	-4	CE Elec	-4
CE Elec	-4	CE Elec	-4	Gen Ed Elec	-4
Gen Ed Elec	-4	Gen Ed Elec	-4	Gen Ed Elec	-4
	16		16		16

MINOR REQUIREMENTS

A minor in Civil Engineering consists of 27 hours of electives selected from engineering courses concentrated in Civil Engineering and approved by the Chairman of the Department of Civil Engineering.

ELECTRICAL ENGINEERING

Professors:
Bollini, R.; Godhwani, A.; Jones, L. C.; Rutledge, R. B. (Chairperson)

Assistant Professors:
Alkin, O.; Chen, J.; Cheng, S. N.; Youn, L.T.

Electrical engineers may specialize in the design and analysis of electronic devices and the use of these devices in circuits and systems. Electronic circuits and systems are used extensively in communications, computers, health fields, and entertainment systems, as well as in automation and control. Electrical engineers also may be involved in the design of power plants and transmission systems to satisfy increasing demands for electrical energy.

CAREER OPPORTUNITIES

Electrical engineers are concerned with the application of engineering principles in the design, analysis, and construction of electrical and electronic equipment. The particular equipment may range from a microwave oven to an information transmission for an unmanned planetary probe. Because of the range of applications, electrical engineering is a fascinating and challenging profession.

Electrical manufacturing companies use large numbers of engineers for design, development, research, manufacturing, and sales. Public utilities employ electrical engineers. Other potential employers include oil companies, railroads, food processing plants, biological laboratories, and chemical plants, the aircraft, missile and space industries, and various branches of the federal government.

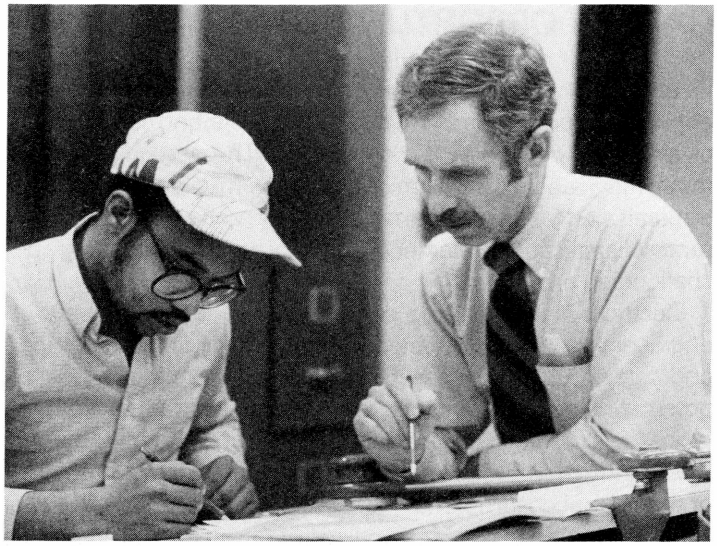
DEGREE REQUIREMENTS

BACHELOR OF SCIENCE IN ENGINEERING DEGREE, ELECTRICAL ENGINEERING

Fine Arts and Humanities Courses 32
English 101* and 102* 8
Fine Arts and Humanities (Introductory Courses*) ... 8
Fine Arts and Humanities (Advanced Course*) 4
Philosophy 106* and 311* 8
Speech 103*, 104* or 105* 4
Natural Science and Mathematics Courses 60
Chemistry 125a*, 126a, 125b*, and 126b 10
Computer Science 172 4
Mathematics 150a*, 150b*, 260a*, 260b*, 260c*, and 305* 24
Physics 211a*, 211b*, 211c*, 212a, 212b, 302a*, and 302b* 22
Social Science Courses 16
Economics 111* and 112* 8
Social Science (Introductory Course*) 4
Social Science (Advanced Course*) 4
Engineering Sciences Courses 18
Civil Engineering 114 and 260 6
Electrical Engineering 112 and 210 4
Industrial Engineering 262 and 305 8
Electrical Engineering Courses 66
Electrical Engineering 301, 310, 326, 327, 328, 340, 341, 342, 351, 352, 365, 382, 401, 404, 405 and 452 54
Electrical Engineering Electives 12
Other Courses 4
Interdisciplinary Course* 4

Total 196

*This course may be used in partial fulfillment of the University General Education requirements. Students must also satisfy the State of Illinois requirement regarding the Constitution.



SAMPLE PROGRAM: ELECTRICAL ENGINEERING

JUNIOR YEAR

FALL		WINTER		SPRING	
EE 301a	-1	EE 301b	-1	EE 301c	-1
EE 310	-4	EE 351	-4	EE 340	-4
EE 326	-3	EE 327	-3	EE 328	-3
PHYS 302b	-4	EE 382	-4	EE 352	-4
ECON 112	-4	Gen Ed Elec	-4	IE 305	-4
	16		16		16

SENIOR YEAR

FALL		WINTER		SPRING	
EE 401a	-1	EE 404	-3	EE 405	-1
EE 452	-4	EE 401b	-1	EE Elec	-4
EE 365	-4	EE 342	-4	EE Elec	-4
EE 341	-4	EE Elec	-4	PHIL 311	-4
Gen Ed Elec	-4	Gen Ed Elec	-4	Gen Ed Elec	-4
	17		16		17

MINOR REQUIREMENTS

Minor Requirements 29
Electrical Engineering 210, 301, 310, 326, 327, 351, 352, 382 29

INDUSTRIAL ENGINEERING

Professors:
Anderson, T. P. (Program Director); Wallace, N. D. (Dean, School of Engineering)

Assistant Professor:
Logendran, R.

Instructor:
Van Roekel, J. H.

Industrial engineering is a profession with an extraordinary breadth of application. Two specific areas of concern distinguish industrial engineering from the other engineering disciplines. The first deals with the human being as the critical element in a productive system. The second deals with the long range economics of proposed production systems. The discipline requires practitioners to have a combination of engineering fundamentals, mathematical and statistical methods, economics, psychology, physiology, and sociology. The Industrial Engineer synthesizes these elements to achieve optimal utilization of available resources. The United States faces a crisis in productivity that is expected to last for many years. An ever-increasing number of consumer and industrial products are being manufactured in other countries and imported to the United States. In response, the Industrial Engineer must design and implement increasingly more effective production systems.

CAREER OPPORTUNITIES

The Industrial Engineer is specifically prepared to identify alternative methods, courses of action, or designs, and to make specific time-oriented estimates of the consequences of choosing from among the alternatives. For instance, production lines must be perfectly timed to ensure smooth operation and optimal use of the worker's effort. Industrial engineers are concerned with automating manufacturing activities, developing data processing procedures, using computers to control production, and improving methods of handling materials.

Careers in industrial engineering frequently are in industrial plants. However, because of their broad education, other businesses, such as banks, department stores, insurance companies, and state and federal government also employ industrial engineers. Many industrial engineers choose to continue their education beyond a bachelor's degree and earn graduate degrees in industrial engineering or in related fields such as business.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE IN ENGINEERING DEGREE, INDUSTRIAL ENGINEERING

Fine Arts and Humanities Courses 32
English 101* and 102* 8
Fine Arts and Humanities (Introductory Courses*) ... 8
Fine Arts and Humanities (Advanced Course*) 4
Philosophy 106* and 311* 8
Speech 103*, 104* or 105* 4
Natural Science and Mathematics Courses** 56
Chemistry 125a*, 126a, 125b*, and 126b 10
Computer Science 172* 4

Mathematics 150a*, 150b*, 260a*, 260b*, 260c*, 305*, and 380* 28
Physics 211a*, 211b*, 212a, 211c* and 212b 14
Social Science Courses 16
Economics 111* and 112* 8
Social Science (Introductory Course*) 4
Social Science (Advanced Course*) 4
Engineering Sciences Courses 29
Civil Engineering 114, 260 and 270 10
Electrical Engineering 210 and 326 7
Industrial Engineering 112, 262, 305 and 315 12
Industrial Engineering Courses 55
Industrial Engineering 320, 321, 322, 330, 331, 420, 421, 422, 423, 424, 440, 441, and 442 43
Industrial Engineering Electives 12
Other Courses 8
Accounting 210 4
Interdisciplinary Course* 4

Total 196

*This course may be used in partial fulfillment of General Education requirements. Students must also satisfy the State of Illinois requirement regarding the Constitution.

**These courses fulfill the requirements for a Minor in Mathematics.

SAMPLE PROGRAM: INDUSTRIAL ENGINEERING

JUNIOR YEAR

FALL		WINTER		SPRING	
Gen Ed Elec	-4	Gen Ed Elec	-4	Acct 210	-4
IE 315	-4	EE 326	-3	IE 305	-4
IE 320	-1	IE 321	-1	IE 322	-1
IE 330	-4	IE 421	-4	IE 331	-4
Stat 380	-4	IE 440	-4	IE 441	-4
	17		16		17

SENIOR YEAR

FALL		WINTER		SPRING	
Gen Ed Elec	-4	Gen Ed Elec	-4	Gen Ed Elec	-4
IE 420	-4	IE 422	-4	Phil 311	-4
IE 442	-4	IE 423	-4	IE Elective	-4
IE Elective	-4	IE 424	-4	IE Elective	-4
	16		16		16

MINOR REQUIREMENTS

Twenty-seven hours are required, including Industrial Engineering 330 and 331. The remaining courses are electives to be selected from Industrial Engineering courses subject to approval by the Director of the Industrial Engineering program.

CONSTRUCTION

Professors:
Buchert, K. P.; Snell, L. M. (Program Director)

Assistant Professor:
Matthewson, C.; Pocreva, R. S.

ADMISSION TO CONSTRUCTION

Students admitted to the construction program shall have met University admission requirements and the following minimum School of Engineering requirements:

1. Completion of Math 120, College Algebra (or high school equivalent), with a grade of C or better.
2. Cumulative grade point average of 3.0 (on a 5.0 scale).

The objective of the construction program is to provide graduates with the knowledge and skills necessary to coordinate the multifaceted aspects of the construction industry. This is accomplished by structuring the program so that basic scientific principles are augmented by business and engineering practices and procedures.

CAREER OPPORTUNITIES

The construction industry, one of the largest components of the present economy, includes skilled and unskilled labor, engineers, accountants, financial analysts, and business managers. The scope of construction includes everything from the most modest project costing a few hundred dollars to projects whose total cost may be billions of dollars. The nature of the industry is such that continuing changes in technology produce a need for personnel specifically trained in the managerial and scientific techniques of construction.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, CONSTRUCTION

Fine Arts and Humanities Courses 32
English 101* and 102* 8
Fine Arts and Humanities (Introductory Courses*) ... 8
Fine Arts and Humanities (Advanced Courses*) 8
Philosophy 106* 4
Speech 103*, 104* or 105* 4
Natural Science and Mathematics Courses 32
Chemistry 120a* 4
Mathematics 244*, 150a*, 150b*, and 260a* 16
Physics 211a*, 211b*, and 211c* 12
Social Science Courses** 16
Economics 111*, 112*, and 331* 12
Social Science (Introductory Course*) 4
Business Courses** 20

Accounting 201 and 202	8
Finance 320	4
Management 242 and 290	8
Engineering Sciences Courses	13
Civil Engineering 114, 260, 263 and 270	13
Construction Courses	75
Construction 120, 130, 201, 202, 264, 301, 302, 321, 331, 332, 341, 351, 352, 375, 403, 411, 451, and 475	63
Construction Electives	12
Other Courses	4
Interdisciplinary Course*	4
Total	192

*This course may be used in partial fulfillment of the University General Education requirements. Students must also satisfy the State of Illinois requirement regarding the Constitution.

**These courses will fulfill the requirements for a Minor in Business.

SAMPLE PROGRAM: CONSTRUCTION

FRESHMAN YEAR

FALL		WINTER		SPRING	
Math 150a	-4	Math 150b	-4	Math 260a	-4
Eng 101	-4	Eng 102	-4	Speech	-4
Chem 120a	-4	Math 244	-4	Econ 111	-4
Cnst 120	-1	CE 144	-2	Cnst 130	-4
Fine Arts or Human. (Intro)	-4	Fine Arts or Human. (Advanced)	-4		
	17		18		16

SOPHOMORE YEAR

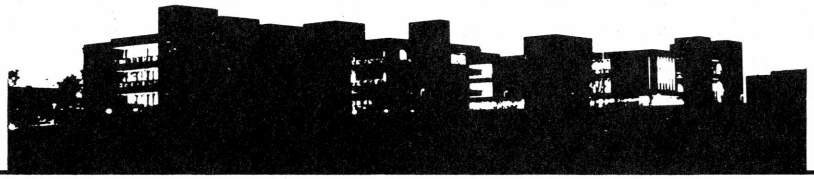
FALL		WINTER		SPRING	
Phys 211a	-4	Phys 211b	-4	Phys 211c	-4
Econ 112	-4	Acct 201	-4	Acct 202	-4
Cnst 201	-4	Cnst 202	-4	CE 263	-3
Phil 106	-4	CE 260	-4	CE 270	-4
	16		16		15

JUNIOR YEAR

FALL		WINTER		SPRING	
Cnst 264	-4	Cnst 302	-4	Cnst 321	-3
Cnst 301	-4	Cnst 331	-3	Cnst 351	-4
Cnst 332	-3	Cnst 352	-4	Cnst 375	-2
Fin 320	-4	Cnst 341	-4	Cnst 411	-4
				Soc.Sci. (Intro)	-4
	15		15		17

SENIOR YEAR

FALL		WINTER		SPRING	
Mgmt 290	-4	Cnst 475	-3	Cnst 403	-4
Econ 331	-4	Mgmt 242	-4	Cnst 451	-4
Elec	-4	Elec	-4		
Fine Art or Human. (Intro)	-4	Fine Art or Human. (Advanced)	-4	Interdiscip. Elec	-4 -4
	16		15		16



SCHOOL OF

FINE ARTS AND COMMUNICATIONS

PETER BUKALSKI, DEAN

The mission of the School of Fine Arts and Communications is to broaden and intensify experiences in the fine and communicative arts and sciences; to impart to all University students an awareness of the cultural values of the arts; to provide facilities for the creative and scholarly pursuit of the arts; and to offer specialized courses of study to serve the ends of liberal and professional education. The visual and performing arts are emphasized through exhibitions, concerts, lectures, and theatrical productions. More specifically the goals are:

1. To provide preprofessional and professional training in art and design, music, dance, theater, speech communication, speech pathology and audiology, radio, television, and journalism.
2. To provide teacher preparation for the profession of teaching art, music, speech communication, theater, dance, and mass communications.
3. To serve as the center of the cultural resources for the campus and to be the cultural and performing arts center of southwestern Illinois.
4. To provide general education in art, music, speech communication, theater, dance, and mass communications.
5. To foster creative work, scholarship, research, experimentation, and publication.
6. To provide services to the University and communities through such activities and instructional laboratories as Broadcasting Service, the Speech Language and Hearing Center, University Theater, bands, choruses, orchestras, quartets, and recitals.

Students may obtain additional information from appropriate sections of this catalog.

ART AND DESIGN

Professors:
Anderson, D. J.; Davis, D. F. (Chairperson); Daw, L. M.; Decoteau, P. H.; Gipe, T. D.; Hampton, P. J.; Huntley, D. C.; Malone, R. R.; Richardson, J. A.; Ringering, D. L.; Smith, M. J.; Weber, J. A.

Associate Professors:
Dresang, P. A.; Smith, J. E.

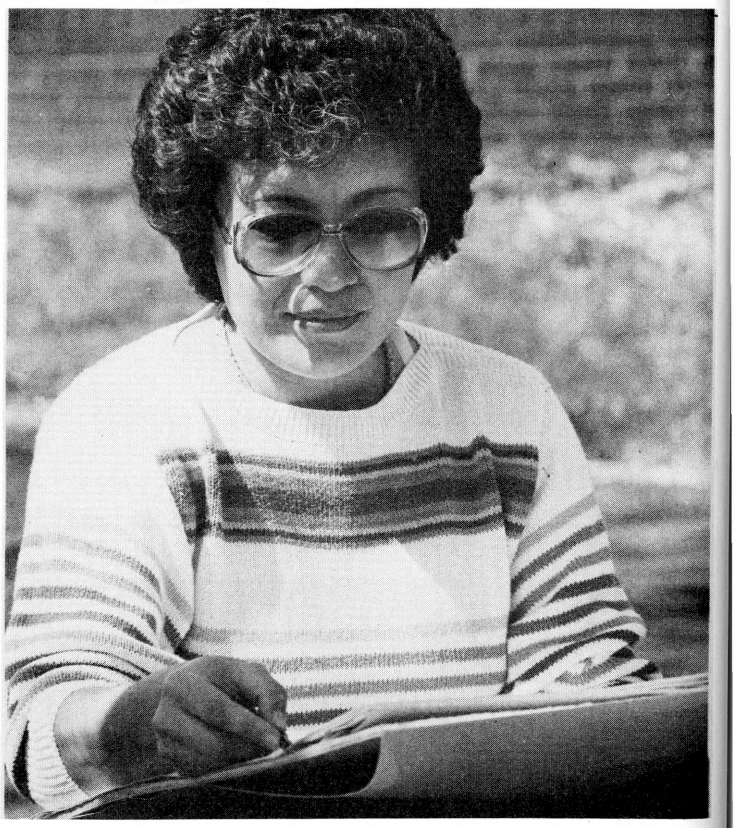
Assistant Professors:
Ehlrich, M. L.; Kinsella, M.; Myers, P. K.

The Department of Art and Design offers three undergraduate degrees: a Bachelor of Arts degree in Art with options in Art History or Studio Art; a Bachelor of Fine Arts degree in Art and Design; and a Bachelor of Science degrae with an option in Studio Art or, in conjunction with the School of Education, Art Education.

Undergraduate offerings in art include introductory and specialized courses in drawing, painting, printmaking, sculpture, ceramics, fiber/fabric, graphic design, photography, jewelry, multimedia, museology, art historical studies, and professional preparation for the future teacher of art at the elementary or secondary levels.

To augment the academic program, the Department of Art and Design has a comprehensive program in the visual arts which includes a Visiting Artist Program and an Exhibitions Program. These programs provide an opportunity for both general students and art majors to become acquainted with well-known artists and artworks brought to the University.

Students who have graduated from accredited high schools may be admitted to the B.A., B.S., and B.F.A. programs. A grade point average of 3.40 is necessary for those students seeking admission to the teacher education program in the B.S. program in both the School of Fine Arts and Communications and the School of Education. Admission to the B.F.A. Program is by portfolio examination with applications accepted early each quarter. Students must have a cumulative grade point average of 3.50 on all work and a 4.00 grade point average in studio courses for admission to the program. Instructions for B.F.A. application are available from the office of the undergraduate adviser at the Wagner Complex.



CAREER OPPORTUNITIES

Students majoring in art find career opportunities in a wide variety of professional fields, including teaching in public and private schools; recreational, cultural, and craft programs in city, state, and federal government agencies; design, advertising, and commercial art agencies; and museums, galleries, and other cultural institutions. The undergraduate programs in art also prepare students for graduate study in their fields of specialization; graduates of the department have been able to compete very successfully for career and graduate education opportunities.

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, ART (STUDIO ART)

General Education Requirements 76
(Some general education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area.)
Requirements for Major in Art 96
Foreign Language ..... 12[1]
Art 112 (15), 202 (15), 225 (12)[2] 42
18 hours from at least five of the following:
Art 302, 305, 310, 312, 331, 341, 358, 377, 384, 386, 393 18
Art history 6
15 additional hours from one of the following studio areas: painting, drawing, printmaking, sculpture, ceramics, fiber/fabric, jewelry, photography, graphic design, or multi-media 15
Art electives 3
Electives or Minor 40

Total 192

[1]Also counts toward General Education skills requirement.
[2]Eight hours may also count toward General Education advanced course requirements.

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, ART (ART HISTORY)

General Education Requirements 76
(Some general education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area.)
Requirements for Major in Art History 78
Foreign Language ..... 12[3]
Art 225 (12)[4] 12
54 hours from the following:
Art 424, 447, 448, 449, 469, 470, 472, 473, 480, 481, 483 54
Electives and/or Minor 58
(Majors are urged to elect Philosophy 360 and Anthropology 305 plus courses in non-visual arts and history. Studio work is encouraged and additional language study advised.)

Total 192

[3]Also counts toward General Education skills requirement.
[4]Eight hours may also count toward General Education advanced course requirements.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, ART (STUDIO ART)

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Art 91
Art 112 (15), 202 (18), 225 (12)* 45
18 hours from at least five of the following:
Art 302, 305, 310, 312, 331, 341, 358, 377, 384, 386, 393 18
Art education courses 289, 300a,b,c, 364, 365 18
Art electives 10
Professional Education Electives 36
(Includes: EDUC 305; EDEL 351b; EDFD 355; EDS 215, 352; SPE 400; HED 205; PE 3 hrs.)

Total 192

*Eight hours may also count toward General Education advanced course requirements.

BACHELOR OF FINE ARTS DEGREE, ART AND DESIGN

Admission to the B.F.A. degree program is by portfolio only. Candidates for the B.F.A. must maintain a cumulative grade point average of 3.50 on all work and a 4.00 grade point average in studio courses to remain in the program.

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Art 118
Art 112 (15), 202 (21), 304 (1), 331 (3), 441 (3), 405 (3), 15 hours from at least five of the following: Art 302, 305, 310, 312, 358, 377, 384, 386, 393 61
Major medium (300 and 400 level) 21
Minor medium (300 and 400 level) 12
Art history (225a,b,c[5]; 300 and 400 level) 18
Thesis (499) 1-6
Electives[6] 3-7

Total 192

[5]Eight hours may also count toward General Education advanced course requirements.
[6]Art courses are not included in these hours. Work in foreign languages is strongly recommended.

BACHELOR OF FINE ARTS TEACHER CERTIFICATION

Students desiring secondary or broad field teaching certification with the Bachelor of Fine Arts may do so in consultation with art

education advisers. Art education and professional education courses needed for certification can be taken as electives. However, students pursuing the B.F.A. with certification may exceed the 192-hour degree requirements.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, ART EDUCATION, SCHOOL OF EDUCATION

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Art Education 72
Art 112 (15), 202 (15) (a, b, c, d, required; elect e, f, g, or h), 225 (12)* 42
18 hours from at least five of the following:
Art 302, 305, 310, 312, 341, 358, 377, 384, 386, 393 18
Art history 3
Art education courses 289, 300d, 365 9
Art 300a,b,c (for K14 certification) ..... (9)
Professional Education Courses 33
See Secondary Education requirements
Electives 10-19

Total 192

*Eight hours may also count toward General Education advanced course requirements.

During the last quarter of the junior year or first quarter of the senior year students may petition the art faculty to grant them the privilege of an exhibition of their work. Such an exhibit may be comprised of the work of an individual or may be comprised of the works of several seniors. Participation in an exhibition is required for BFA students.

MINOR REQUIREMENTS

Students desiring a minor in art should take the following courses: Basic Studio, Art 112 (15); Intermediate Studio, Art 202 (15) and History of World Art, Art 225 (8) for a total of 38 hours.

Students desiring a minor in art history should take the following courses: History of World Art, Art 225 (12) plus 15 additional hours from 400 level art history courses.

Fees are assessed for all studio courses. These fees are indicated at the end of each course description. Fees are billed at the beginning of the quarter and should be paid at the Office of the Bursar.

Students dropping classes after the second week of the quarter will not be eligible for a refund of studio fees.

MASS COMMUNICATIONS

Professors:
Regnell, J. A. (Chairperson); Rider, J. R.; Shaheen, J. G.; Ward, W. G.; Winter, K.; Killenberg, G. M.

Associate Professors:
Bukalski, P. J. (Dean, School of Fine Arts and Communications); Regnell, B. C.

Assistant Professors:
Baker, N; Ellis, B; Maynard, R.

The professional program leading to the Bachelor of Science degree in mass communications (television/radio, journalism) rests on three general beliefs about education:

1. The liberal education of students, primarily in the liberal arts and sciences, is fundamental to future success in the media and should constitute the major portion of their college experiences.
2. Students need to become proficient enough in the technical and production aspects of the media and knowledgeable enough in the management, sales, and operational aspects in order to enter the field of their choice after graduation.
3. Liberal education and media experience and knowledge should be integrated to insure maximum opportunity for success as potential leaders in the media.

Students in mass communications develop professional standards of performance and decision-making styles through student internships offered in cooperation with the media in the Metro-East and St. Louis areas.

Students may select a specialization in television/radio or in journalism. In either program a minor outside the Department of Mass Communications is required, and students are encouraged to consider a second major field if their schedules permit. Students with second majors are not required to have a minor. Students majoring in mass communications are assigned an adviser who assists them until completion of the program. Although a core of course work is required of students regardless of major, each program is designed to assist students in attaining their career aspirations.

Core requirements in journalism are 130, 201, 202, 210, 344 or 345 or 346, 303a, 303b, 320 or 481, 321, 340, and 410. Electives must be taken from other mass communications offerings to total 53 hours of departmental courses.

Core requirements in television/radio are 150, 200, 201, 230, 252, 400, 402, and 408. Electives must be taken from other mass communications offerings to total 53 hours in departmental courses.

The programs in the Department of Mass Communications are accredited by the American Council on Education in Journalism and Mass Communications. Departmental graduates have risen to responsible positions in the mass media in Illinois and metropolitan St. Louis as well as in many major markets across the country.

For more detailed information regarding the programs please contact the Chairperson of the Department of Mass Communications.

CAREER OPPORTUNITIES

A degree in mass communications will assist students in seeking employment with television and radio stations, newspapers, magazines, industrial and corporate publications, advertising agencies, teaching, and production agencies, and in photography, film work, cable television, and public broadcasting. Mass communications majors are increasingly in demand for public relations and public information positions and low-technology or closed circuit applications of television in business and industry.

ADMISSION AND RETENTION REQUIREMENTS

1. With the exception of incoming freshmen, students wishing to declare a major in mass communications are required to have a 3.0 average.

2. Students in the television/radio major must earn a "C" or better in TVR 150 and TVR 200 in order to register for additional courses required for the major.

3. Students may repeat Department of Mass Communications courses only one time.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, MASS COMMUNICATIONS (TELEVISION/RADIO)

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Mass Communications 52
Television/Radio 150, 200, 201, 230, 252, 400, 402, 408 32
Television/Radio electives (five of the following 4-hour courses: 202, 301, 302, 303, 359, 401, 404, 405, 406, 407, 410, 466, 490, 499) 20
Minor Outside Mass Communications ..... (29)
(A double major is recommended.)
Electives ..... 34 or 38
(May include a minor in journalism.)

Total 192

MINOR REQUIREMENTS IN TELEVISION/RADIO

A minor in television/radio is possible by taking the following courses: 150, 200, 201, 230, 252, 401 for a total of 25 hours.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, MASS COMMUNICATIONS (JOURNALISM)

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Mass Communications 53
Journalism 130, 201, 202, 210, 321, 303a, b, 320 or 481, 344 or 345 or 346, 340, 410 45
Journalism, selected television/radio, and electives from other schools on campus as approved by the Department of Mass Communications 8
Minor Outside Mass Communications 28
(A double major is recommended.)
General Electives
(or additional minor in television/radio) ..... 35 or 39

192

REQUIREMENTS FOR A MINOR IN JOURNALISM

A minor in journalism consists of 130, 201, 210, 303a, 303b, and 8 hours of electives as approved by the Department of Mass Communications.

MASS COMMUNICATIONS IN A DEMOCRATIC SOCIETY MINOR

This minor is intended to be useful to those students who do not wish to pursue a professional minor in the media. It is suggested that this sequence might be particularly valuable to students majoring in political science, government, or history. Requirements for the minor are as follows: Television/Radio 150, 200, 400, 401 407, 499 and Journalism 344, 345. A total of 31-32 hours must be taken.

MUSIC

Professors:
Claudson, W. D. (Chairperson); Haley, J. A.; Joseph, W. A.; Kendall, J. D.; Kerr, R. S.; Loucks, D. G.; Mellott, G. K.; Perry, R. K.; Pival, J. E.; Schieber, R. W.; Turner, S. T.; Van Camp, L. W.; Williamson, R. N.; Woodard, J. P.

Associate Professors:
Brown, S. M.; Rogers, K. C.; Scott, J. A.; Stamps, D. B.

Assistant Professors:
Ho, A.; Markovich, V. A.; Perry, L. W.

Assistants in Music:
Anderson, M.; Gross, J. G.

The faculty in the Department of Music believe that students at the undergraduate level should receive a comprehensive musical background which includes individual performance, ensemble performance, scholarly studies in music theory and history/literature, teacher preparation (if applicable), and a sound cultural background through general education. The ultimate aim is to develop skilled and informed musicians, able scholars, and competent and enthusiastic teachers.

An accredited member of the National Association of Schools of Music, the Department offers the Bachelor of Arts Degree with a major in Music. A specialization in Music Merchandising is available within this degree program. The Department also offers the Bachelor of Music Degree with specializations in Performance, Music Education, Theory/Composition, Studio Music and Jazz Performance, and Musical Theater.

The B.A. degree is designed for students who wish to specialize in music within a liberal arts curriculum and may serve as the foundation for advanced studies in music. The Bachelor of Music degree offers a curriculum which prepares students for professional careers and advanced graduate study in music.

Frequently scheduled concerts and recitals by guest artists, faculty, and students offer an excellent and diverse program of cultural events for the enjoyment of the University community and residents of the bi-state metropolitan area.

CAREER OPPORTUNITIES

A degree in music can lead to many interesting and productive careers in music and music-related fields. Some of the career opportunities available to graduates of the bachelor's degree programs in music include teaching in public and private schools; playing professionally in symphony orchestras, studio orchestras, and jazz groups, or performing in choruses, recitals, operas, oratorios and musical theater; and composing and arranging. Additional opportunities exist in music publishing, music management and sales, music criticism, music librarianship, and private studio teaching.

ADMISSION AND ADVISEMENT

Students seeking admission to any music major degree program must perform an acceptable audition prior to enrollment. Students are not permitted to register for private lessons until they complete the audition requirement. To schedule an audition, please write or call the Music Department office.

Students desiring to pursue any of the music major programs are advised to file the Declaration of Major upon entry to the University and to consult a music adviser prior to registration. Students declaring a major are issued the appropriate curriculum guide and Music Student Handbook, both of which contain requirements for the degree.

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, MUSIC

Courses in this program are for students who wish to study music as part of their general cultural education. Such courses may also be taken as background for advanced studies in music.

General Education Requirements	76
(Some general education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area.)	
Requirements for Major in Music	69
Foreign Language[1]	12
Music 211	(4)
Music 125 (12), 225 (12), and electives	39
Music private applied (2 hours per quarter)	12
Music major ensemble[2]	6
Minor Concentration	24
Electives	39
	192

[1]Also counts toward General Education skills requirement.
[2]May also count towards General Education advanced course requirements.

BACHELOR OF ARTS DEGREE, SPECIALIZATION IN MUSIC MERCHANDISING

General Education Requirements	76
(Some general education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area.)	
Requirements for Major in Music	83
Foreign Language	12[3]
Music 211	4
Music 125 (12), 225 (12), and electives	28
Music major ensemble	6[4]
Music private applied (2 hours per quarter)	12
Music 395	9
Music 495	16
Minor Concentration (Business)	36
MS 251	4
MKTG 370, 371, 377	12
MGMT 340	4
ECON 112	4
ACCT 201	4
Plus two of the following:	
MKTG 471, 474, 475, 476	8
Electives	13
	192

[3]Also counts toward General Education skills requirement.
[4]May also count towards General Education advanced course requirements.

DEGREE REQUIREMENTS

BACHELOR OF MUSIC DEGREE (PERFORMANCE)

General Education Requirements 76
(Some general education requirements may be satisfied while completing this major concentration. Students in this degree program must elect option B in the skills area.)
Requirements for Major in Music 118-126
Foreign Language ..... 12[5]
Music 125 (12), 225 (12), 309a, 312a, 318a, 326a, 442a ..... 39[6]
Music 357 ..... 9[7]
Music, private applied (major instrument) 40-48
Music, major ensemble (1 hour per quarter) ..... 12[8]
Music, class piano, or secondary instrument/voice 6
Electives 1-6

Minimum 192

[5]Students concentrating in voice should include two years of foreign language (generally one year each of French and German). Students should consult with the music adviser regarding the sequence to be followed. Foreign language counts toward the general education skills requirement.
[6]Students with a specialization in piano may substitute 9 hours in Music 413 and/or 461 in lieu of 309a, 312a, and 442a.
[7]Up to 8 hours may also count toward general education advanced course requirements.
[8]Students with a specialization in piano may substitute a maximum of 9 hours in 365 as partial fulfillment of this requirement.

DEGREE REQUIREMENTS

BACHELOR OF MUSIC DEGREE (JAZZ PERFORMANCE)

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Music 117-147
Music 125 (12), 225 (12), 318a (3), 326a (3), 357c (3) 33
Music 330 (6), 337 (4), 409 (6), 430 (6) 436 (3) 25
Music, private applied (major instrument) 36-42
Music, major ensemble (1-2 hours per quarter) 18-24
Music, class piano, jazz piano and/or proficiency, secondary instrument/voice 0-9
Electives 3

Minimum 192

DEGREE REQUIREMENTS

BACHELOR OF MUSIC DEGREE (MUSIC EDUCATION)

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Music 77-96
Music 125 (12), 225 (12), 309a, 318a, b, 326a 36
Music 357 9
Music, private applied (major instrument) 20-24
Music, major ensemble (1 hour per quarter) 12
Piano proficiency or class ..... 0-6[9]
Voice proficiency or class ..... 0-3[9]
Music: class strings, woodwinds, brass — 2 hours in each area ..... 0-6[9]
One year of French or German is recommended for the student with a choral emphasis in music education.
Professional Education Requirements 37
EDS 215 4
Foundations of Education 355 4
Music 301 9
Education 305 4
Special Education 400 4
Elementary Education 451c, Secondary Education 352o 12
Electives 10

Minimum 192

[9]Study on a secondary instrument and/or voice is possible if requirements for class instruction are met by proficiency.

Before being approved for student teaching, students must satisfy the course of study and proficiency prerequisites as established by the Music Department.

DEGREE REQUIREMENTS

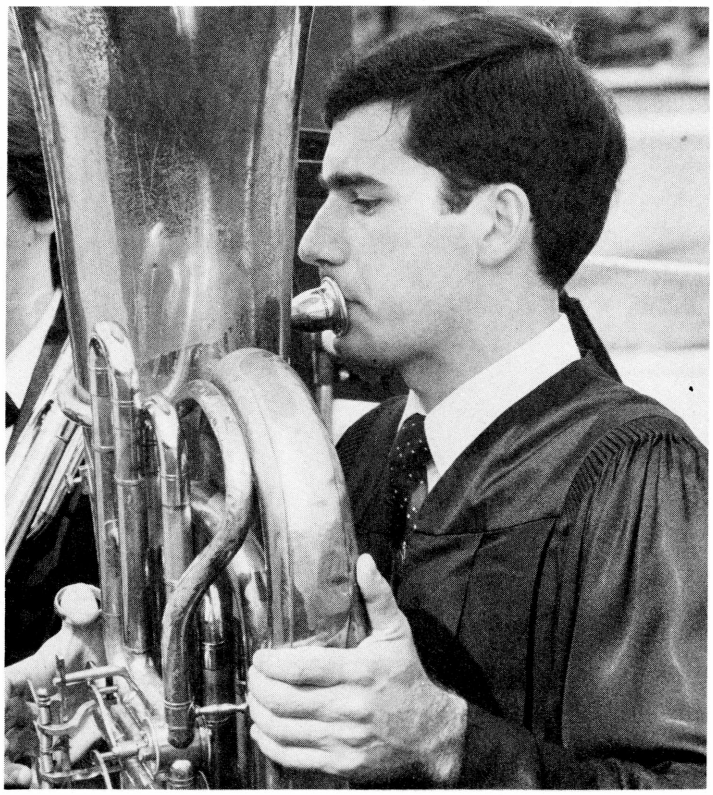
BACHELOR OF MUSIC DEGREE (THEORY/COMPOSITION)

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Music 117
Music 125 (12), 225 (12), 309 (9), 312 (9), 326 (9), 357 (9)[10], 442 (9) 69
Music, private applied ..... 18[11]
Music, major ensemble 12
Music electives ..... 18[12]
Electives 15

Minimum 192

[10]Up to 8 hours may also count toward General Education advanced course requirements.
[11]Private applied piano until proficiency is satisfied; thereafter any instrument or voice. Students are expected to enroll for applied study for a total of nine quarters.
[12]A program of electives must be approved by the theory committee. Students with emphasis in composition normally elect 412-9; those with emphasis in music theory normally elect 481.

Students with a specialization in theory/composition include one year each of French and German. In their fourth year, degree candidates must present to the Music Department either a composition or a written thesis in music theory as evidence of their achievement.



BACHELOR OF MUSIC DEGREE (MUSICAL THEATER)

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements in Theater 40
Dance 210A (4), 211 (4), 212A (2), 213 (2) 12
Acting: Thea 112A (4), 112B (4), 210A (4) 12
Musical Theater Workshop: Thea 309abc (4,4,4) 12
Musical Theater History: Thea 402 (4) 4
Requirements in Music 84
Music, voice (freshman/sophomore years), Music 140q (2,2,2); 240q (2,2,2) 12
Music, voice (junior/senior years), Music 340q (4,4,4); 440q (4,4,4) 24
Choral ensemble: Music 444 (1,1,1,1,1,1)[13] 6
Musical theater ensemble: Thea 230 (2), 330 (2), 430 (2) 6
Music theory: Music 125abc (4,4,4); Music 225abc (4,4,4) 24
Music history, Music 357bc (3,3)[13] 6
Class piano, Music 121abc (1,1,1); Music 221abc (1,1,1) 6

Minimum 192

[13]Up to 8 hours may also count towards General Education advanced course requirement.

MINOR REQUIREMENTS

Students wishing to minor in music must consult with a designated adviser in order to develop an approved program before beginning course work. Students minoring in music must take at least one course in music theory and one course in music literature, as approved by the adviser. Music 200 and Music 111 cannot be applied toward completion of the minor requirements. In order to secure the minor in music, students must complete a total of 30 hours in approved music or general education courses with an overall average of 3.60 or better.

Music minors are expected to build a concentration in one particular area of music; a minimum of 9 hours in any one area constitutes a concentration. The following areas of concentration are suggested: Performance (solo and ensemble); Theory; History/Literature; Jazz; and Music Education. Certain activities, such as private applied study, advanced level courses, and some ensembles, require an audition and/or prior approval of the instructor.

SPEECH COMMUNICATION

Professors:
Anderson, R. O.; Hawkins, R. B.; Munshaw, J. A.; Salden, D. R. (Chairperson); Stoppe, R. L.; Valley, D. B.

Associate Professors:
Goehe, P. A.; Graebe, A. M.; McClearey, K. E.

Speech communication professionals have a number of important interests. They focus on understanding and improving the ways people interact nonverbally and through the spoken word—sharing ideas and feelings—in many different relationships and contexts.

Speech communication is the extension of a discipline that began with the theories and practices of great orators and teachers of persuasive speaking in Athens and Rome. Courses focus on two-person interaction (from casual talk in friendships to interviews in formal work situations); on small group interaction (from family communication patterns to task-oriented discussions in work groups); on speaker-audience interaction (from impromptu remarks at community meetings to formal presentations in national politics); and on interaction in large communication systems (from confrontations between different subcultures to negotiation and conflict resolution in agencies and corporations). The department encourages students to develop richer theories, more precise research tools, and better skills to help explain and improve complex communication patterns.

Students work closely with the faculty. In teaching, advising, and informal interactions, the department reduces traditional barriers between professors and students and maintains an ongoing, open community involved in studying and improving human communication. Initially, speech communication majors and minors are advised by the Director of the Undergraduate Program. After taking a few courses, students select permanent advisers who assist them in planning their programs. Students interested in speech communication are encouraged to contact the department at (618) 692-3090.

CAREER OPPORTUNITIES

Employers in business and industry, governmental agencies, educational systems, and churches and other community resource centers recognize the need for more effective communication. As a result, there are increasing job opportunities for graduates trained in speech communication. Graduates often have several career choices and seldom find themselves restricted to positions with traditional, tightly defined job descriptions. Some speech communication graduates find rewarding careers as teachers and administrators in elementary or secondary schools. Other graduates become specialists and consultants in organizational communication, working in either the public or private sector. Some graduates select roles as trainers and facilitators in human relations and development programs while others secure positions in management, public relations, sales, and government.

The department is committed to helping undergraduate majors identify jobs and work environments for which they are suited best and to helping them select minor, cognate, and elective courses to complement the speech communication major and their career plans.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, SPEECH COMMUNICATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Speech Communication 56
(At least 24 hours must be at the 400-level.)
Speech Communication 210, 301, 302, 330, 409, and 410 24
Electives in Speech Communication 32
Minor 24
(Actual number of hours determined by the minor selected.)
Electives ..... 36 or 40

Total 192

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, SPEECH COMMUNICATION

Same as above plus twelve (12) hours of foreign language as part of the 36 or 40 elective hours.

Majors seeking certification for teaching must take the program outlined above, plus SPC 461, and must meet other minimum standards for certification under Secondary Education and those set forth by the Illinois State Board of Education. In addition to their academic responsibilities, students are expected to integrate campus and community speech communication-related activities and experiences. The communication practicum course, SPC 309, offers 1 to 8 hours of academic credit for such activities. SPC 489, an internship course, enables qualified juniors and seniors to gain professional experience in the career environments which they anticipate entering.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, SPEECH COMMUNICATION, SCHOOL OF EDUCATION

Students seeking the Bachelor of Science degree offered by the School of Education must take the program outlined above for majors, including SPC 461, and must meet current certification requirements as set forth by the Illinois Office of Education.

MINOR REQUIREMENTS

A 28-hour minor (30 hours for a second teaching field) in speech communication is composed of any courses offered in the speech communication curriculum which students and their advisers decide best fit the students' academic and career interests. It is recommended that the minor include courses listed above as requirements for majors in speech communication. Students electing speech communication as a second teaching subject must include SPC 461. At the time they declare their minor or earlier, students should consult with the Director of the Undergraduate Program in Speech Communication.

General education courses are not applicable to the 28 hours necessary for a minor.

SPEECH PATHOLOGY AND AUDIOLOGY

Professors:
Carey, A. L.; Kurtzrock, G. H.; Lieblich, M.; Maag, O. E.; St. Onge, K. R.; Taylor, J. S. (Chairperson)

Assistant Professor:
Engelman, D. A.

Instructors:
Harrison, J. M.; Hoge, D. R.

The professions of speech pathology and audiology are devoted to serving the more than twenty million Americans with disordered communication. Speech-language pathologists study human communication, its normal development, and its disorders. Their responsibilities include the identification, evaluation, and remediation of individuals having communicative disorders. They also work toward the prevention of disorders of speech, hearing, and language through public education, early identification of problems, and research into the causes and treatment of disorders.

Audiologists are concerned with normal and defective hearing. Their responsibilities include the prevention of hearing loss and the identification and rehabilitation of those who have impaired hearing. Audiologists utilize tests and instruments to determine whether a hearing loss is present and then work in a variety of ways to assist clients in making the best use of residual hearing. Like speech and language pathologists, audiologists are concerned with research in the hearing process and hearing disorders.

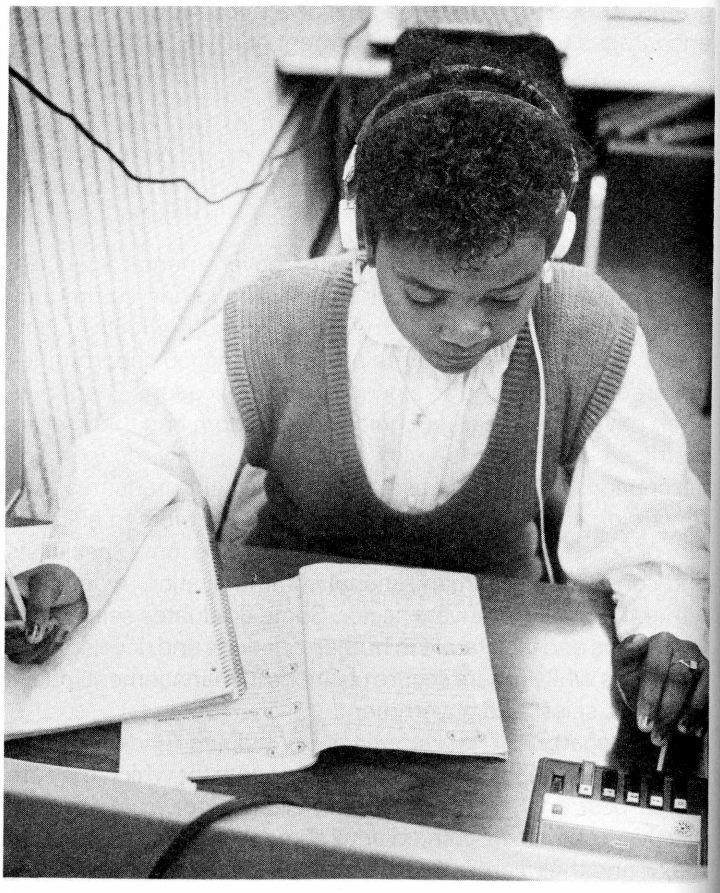
In order to meet the standards established by the American Speech-Language-Hearing Association (ASHA), students wishing to pursue a career in either speech pathology or audiology must complete a master's degree. Students wishing to be certified by the State of Illinois must complete a master's degree in speech pathology and participate in student teaching. Before registering for student teaching, students must secure written consent of the Speech Pathology and Audiology Department and must have completed academic and clinical requirements. No minor concentration in Speech Pathology and Audiology is offered at the undergraduate level. Specific requirements and options must be approved by the Department.

The Department of Speech Pathology and Audiology has a faculty of nine, all of whom are certified as clinically competent by ASHA. The terminal program in speech pathology is accredited by the Educational Standards Board of the Board of Examiners in Speech Language Pathology and Audiology of ASHA and entitled by the Illinois State Board of Education.

Students may enter the program after conferring with the chairperson of the department. Quarterly advisement is required. In order to complete the clinical portion of the program, students must maintain 3.50 grade point averages. Students desiring additional information should contact the Chairperson, Department of Speech Pathology and Audiology.

CAREER OPPORTUNITIES

Certified speech-language pathologists and audiologists find employment in a variety of settings, including hospitals, community clinics, colleges and universities, state and federal agencies, industry, rehabilitation centers, and nursing homes. A large number of graduates in speech-language pathology enter public school settings; there the mandate of state and federal legislation has made service delivery to all children with communicative disorders necessary. Some graduates establish private practices or become affiliated with physicians. Currently, employment possibilities are plentiful.



DEGREE REQUIREMENTS

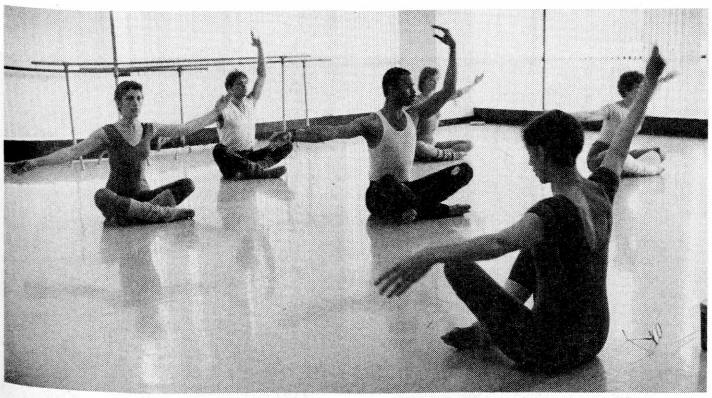
BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, SPEECH PATHOLOGY AND AUDIOLOGY

General Education Requirements[1] 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements in Speech Pathology and Audiology 54-60
Basic courses: Speech Pathology and Audiology 231, 303, 312, 320 16
Speech Pathology courses: 201, 441, and two of the following: 442, 443, 444, 445[2] 16
Audiology courses: Speech Pathology and Audiology 360, 461, 471 12
Clinical procedures and practices: Speech Pathology and Audiology 449, 469, 452 6-12
Optional courses: Speech Pathology and Audiology 450[3], 462, or approved elective 4
Requirements in Related Areas 12
Psychology 201, 205 8
Special Education 400 4
Requirements for Illinois Certification in Speech and Language Impaired 25-33
Elementary Education 337 4
Education 305 4
Elementary Education 451 8-16
Foundations of Education 380 4
Health and Physical Education 5
Approved Electives 29-11
Students are encouraged to pursue a minor in a related field.

Total 192

Twelve hours of foreign language are required for the B.A. option.

[1]Must include basic psychology.
[2]SPPA 442, 443, and 444 are requirement for student preparing to student teach.
[3]Required for Illinois Certification in Speech and Language Impaired.



THEATER AND DANCE

Professors:
Kluth, L. F.; Vilhauer, W. W. (Chairperson)

Associate Professors:
Bukalski, P. J. (Dean, School of Fine Arts and Communications); Grivna, W. J.; Mackie, W. C.; Sill, D. J.; Sweezey, C. O.; Tallant, A. M.

Assistant Professors:
Jarrell, C.; Shaul, K. J.

Assistants in Theater and Dance:
Claudson, M.; Goldston, V.; Lartonoix, P.

The Department of Theater and Dance provides instruction and practical performance experience in all phases of theater and dance production for the stage.

The Department enhances the liberal arts experience of students through general education courses and through mainstage and experimental theater productions. Students majoring in theater and dance may elect any one of four possible specialization programs: performance, design and technical, dance, and musical theater.

Practicum training studios enable students to learn the arts of theater and dance through instruction and participation in a series of major and minor presentations for class, campus, and community audiences through the Student Experimental Theater, the University Theater, the Concert Dance Company, and the Dance Organization.

All students desiring further information about work in theater and dance should contact the Department of Theater and Dance. Students must be advised by a member of the departmental faculty, who may grant permission to enroll in courses.

CAREER OPPORTUNITIES

An undergraduate degree in theater provides students with preprofessional theater and dance training in acting, directing, dance, choreography, technical production, and design. Since professional theater and dance employment is very competitive, career opportunities largely depend upon the graduate's initiative and artistic skills. In addition to providing background for entry into professional training schools, a degree in theater and dance also may lead to career opportunities in television, radio, and promotional work.

DEGREE REQUIREMENTS

BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, THEATER AND DANCE

PERFORMANCE SPECIALIZATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Major Requirements 96
Danc 114 (2), Thea 112A and B (8), 115 (4), 150 (4), 170 (4), 175 (4), 204 (2), 210A and B (8), 212A and B (8), 215 (4), 265 (4), 305 (4), 310A and B (8), 320 (4), 399 (2) 401A, B, and C (12), 404 (4), 410, 420 430 or 490 (8), theater electives (2)
Electives (At least 16 hours must be taken in areas other than the major) ..... 20 or 24

Total 192

DESIGN AND TECHNICAL SPECIALIZATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Major Requirements 96
Danc 114 (2), Thea 112A (4), 150 (4), 170 (4), 175 (4), 204 (2), 250 (4), 260 (4), 265 (4), 270 (4), 276 (4), 305 (4), 320 (4), 350 (4), 360 (4), 399 (2), 401A, B, and C (12), 404 (4), 450, 460, 470, 465, or 495 (8), theater electives (2), Art 100A (3), 100B (3), 100C (3), 100D (3)
Electives (At least 16 hours must be taken in areas other than the major) ..... 20 or 24

Total 192

MUSICAL THEATER SPECIALIZATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Major Requirements 84
Thea 112A (4), 150 (4), 170 (4), 175 (4), 210A (4), 265 (4), 309A, B, C (12), 310B (4), 402 (4), 130, 230, 330 or 430 (8), 399 (1), Danc 114 (2), 210A (4), 211 (4), 212A (2), 212B (2), 213 (2), Mus 101 (1,1,1), 140Q (2,2,2), 141F (2), 240Q (2,2)
Additional electives in theater or dance to be selected from Thea 112B (4), 115 (4), 210B (4), or Danc 310A (4), 311A (4), 320A (2), 320B (2) 12
Electives (At least 16 hours must be taken in areas other than the major) ..... 20 or 24

Total 192

DANCE SPECIALIZATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Major Requirements 96
Danc 114 (2), Danc 210A and B (8), 211 (4), 212A and B (4), 213 (2), 220 (4), 250 (2), 310A, B, and C (12), 311A, B, and C (12), 320A and B (4), 399 (2), 410A, B, and C (12), 411A and B (8), 420A, B, and C (6), 430A and B (4), 431A, B, and C (6), 432 (2), 440 (2)
Electives (At least 16 hours must be taken in areas other than the major) ..... 20 or 24

Total 192

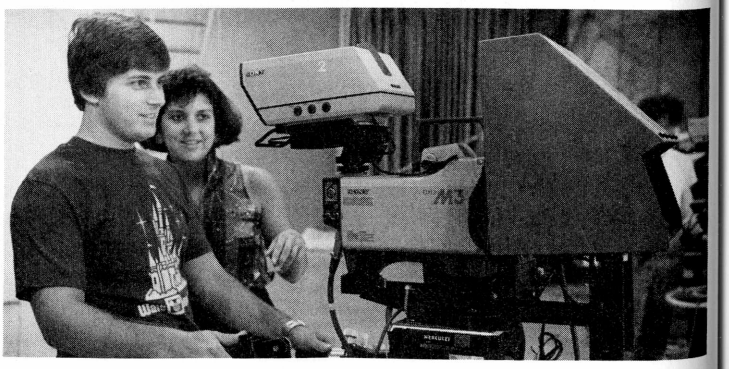
Students pursuing the Bachelor of Arts degree must complete 12 hours of foreign language.

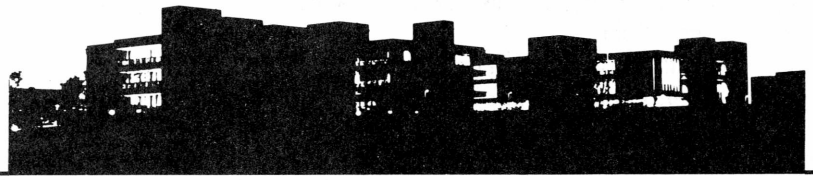
MINOR REQUIREMENTS

A 40-hour minor in theater or dance must be planned in consultation with the Chairperson of Theater and Dance prior to advisement.

University Theater and Musical Events

Students interested in information regarding University theater and musical events should refer to the Student Activities and Services section of this catalog.





SCHOOL OF HUMANITIES

DAVID BUTLER, DEAN

The School of Humanities offers B.A. degree programs in English, French, German, Spanish, and Philosophy, and specializations in English, French, German, and Spanish for students desiring a B.S. degree from the School of Education. The School offers minor concentrations in Creative Writing, French, German, Italian, Linguistics, Philosophy, Spanish and Russian; it also offers an Open English Minor.

The School of Humanities sponsors the Humanities Honors Program. Four periodicals—*Sou'wester, Papers on Language and Literature, Victorian Periodicals Review,* and *Hypatia*—are edited by members of the faculty of the School of Humanities.

Undergraduate programs in the Humanities offer opportunities to enjoy, to examine, and to learn from the most meaningful of human expressions. In studying language, literature, and philosophy, students learn to think more critically and powerfully, they develop the ability to write more effectively, and they grow to appreciate philosophical and imaginative literature more fully. Preparation in the Humanities provides knowledge and skills essential for careers and professions which demand intellectual agility, cultural awareness, and highly-developed communications skills. Such preparation also produces highly qualified candidates for graduate and professional schools.

The School offers M.A. degrees in English and Philosophy. Students seeking the M.A. in English may specialize in English and American Literature, Linguistics, Preparation for Junior College English Teaching, or American Studies. M.A. candidates in Philosophy may select a course of general study or may specialize in Women's Studies.

ENGLISH LANGUAGE AND LITERATURE

Professors:
Ades, J. I.; Bailey, D. S.; Gaston, P. L. (Associate Vice President for Academic Programs); Havens, D. F.; Lawrence, B. J.; Love, T. R.; Revard, S. P.; Richardson, B. H.; Slattery, W. C. (Chairperson); Spurgeon D. A.; Sullivan, A. D.; Zanger, J.

Associate Professors:
Bosse, R. B.; Butler, D. L. (Dean, School of Humanities); Funkhouser, L. K.; Kropp, L.; Pennell, J. C.; Robbins, F. W.; Schmidt, B. Q.

Assistant Professors:
Barnes, L. L.; Kittrell, J.; Meyer, W. C.; O'Gorman, G. J.; Smithson, I.; Ziegler, R. J.

Instructor:
Violette, P. E.

The study of literature and of the English language encourages appreciation of the significant ideas of the past and present, provides training in effective writing, and offers practical experience in logical and aesthetic analysis. These skills are of particular value in a world in which specific technical capabilities may be threatened by obsolescence. Students prepared in English language and literature are equipped to acquire essential technical skills and to assimilate knowledge crucial to technological and computer based capabilities.

CAREER OPPORTUNITIES

Students majoring in English are well prepared for graduate and professional studies in business, law, and medicine. In addition, they may find career opportunities in public relations, journalism, teaching, consulting, and editing—particularly when an English major is combined with a major or significant course work in Art and Design, Mass Communications, or Speech Communication. Advertising agencies, book publishers, and institutions such as universities, hospitals, major corporations, and federal agencies which have organizational publications employ creative and technical writers, researchers, and editors. Articles by free lance writers are published in many local and national magazines and newspapers. Although job opportunities in these areas are competitive, students who can express themselves clearly and document their ideas through careful research will receive careful consideration from potential employers.

Grade Policy

Students must maintain a C average in all English courses accepted towards a degree.

UNDERGRADUATE HANDBOOK

Students considering a major or minor in English may obtain the Undergraduate Handbook for English Majors and Minors in the Department of English office.

DEGREE REQUIREMENTS

BACHELOR OF ARTS, ENGLISH — GENERAL PLAN

The major consists of 48 hours in English.

General Education Requirements	72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)	
Requirements for Major in English	48
Language Systems (370, 371, 400, 402, 403)	4
Writing (325, 392, 393, 490, 492, 493)	4
Major Authors (404, 471a,b, 473)	4
Surveys (208, 209, 210, 211, 212)	12
Electives in English (201-499)	24
Foreign Language (one year of same language)	12
Minor	24-28
Additional Electives	28-36
Total	192

Of the 48 hours required in English courses, at least 16 must be in 400-level courses, and no more than 20 hours may be at the 200-level. At least 12 hours must be in English literature courses, and at least 8 hours must be in American Literature courses. Students must maintain a C average in all English courses accepted towards a degree.

DEGREE REQUIREMENTS

BACHELOR OF ARTS, ENGLISH — PRE-PROFESSIONAL PLAN

English majors may choose to enroll in the preprofessional B.A. degree program. This option is strongly recommended for those who anticipate graduate or professional education. The requirements are the same as for the B.A. in English except that students must take two years of a foreign language and English 301. Students are encouraged to take these courses early in their programs. Thus, English electives are reduced by 4 hours, and additional electives are reduced by 12 hours.

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in English 48
Language Systems (370, 371, 400, 402, 403) 4
Writing (325, 392, 393, 490, 492, 493) 4
Major Authors (404, 471a,b, 473) 4
Surveys (208, 209, 210, 211, 212) 12
Criticism (301) 4
Electives in English (201-499) 20
Foreign Languages (two years of same language) 24
Minor 24-28
Additional Electives 20-24

Total 192

Of the 48 hours required in English courses, at least 16 must be in 400-level courses, and no more than 20 hours may be at the 200-level. At least 12 hours must be in English literature courses, and at least 8 hours must be in American Literature courses. Students must maintain a C average in all English courses accepted towards a degree.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, ENGLISH, SCHOOL OF EDUCATION

General Education Requirements ..... 72 or 76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in English 52
A. Language Systems 8
369, 370, 371, 400, 402, 403 (one course must be a grammar course—369, 371, or 400)
B. Expression and Analysis 8
301, 325, 392, 393, 418, 490 (required), 492, 493, 495
C. Literature (at least one course must be in American literature and one in English literature) 24
D. Teacher Preparation 485 (required) 4
E. Electives in English 8
Minor of Approved Supporting Courses 28
Professional Education Courses (see Secondary Education requirements) 37
Electives 3-0

Total 192-193

Of the 52 hours required in English courses, at least 24 must be 400-level courses, and no more than 20 may be at the 200-level. Students must maintain a C average in all English courses accepted towards a degree. Students, in consultation with the Undergraduate Adviser, may use the 28 hours of approved supporting courses to (a) minor in another subject, (b) take additional courses in English, or (c) take courses satisfying State requirements for certification in the fields of speech, journalism, reading, or other appropriate fields.

OPEN MINOR REQUIREMENTS

A 24-hour open minor in English includes courses at the 200 level and above. Courses, of which there must be at least two from the 400 level, should be selected with the approval of the students' advisers and in consultation with the English Department Undergraduate Adviser.

LINGUISTICS MINOR REQUIREMENTS

The minor in linguistics requires a minimum of 24 hours, usually consisting of at least six of the following 300- and 400-level linguistics courses: English 370, 371, 400, 402, 403, 405a,b, 406, 407, 418, and 488a,b. However, students may elect to substitute a maximum of 8 hours from the following courses: English 404, 421; Greek 101, 102, 103, 201, 202, 203; Latin 101, 102, 103, 201, 202, 203. Students should select at least one course in each of the following: phonology (370, 405a), syntax (371, 400, 405b), and historical change (403, 404, 406, 407, 421). Students who major in English may have a minor in linguistics.

CREATIVE WRITING MINOR REQUIREMENTS

The minor in creative writing requires a minimum of 24 hours. Students must choose one of the following programs from the primary sequence: Fiction (English 392, 492, 498) or Poetry (English 393, 493, 498). Elective courses within the minor in creative writing include Television/Radio 359, English 490, 494, 4 additional hours of 498, any 400-level course in

literature, and any 392, 393, 492, or 493 course that is outside the chosen program. A more complete description of the creative writing minor can be obtained at the Department of English office or from the Creative Writing Adviser. Students who satisfy the Creative Writing minor requirements are not required to fulfill the four-hour writing requirement for the B.A. major.

FOREIGN LANGUAGES AND LITERATURE

Professors:
Francis, C. W.; Griffen, T. D.;

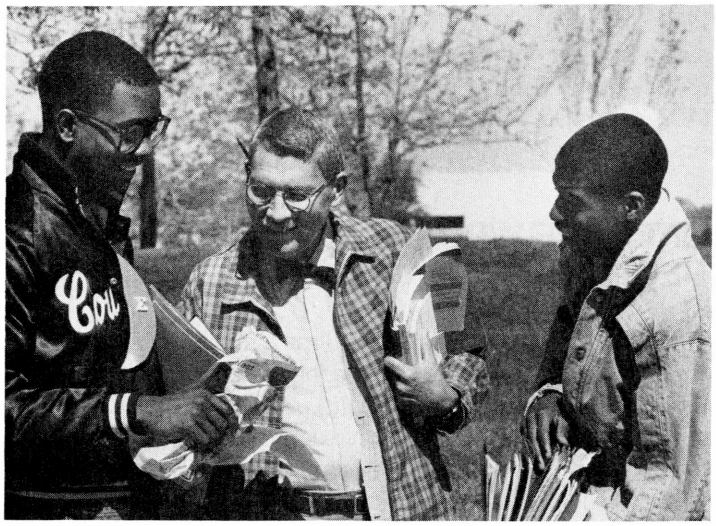
Associate Professors:
Bueno, J. (Chairperson); Romani, L. D.; Zaytzeff, V.

Assistant Professors:
Cassanelli, R.; Fonseca-Downey, E.; Morris, R. L.; Morrison, F. M.

Courses offered by the Department of Foreign Languages and Literature are designed to provide students with important insights into the culture and literature of a foreign country or countries while they develop a fluency in the language. The study of a foreign language, ranging from an introductory sequence through a minor or major concentration, represents an integral part of a broad, internationally enlightened education not only for cultural and scientific applications, but also for increasing the students' employment opportunities and for enhancing their understanding and command of their native language.

The Department offers both major and minor programs in French, German, and Spanish, leading to the Bachelor of Arts degree. It also offers minor programs in Italian and Russian, as well as courses in Latin and Greek.

It is recommended that students who choose a language major also declare an additional major or minor concentration in another discipline, as such a combination may enhance their education and employment opportunities.



CAREER OPPORTUNITIES

There is and will continue to be a demand for men and women who know a foreign language. This need lies in four major areas:

1. International business, including export trade
2. Domestic business, professions, and organizations
3. The federal government
4. Teaching in elementary schools, secondary schools, or colleges in the United States and abroad, in an American or a foreign institution

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, FOREIGN LANGUAGES AND LITERATURE

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in a Foreign Language 48-50 50
203; 301; 302; 303; 351; 352; 353* 28
Electives beyond 203 in a foreign language (and culture) 20-22
Requirements for Minor in a Foreign Language 28
203; 301; 302; 303; 351; 352; 353* 28
Electives 56-54

Total 192

*Eight hours of the series 351-353 will satisfy requirements for General Education.

For both majors and minors in the Department of Foreign Languages and Literature, credit is allowed for only those courses in which grades of C or better are earned.

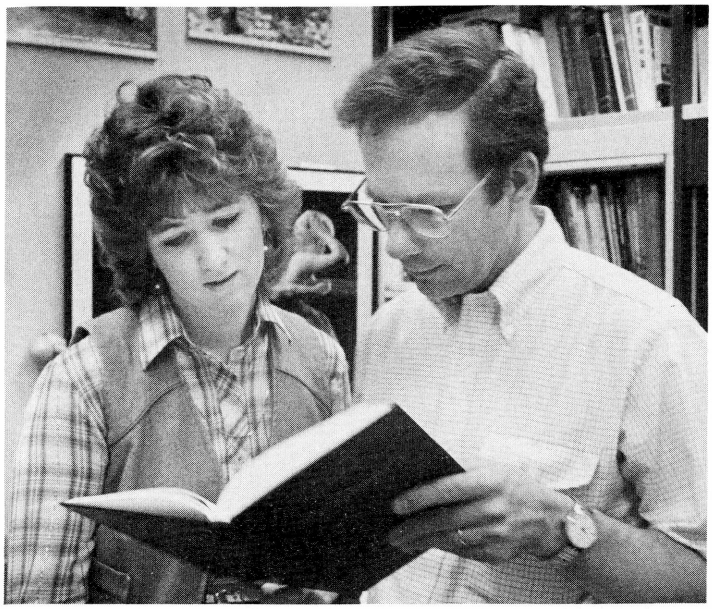
DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, FOREIGN LANGUAGES AND LITERATURE, SCHOOL OF EDUCATION

For this degree, the requirements for a major in foreign languages are 42 hours (exclusive of elementary foreign language courses) in a language plus one English and one history course numbered above 299. See Secondary Education requirements.

MINOR REQUIREMENTS

A minor consists of 24 hours (exclusive of elementary level) in a language.



PHILOSOPHICAL STUDIES

Professors:
Barker, J. A.; Broyer, J. A.; Corr, C. A.; Glossop, R. J.; Hamrick, W. S.; Linden, G. W.; Runkle, G. J. T.; Ruth, S.

Associate Professors:
Danley, J. R.; Emblom, W. J.; Hudlin, E. W.; Keene, C. A.; Kim, S-K.; Lawrence, E. G.; Nabe, C. M.; Paxson, T. D.; Pletcher, G. K. (Chairperson); Simons, M. A.; Wolf, R. G.

Philosophy is the attempt to think carefully and critically about the nature of the world, the significance of life, and what goals we should pursue both as individuals and as a society. Philosophers consider such questions as: What is the nature and what are the limits of the power that society can legitimately exercise over the individual? What makes human life valuable and worthy of respect? Are moral values objective or subjective? Is there a God? If so, what is God's relation to the world? How do we decide whether a given work of art is beautiful? Is there a difference between knowledge and personal opinion? Do human beings have free will? These pursuits also involve inquiring into the reasons we have for our beliefs about these issues. Thus, philosophers are forced to consider the additional problem of what kinds of reasons are good reasons.

The philosophy faculty has nineteen members; all have doctoral degrees. All courses offered by the department are taught by regular staff members.

CAREER OPPORTUNITIES

The value of philosophy lies in its ability to help students grow and develop into more complete persons—persons who have gained an appreciation of what it means to be human beings. Philosophy is relevant to all occupations and professions because it will help those who pursue them to become more sensitive and enlightened persons. Consequently, though some students may not want to major in philosophy, philosophy is a desirable minor for almost everyone.

Philosophy is especially appropriate as a minor for those who plan to enter the professions of teaching, law, medicine, journalism, theology, science, and social service, as well as for all who are or will become parents. Philosophy is an appropriate major for those entering teaching, law, and theology, as well as for those planning various types of government careers—in the Foreign Service, for example, or with the National Institutes of Health. In addition, because of the modest number of hours required for a philosophy major, many students find it convenient to plan a double major, uniting philosophy with such other academic fields as government, English, foreign language, business, computer science, mass communications, and art. For additional information or assistance concerning the philosophy program, check with the Philosophy Department Office.

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, PHILOSOPHY

General Education Requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
Requirements for Concentration in Philosophy	60
Foreign Language (first year: may be used to satisfy Option B General Education Skills requirement)	12
Philosophy 490	4
Three courses in Area I with no historical overlap[1]	12
Two courses in Area II, at least one of which is from the "General" category	8
One course in each of the other Areas	12
Three more philosophy electives	12
Secondary Concentration	30-36
Electives	40-46
Total	192

[1]The following courses overlap historically: 484a overlaps with 385a and 385b; 484b overlaps with 385c; and 484c overlaps with 385d and 385e.

Recommendations: It is strongly recommended that all students elect Philosophy 111 early in their careers. Philosophy 111, Philosophy 115 and Philosophy 120 confer elective hours only, and they count toward the major program only if they are among the first twelve (12) credit hours in Philosophy. If students are seriously contemplating graduate work in philosophy, they should take two years of a foreign language, preferably French or German. Such persons should also take Philosophy 230, 322, 385a, and 385c, as well as at least one of Philosophy 385b, 385d, and 385e.

General Areas Within Philosophy

I. *History of Western Philosophy*
Phil 385 a,b,c,d,e — History of Western Philosophy sequence
Phil 484 a,b,c — History of Western Political Theory sequence

II. *Theory of Value*

General Courses:
Phil 310 Philosophy of Law
Phil 320 Philosophical Conceptions of Woman
Phil 322 Ethics
Phil 342 Social and Political Philosophy
Phil 360 Philosophy of Art
Phil 376 Ethical Systems

Special Courses:
Phil 311 Engineering, Ethics, and Professionalism
Phil 312 Ethics in the Medical Community
Phil 321 Social Philosophies of the Women's Movement
Phil 345 Aesthetics of Film
Phil 388 Communism
Phil 412 Contemporary Issues in Bio-Ethics
Phil 470 Topics in Business Ethics

III. *Metaphysics and Epistemology*
Phil 300 Metaphysics
Phil 301 Philosophy of Religion
Phil 391 Theory of Knowledge

IV. *Logic and Methodology*
Phil 230 Deductive Logic
Phil 283 Philosophy of the Physical Sciences
Phil 284 Philosophy of the Social Sciences
Phil 306 Existentialism and Phenomenology
Phil 307 Pragmatism
Phil 308 20th Century Analytic Philosophy
Phil 430 Symbolic Logic

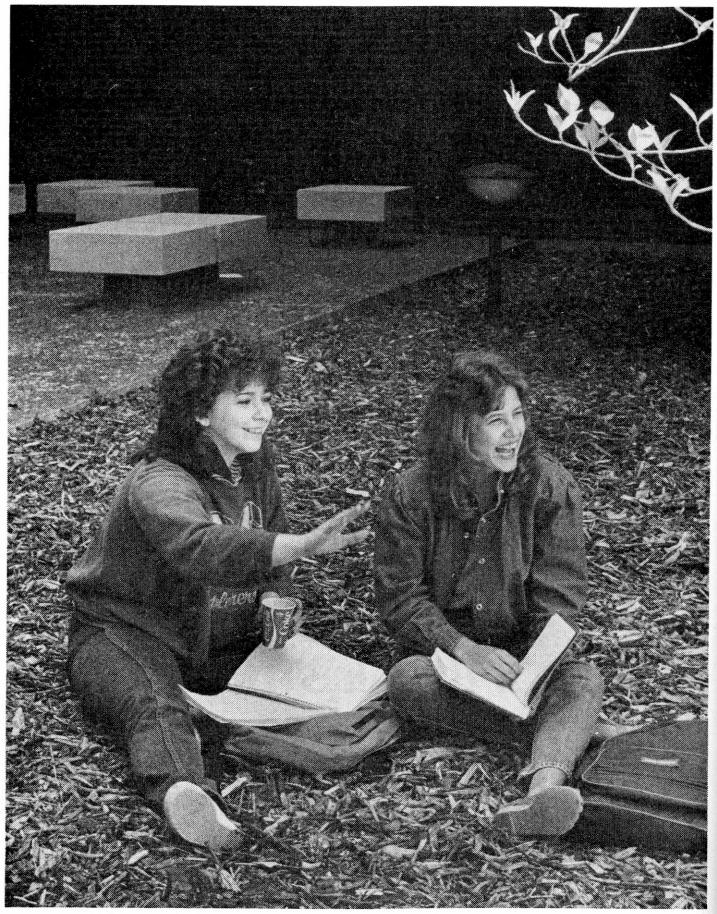
V. *Philosophy and World Culture*
Phil 302 World Religions
Phil 380 Chinese Philosophy
Phil 386 American Philosophy
Phil 402 Hindu Thought
Phil 403 Buddhist Thought

MINOR REQUIREMENTS

A minor in philosophy consists of 24 hours in philosophy courses. Only two of Philosophy 111, Philosophy 115 and Philosophy 120 may count toward the 24 hours.

ACADEMIC STANDARDS

For both majors and minors in philosophy, credit is allowed only for those courses in which the grade earned is C or better.



HUMANITIES HONORS PROGRAM

Each quarter the Humanities Honors Program offers at least one seminar course designed specifically for academically superior students at SIUE. Enrollment is open to all qualified students. Each course is a seminar; enrollment, which is on a first-come, first-served basis, is limited to fifteen students in any one course.

Courses are chosen from broad areas within the humanitias, and each course concentrates intensively upon one major topic or idea. The Humanities Honors Program is offered to qualified students who wish to satisfy or diversify interests in the humanities not met by existing curricula.

Undergraduate students who wish to write an Honors Thesis may do so provided they have a grade point average of 4.25 or better. First, students select a faculty member. Then, the student and the faculty member compose a letter identifying the proposed topic, describing the topic, and specifying the quarter(s) during which the work will be undertaken and completed. The letter is presented to the Coordinator of the Humanities Honors program who, in turn, seeks approval from the chairperson of the faculty member's department. When approval is granted by the chairperson, the student enrolls in Humanities 495, Section 2, Honors Thesis (2-4 hours). Students may take one quarter (two or four hours) or two quarters (two hours each) to complete the thesis. A maximum of four hours credit will be granted for the Honors Thesis.

School of

Nursing

SCHOOL OF

NURSING

PATRICIA FORNI, DEAN

The School of Nursing offers a program of study leading to the Bachelor of Science degree in Nursing. The program is accredited by the National League for Nursing. Faculty in the School have advanced preparation in their clinical area of specialization and are skilled clinical practitioners. Students have the opportunity to work with a number of faculty throughout the program.

Nursing is a dynamic, therapeutic, interpersonal discipline which assists people in maintaining, restoring, and promoting optimal health throughout their lives. The practice of nursing includes assessment, planning, intervention, and evaluation. Professional nursing practice is broad in scope and serves individuals in a multiplicity of settings. Thus, the professional nurse functions in both traditional and non-traditional situations which may require conventional and/or innovative patterns of practice and role behavior.

FACULTY

Professor:
Forni, P. R. (Dean, School of Nursing); Welch, M. J.

Associate Professors:
Bell, D. E.; Boyd, M. A.; de Meneses, M. R.; Gresley, R. S.; Merritt, S. L.; Perry, G.; Ruddy-Wallace, M. W.

Assistant Professors:
Clement, J. M. (Assistant Dean, School of Nursing); Custer, M. S.; McDonnell, B. C.; Mitchell, S. I.; Rumfelt, J. J.; Strader, M.; Sykes, R. K.; Walker, B. B.

Instructors:
Attala, J. M.; AuBuchon, B. L.; Baccus, M. G.; Baier, M.; Baker, S.; Branch, C. A.; Broeder, J.; Buck, E.; Canfield, R. H.; Chaney, J.; Dunning, M. L.; Fadden, E.; Forney, S.; Freed, P. E.; Gaertner, R. M.; Haycraft, L. L.; Headley, R.; Mantych, E. A.; Marshall, F. G.; Milne, S.; Morton, J. A.; Pinnell, N.; Schmidt, C. A.; Steele, R. L.; Vogt-Yanta, M.

CAREER OPPORTUNITIES

Professional nurses are in great demand across the country. Opportunities for employment exist in a variety of health care settings, including hospitals, nursing homes, offices, industry, schools and clinics. Graduates of this program are able to find employment upon graduation. Students have numerous opportunities for part-time employment while attending school.

ADMISSION REQUIREMENTS

The baccalaureate program consists of courses in the arts and sciences, as well as in nursing; nursing courses are concentrated at the upper division level. Foundational courses are available through the General Education program and through other schools in the University. Students are admitted into the School of Nursing every quarter during the academic year. Admission to the University does not guarantee admission into the School of Nursing.

PROVISIONAL ADMISSION OF PRECLINICAL STUDENTS

Students who enter Southern Illinois University at Edwardsville or at Carbondale as freshmen and indicate Nursing as their major will be provisionally admitted to the School of Nursing. Upon completing all prerequisite courses at Southern Illinois University at Edwardsville or at Carbondale with grades of "C" or better and an overall GPA of 3.5 (on a scale of 5.00) or better, the students will be admitted to the School of Nursing.

REGULAR ADMISSION

Students who do not qualify for "Provisional Admission" to the School of Nursing should consult an adviser at (618) 692-3956 for information regarding requirements. Assistance will be provided regarding transfer courses and any prerequisite courses still needed.

Admission criteria for the School include: (1) successful completion of prerequisite courses with grades of "C" or above; (2) a minimum overall grade point average of 3.50 (on a scale of 5.00); and (3) a completed application on file in the School of Nursing by the time deadline.

APPLICATION PROCEDURE

All applicants are encouraged to apply at least three quarters prior to the expected quarter of entrance into the School. Forms for this purpose are available from the School of Nursing. Deadline dates for application are: for fall quarter, December 15 of the previous year; for winter quarter, March 15 of the previous year; for spring quarter, June 15 of the previous year. Late applicants will be considered on a space available basis.

An application is considered complete when the application, official transcripts of all college coursework, the record of current course enrollment, and the most recent cumulative grade point average are in the applicant's file. Applicants are responsible for insuring that their materials are received (Box 1066, School of Nursing) by February 1 for fall admission, by July 1 for winter admission, and by October 1 for spring admission. Applicants' files completed after those dates will be reviewed on a space available basis.

Students who meet admission requirements under the "Provisional Admission of Preclinical Students" policy will be guaranteed admission. Other applicants are accepted from a list of students whose cumulative grade point averages are 3.50 (on a scale of 5.00) or better and who have no grades lower than "C" in any prerequisite courses. Grades of "D" or "E" in prerequisite or nursing courses are not accepted by the School of Nursing. When there are more qualified applicants than can be accepted into the School of Nursing, selective criteria will be

used to rank all qualified applicants. You may contact the School of Nursing for detailed information. Because of limited enrollment in the School, all qualified applicants may not be accepted for a specific quarter; those not accepted are encouraged to reapply for a subsequent quarter.

Transfer students must send a transcript and school bulletin to the School of Nursing for evaluation of transfer prerequisite courses. Transfer students who are Registered Nurses must meet the requirement of an overall grade point average of 3.50 and complete the same course of study required of generic students. Registered Nurses must present proof of licensure upon application. Registered Nurse students must be licensed in the state in which they have their clinical experience as a student (Illinois or Missouri). Early application is *not* required for Registered Nurses.

Nursing courses taken in an NLN accredited baccalaureate level program will be evaluated for transfer. Registered Nurses may receive up to 50 hours of credit by passing the NLN Mobility Profile II tests. Some credit may also be available through CLEP general and/or subject examinations.

Annual physical examinations and specific diagnostic requests are required for all students enrolled in the School of Nursing.

All students are encouraged to seek early advisement in the School of Nursing so that an appropriate program of study can be projected, and so that they can receive additional information relative to School policies.

DEGREE REQUIREMENTS

The baccalaureate program in nursing provides generalist preparation and a foundation for graduate education. Graduates of the program receive a Bachelor of Science degree in Nursing and are eligible to take the State Board Examination for licensure as a Registered Nurse.

Clinical experiences are an integral part of the nursing major. Health care agencies in Southwest Illinois and in St. Louis cooperate with the School in providing opportunities to practice clinical skills.

BACHELOR OF SCIENCE DEGREE, SCHOOL OF NURSING

General Education Option A and
School of Nursing Requirements

Courses (hours)	Meets General Education Requirements	Meets School of Nursing Requirements
LEVEL I		
ANTH 111 (4)[1]	*	*
BIOL 240a (5)[1]		*
BIOL 240b (5)[1]		*
BIOL 250 (4)[1]		*
CHEM 120a (4)[1]	*	*
CHEM 120b (4)[1]	*	*
CHEM 120c (4)[1]	*	*
PHIL 322 (4)[1]	*	*
NURS 170 (4)[1]		*
NURS 201 through NURS 242 (20 total)		*
PSYC 111 (4)[1]	*	*
PSYC 205 (4)	*	*
Nat. Science & Math: Introductory, Elective (4)	*	
ENG 101 (4)[2]	*	*
ENG 102 (4)[2]	*	*
SPC 103 (4)[2]	*	*
STAT 107 (4)	*	*
SOC 111 (4)[1]		*
SOC 440 (4)	*	*
LEVEL II		
IS Interdisciplinary Elective (4)	*	
NURS 301 through NURS 344 (47 total)		*
PSYC 465 (4)		*
PHIL 106 or MATH 106 (4)	*	
Fine Arts & Humanities: Introductory, Elective (4)	*	
LEVEL III		
Fine Arts & Humanities: Introductory, Elective (4)	*	
Fine Arts & Humanities: Advanced, Elective (4)	*	
Electives (7) (or number needed to total 192)		
NURS 401 through NURS 442 (20 total)		*
Total 192		

[1]Satisfactory completion (C or above) of these courses or their equivalent is required for admission to the School of Nursing.
[2]Satisfactory completion of these courses (as defined by the University) is required for admission to the School of Nursing.

General Education Option B and School of Nursing Requirements

Courses (hours)	Meets General Education Requirements	Meets School of Nursing Requirements
LEVEL I		
ANTH 111 (4)[1]	*	*
BIOL 240a (5)[1]		*
BIOL 240b (5)[1]		*
BIOL 250 (4)[1]		*
CHEM 120a (4)[1]	*	*
CHEM 120b (4)[1]	*	*
CHEM 120c (4)[1]	*	*
PHIL 322 (4)[1]	*	*
NURS 170 (4)[1]		*
NURS 201 through NURS 242 (20 total)		*
PSYC 111 (4)[1]	*	*
PSYC 205 (4)	*	*
Nat. Science & Math: Introductory, Elective (4)	*	
ENG 101 (4)[2]	*	*
ENG 102 (4)[2]	*	*
SPC 103 (4)[2]		*
STAT 107 (4)	*	*
SOC 111 (4)[1]		*
SOC 440 (4)	*	*
LEVEL II		
IS Interdisciplinary Elective (4)	*	
NURS 301 through NURS 344 (47 total)		*
PSYC 465 (4)		*
Skills: Option B - Foreign Language (4)	*	
Fine Arts & Humanities: Introductory, Elective (4)	*	
LEVEL III		
Fine Arts & Humanities: Introductory, Elective (4)	*	
Fine Arts & Humanities: Advanced, Elective (4)	*	
Skills: Option B - Foreign Language (4)	*	
Skills: Option B - Foreign Language (4)	*	
NURS 401 through NURS 442 (20 total)		*
Total 193		

[1]Satisfactory completion (C or above) of these courses or their equivalent is required for admission to the School of Nursing.
[2]Satisfactory completion of these courses (as defined by the University) is required for admission to the School of Nursing.

ACADEMIC STANDARDS

The School expects its students to maintain a minimum grade of C in all courses in the nursing major. Students who fail a nursing course will be referred to the Progression and Retention Committee. Students will be excluded from the School for failures in (a) 2 nursing practicum courses or (b) 1 nursing practicum course and 2 nursing didactic or college laboratory courses or (c) 3 didactic nursing or college laboratory courses. No didactic nursing course may be taken more than 2 times. After admission to the School, students must maintain a cumulative grade point average of at least 3.00 (on a five point scale) to continue in the nursing program.

All nursing majors are required to file reports of annual physical examinations and immunizations. Some clinical courses have requirements for specific tests such as X-rays or a nose culture. The Student Handbook for Undergraduate Nursing and the RN Student Handbook issued to students accepted into the School of Nursing contain full details.

SPECIAL COSTS

Students wear a uniform while in clinical practice. Please refer to the Student Handbook for additional information. Additionally, students should be prepared to purchase a variety of health care equipment, such as a stethoscope, bandage scissors, and a watch with a second hand. Certain textbooks used throughout the curriculum must be purchased for the first quarter of the program. These cost approximately $300.00.

Costs for special tests, such as nose cultures required by clinical agencies, are payable to the Bursar.

The School pin, available only at graduation, may be purchased at the University Bookstore for approximately $48.00.

Costs for State Board Examinations should also be anticipated.

Students must provide their own transportation to and from clinical agencies. This requires two trips per week for distances as great as 40 miles from the campus.

School of

Sciences

SCHOOL OF

SCIENCES

DONAL MYER, DEAN

The School of Sciences provides quality education at the bachelor's and master's levels in the major disciplines of Biology, Chemistry, Computer Science, Environmental Studies, Mathematics, Physics and Statistics. The programs are designed to provide a strong basic foundation in the chosen field and to serve as a preparation for many different careers and professional activities. Each department in the School provides one or more programs of specialization, which are described in detail in the following pages. The School also actively strives to serve the needs of local institutions, industries, communities, and governments through continuing education programs and technical cooperation and consultations.

ADMISSION

High school students who plan to major in one of the degree programs in Biology, Chemistry, Computer Science, Mathematics and Statistics, or Physics should complete at least three years of college preparatory mathematics (two years of algebra and one year of geometry) prior to entering college. A fourth year of college preparatory mathematics (to include trigonometry) and one year each of biology, chemistry, and physics are strongly recommended.

Admission to a degree program in the School of Sciences requires declaration of a major by the student in one of the disciplines in the School and acceptance by the department. Once admitted, students are formally affiliated with the department and assigned a faculty adviser. Advisement is mandatory; declared majors are allowed to register each quarter only after course request forms have been approved by the departmental adviser. Because the study of science is progressive, students are encouraged to select their major field of study early in their academic careers in order to insure orderly progress toward meeting degree requirements.

To obtain formal acceptance to a major program in the School, students already enrolled in the University must have a minimum grade point average (GPA) of 3.00 in science and mathematics courses completed and also a GPA of 3.00 or higher in all courses taken at SIUE. Transfer students should meet similar minimal requirements. In addition, students may have to satisfy other special requirements established by the departments.

ACADEMIC STATUS

1. Students should show satisfactory academic progress in order to be retained in a program. Students may be dropped from the program in any one of the following circumstances:

a) GPA of 2.00 or less in any quarter;
b) Cumulative GPA of less than 3.00 in the major at any time;
c) Withdrawal, incomplete, and/or failing grades in 50% or more of the credits for which the student is registered during two successive quarters;
d) Any combination of three withdrawal, incomplete, or failing grades in any single required course in the major discipline;
e) failure to satisfy any other requirement established by the major department.

For readmission, students must meet the same admission requirements as students entering the programs for the first time.

GRADUATION REQUIREMENTS

The following requirements must be met in order to graduate from the School:

a) a minimum of 192 quarter hours of acceptable credit with an overall GPA of 3.00 or higher;
b) a minimum of 48 hours of credit in one major with a GPA of 3.00 or higher;
c) at least 16 hours of SIUE credit in major courses numbered above 299 with a GPA of 3.00 or higher;
d) a GPA of 3.00 or above in all major courses numbered above 299;
e) at least 9 hours of credit in major courses numbered above 299 earned at SIUE within 2 years preceding graduation.

Duplicate credits of the following types are not applied towards the graduation requirements: credit hours earned (through proficiency, transfer, CLEP, or from a course) after credit has been received for similar or more advanced course work in the same subject at SIUE or elsewhere.

Candidates for the Bachelor of Science degree in education with a major in the School of Sciences should meet the same GPA requirements as other degree candidates and earn either a minimum of 48 hours of credit in the major discipline *or* a minimum of 36 hours in the major area plus two 27 hour minors in other fields of study.

ADDITIONAL ACADEMIC OPTIONS

a) Double majors: Interested students may pursue a double major by completing the major requirements in two disciplines. However, the same hours of credit may not be applied to satisfy the major requirements of two departments.

b) BS/MS option: Undergraduates with exceptional academic credentials may be able to earn both the bachelor's degree and the master's degree in biology in 5 years of study. Admission to this program is based on departmental recommendation to and approval by the Graduate School. Students who are interested in this program should seek advice from their faculty advisers early in their junior year.

MINOR REQUIREMENTS

A minor within the School must include at least 27 hours of credit with a GPA of 3.00 or higher of which at least 8 hours must be SIUE credit. Specific requirements are listed by department under the heading Minor.

BIOLOGICAL SCIENCES

Professors:
Axtell, R. W.; Baich, A. (Chairperson); Keating, R. C.; Kulfinski, F. B.; Levy, M. R.; Myer, D. G. (Dean, School of Sciences); Thomerson, J. E.; Wittig, G. C.; Zahalsky, A. C.

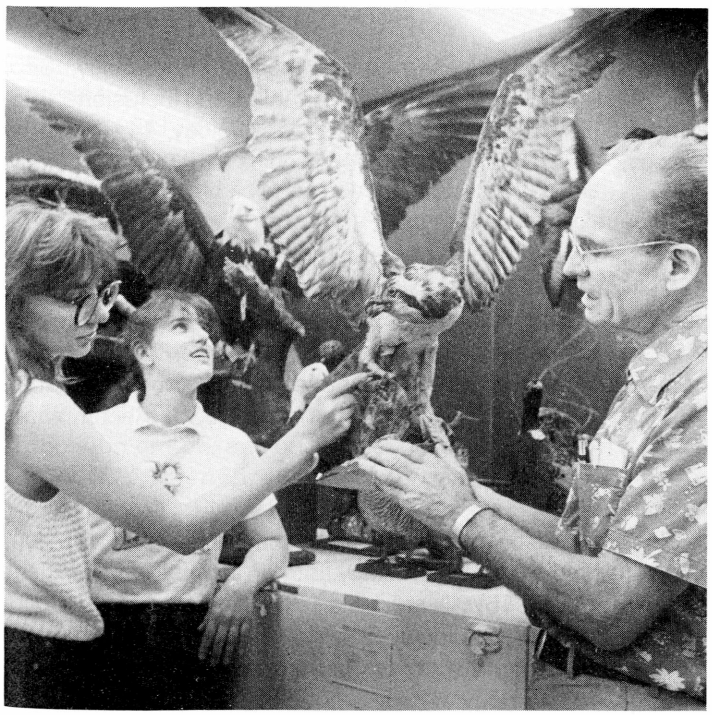
Associate Professors:
Brugam, R. B.; Eder, D. J.; Nair, P. S. (Dean, University College); Parker, N. R.; Ratzlaff, K. O.

Assistant Professors:
Kitz, D. J.; McCommas, S. A.; Wanda, P. E.

Adjunct Faculty:
Bobowski, S. J., Professor, Med Tech; Hoegl, E., Instructor, Med Tech; Lampman, M., Instructor, Med Tech; Soto, P., Professor, Med Tech; Torrey, J., Asst. Professor, Med Tech; Van Fossan, D., Professor, Med Tech; Visintine, J., Instructor, Med Tech; Wilner, G. D., Professor, Med Tech.

Biology includes the whole domain of living things: patterns of cellular structure, the underlying biochemical pathways, anatomy and function of whole organisms, the mathematical predictability and molecular basis of inheritance, the flow of energy and matter through living systems, the regulation and interaction of basic life processes, the universality of adaptation, and the interdependence of the biosphere. Like all sciences, biology is both cumulative and open-ended in its discoveries. It teaches the wonders of life, the excitement of discovery, and the challenge of the unknown.

Students who are curious about living things—how they function or how they relate to their environment—may want to study biology.



CAREER OPPORTUNITIES

Many careers are available for people with basic or advanced training in biology. There are opportunities in botany, dentistry, ecology, environmental biology, fisheries biology, genetics, genetic engineering, horticulture, immunology, medicine, medical technology, microbiology, molecular biology, parasitology, physiology, wildlife management, and zoology. Technical and supervisory positions are available in federal, state, industrial and university laboratories. Environmentally-related and health-related occupations almost always require a sound basic training in biology. A majority of students entering schools of medicine, dentistry, optometry, osteopathy, veterinary science, chiropractic and podiatry are biology majors. Basic training in biology is also essential for careers in allied health sciences, including nutrition, pharmacy, occupational therapy and physical therapy.

SPECIALIZATIONS IN BIOLOGICAL SCIENCES

The Department of Biological Sciences offers four specializations or options for a Bachelor of Arts or Science degree in Biology. These are: a) specialization in Biology; b) specialization in Ecology; c) specialization in Medical Science; and d) specialization in Medical Technology. Brief descriptions of these specializations along with the academic requirements for each are given below. The programs are sufficiently flexible to allow students to change from one specialization to another should their goals and interests change.

ADVISEMENT

Students interested in majoring in one of the options in biology are advised to declare their major *as early as possible* and to consult with a biology adviser without delay. At the time of declaration, students are informed in writing of advisement procedures and of the names of the faculty advisers assigned to them. Students are required to consult their advisers prior to registration each quarter. Enrollment in biology courses requires prior approval of the adviser. Biology, particularly specializations in Medical Sciences and Medical Technology, requires a definite time sequence if the course requirements are to be completed in four years. Appointments for advisement may be made by calling the Biology Office at 692-3927.

The adviser will be pleased to assist the student in preparing a Program of study in biology with any one of four specializations.

ACADEMIC REQUIREMENTS

A. Academic Standards

All students pursuing a major in the biological sciences must adhere to the following academic standards *in addition to those listed for the School of Sciences.*

1. A grade of C or better is required in the introductory biology courses (112 and 113 or the equivalent) before a student can proceed into any of the courses numbered above 199.
2. No more than 5 hours of D may be counted in the 56 hours that are required for a major in the biological sciences.
3. The GPA in the major will be based on all courses attempted for the major.

B. Residency and Other Requirements

Majors in the biological sciences must complete at least 24 of the required hours in biology at SIUE. At least two 400-level courses must be included in the 24 hours. Students may take as many as 8 hours of 491 and 493 together as electives but these will not fulfill the 400-level requirements. For graduation, all specializations require 48 hours in biology beyond the introductory level. Credit for a biology major will be awarded for courses cross-listed with the biology curriculum. One year of a foreign language is required for the B.A. degree in all specializations.

Students seeking a minor in the biological sciences must complete at least 12 of the 27 hours in biology at SIUE. Students seeking a minor in biology and other students whose program requirements do not include Chemistry 125 may substitute Chemistry 120 for enrollment in any biology course for which Chemistry 125 is listed as a prerequisite.

DEGREE REQUIREMENTS

Biology Specialization

The curriculum in this program is designed to provide a firm basis in biological sciences for students with a variety of aims. It is an attractive major for students planning to enter graduate school or to pursue careers in biological research or in applied work in such areas as agriculture, conservation, wildlife management, etc. Students in this program may elect to concentrate in such specific subdisciplines as Botany, Microbiology, Physiology, Cellular and Molecular Biology, Genetics, and Zoology by completing their electives through courses in these areas. Some subdisciplines require Chemistry courses beyond the minimum requirement. Courses available in each subdiscipline are listed at the end of this section.

BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCES

General Education Requirements

The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4-hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Biology Requirements	56
112, 113, 220, 331 and any two of 270, 280, 350	28
Electives	28
Elective courses may be chosen from any Biology courses permitted for major credit. Electives must include three lecture courses at the 400 level.	
Chemistry Requirements	14-28
Minimum: 125a,b; 126a,b;, 120b	14
Recommended: 125, 126, 241, 245a,b	28
Mathematics/Physics Requirements	16-19
MSCS 150 and PHYS 111, or Physics 206 (or 211 and 212)	12-15
A course in statistics	4
Electives	50-29
Minimum Required	192

Subdiscipline Electives

Botany: Electives available include: Plants and Environment, 461; Economic Botany, 477; Topics in Plant Physiology, 472; Plant Anatomy, 475; Plant Microtechnique, 417; Field Botany, 470; Phycology, 471.

Microbiology: Electives available include: Introduction to Microbiology, 350; Immunology, 335; Diagnostic Microbiology, 351; Microbial Physiology, 454; Virology, 455; Microbial Pathogenesis, 451; Microbial Genetics 452; Phycology, 471.

Physiology: Electives available include: Physiology, 340; Microbial Physiology, 454; Cell Organelles and Inclusions, 436; Mammalian Physiology, 441; Neurophysiology, 444; Endocrinology, 445; Psychobiology, 448; Topics in Plant Physiology, 472.

Cellular and Molecular Biology and Genetics: Electives available include: Molecular Biology, 430; Microbial Physiology, 454; Techniques in Cell and Tissue Culture, 415; Cell Organelles and Inclusions, 436; Human Genetics, 421; Microbial Genetics, 452; Endocrinology, 445; Immunology, 335; Recombinant DNA, 418.

Zoology: Electives available include: Functional Morphology of Vertebrates, 324; Embryology, 325; Principles of Parasitism, 482; Ethology, 467; Mammalian Physiology, 441; Endocrinology, 445; Field Zoology, 480; Principles of Entomology, 483; Ichthyology, 485; Herpetology, 486; Ornithology, 487; Mammalogy, 488; Biology of the Primates, 489.

Ecology Specialization

The recent rapid advances in technology combined with growing awareness of the impact of human activity on the environment have resulted in the development of broad teaching and research areas in biological ecology.

Ecology is the study of interactions between living organisms and their environment. Ecology integrates biological disciplines through the study of individuals, populations, communities, and ecosystems. This area of study has both academic and practical importance for students; it stimulates their intellectual curiosity while providing them with increasing knowledge and new techniques to insure the health, productivity, and diversity of the biosphere.

The Ecology Specialization within the Biological Sciences Bachelor's Degree Program will prepare students for positions which require application of ecological principles and processes to those activities which are environmentally responsive.

Students selecting this specialization will take a planned sequence of which includes basic courses in 1) ecological principles; 2) aquatic ecosystems; and 3) terrestrial ecosystems. In addition, a variety of elective support courses is also available, and students may choose to take an emphasis in various areas of ecology, such as plant ecology, animal ecology, or physiological and biochemical ecology. Students may obtain more information about various emphases within the specializations from their advisers.

DEGREE REQUIREMENTS

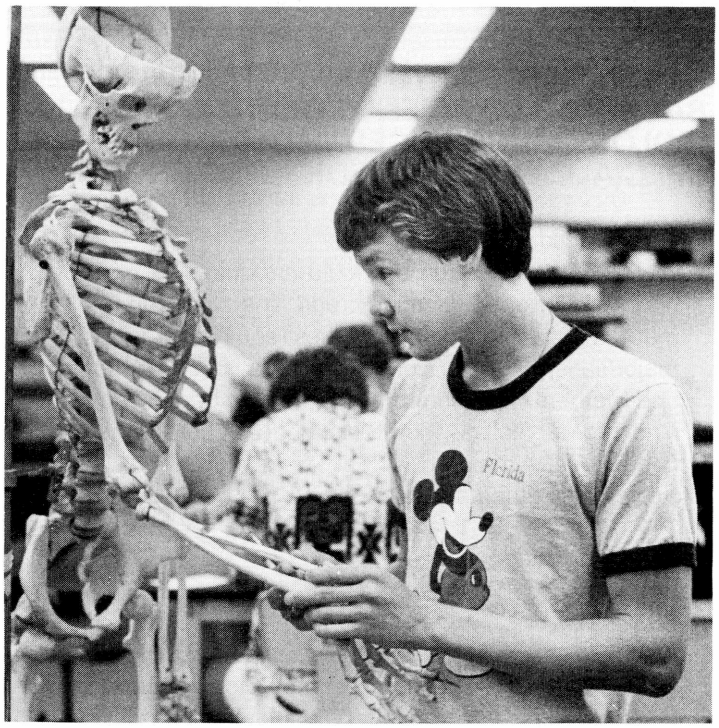
BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCES WITH A SPECIALIZATION IN ECOLOGY

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathamatics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Biology Requirements 56
112; 113; 220; 331; any two of 270, 280, 350; 365; 465 or 466; and one additional course from 460, 461, 465, 466, 470, 480 40
Electives 16
Electives may be chosen from any Biology courses permitted for major credit. Electives must include one additional lecture course at the 400-level. Particularly appropriate electives include alternates to courses chosen above as well as 467, 471, 472, 477, 483, 485, 486, 487, 488, 489.

Chemistry Requirements 18-28
Minimum: 125a,b; 126a,b; 120b,c 18
Recommended for minor: 125, 126, 241, 245a,b .. 28
Mathematics/Physics Requirements 26-27
MSCS 150 8
Physics 206 or 211 and 212 14-15
A course in statistics 4
Electives
(a course in computer language is recommended) ... 36-21

Minimum Required 192



Medical Sciences Specialization

The Medical Sciences Specialization, a pre-health professions curriculum, will prepare students for entry into Medical, Dental, Veterinary, Optometry, Osteopathy, Chiropractic, and Podiatry schools, as well as into many other allied health programs.

Students considering a health-related profession should demonstrate above-average ability in the natural sciences. These individuals should also exhibit traits commonly associated with health practitioners, e.g., persistence, curiosity, good judgment, initiative, emotional maturity, and attention to details. Pre-dental students should also have or develop good manual skills and the ability to make acute judgments on space and shapes.

The biology program described below is designed to provide students with a rigorous course of study which will satisfy the entrance requirements of professional schools, as well as to award students a B.S. degree either at the end of the four year program, or in the case of early admission, at the end of the first year of professional school (see below).

Students declaring the Medical Science Specialization will be advised by a Biology/Medical Science adviser with regard to their academic curricula. Since professional schools adhere rigidly to their entrance requirements and since there is a definite time sequence for completion of these requirements, students in this specialization should seek advisement early to insure satisfactory progress.

The Chief Health Professions Adviser maintains a centralized evaluation service to aid the students seeking entry into professional schools during the application process. The adviser is available in the Biology Department to help and advise such students with regard to application procedures.

DEGREE REQUIREMENTS

BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCES WITH A SPECIALIZATION IN MEDICAL SCIENCE

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Biology Requirements 56
112, 113, 220, 331, any two of
270, 280, 350; any three of
340, 324 or 325, 332 or 430,
335, 337 41-47
Electives 9-15
Electives may be chosen from any Biology courses permitted for major credit. Particularly appropriate electives include alternates to courses chosen above as well as 412, 421, 441, 445, 451, 454, 455. Three lecture courses at the 400-level are required; completion of 430 counts as two.

Chemistry Requirements 26-28
Minimum: 125, 126, 241, 245a (Addition of 245b recommended for a minor)

Mathematics/Physics Requirements 22-23
MSCS 150 8
Physics 206, or 211 and 212 14-15

Electives 32-25

Minimum Required 192

Students admitted to professional school at the end of the junior year may substitute transfer credit earned during the first year of professional school for any 48 hours of biology or general electives. In such cases, students earn degrees at the end of the first year of professional school subsequent to their application for graduation and the University's receipt of their first year's transcripts.

Medical Technology Specialization

This degree specialization is designed for those students who wish to become Medical Technologists certified by the American Society of Clinical Pathologists (ASCP). Medical technologists should have a firm understanding of the theory behind the diagnostic tests which they perform in the clinical laboratory. Their responsibilities encompass all of the clinical laboratory disciplines, such as clinical chemistry, urinalysis, hematology, serology, immunology, blood and organ banking, microbiology, parasitology, and nuclear medicine. As self-motivated, inquisitive scientists, medical technologists contribute to the development of new methods and laboratory instrumentation which aid the physician in the prevention and cure of disease. Most medical technologists are employed in hospitals, but private laboratories, physicians' offices, governmental agencies, industrial and pharmaceutical laboratories, and university research programs offer increasing opportunities for employment and advancement.

The American Medical Association's Council on Medical Education, the American Society of Clinical Pathologists (ASCP), and the American Society for Medical Technology collaborate in determining minimum standards for educational programs for medical technologists. The first three years of the program take place on the SIUE campus. During this time, students fulfill general education requirements and master fundamental knowledge and skills in biology, chemistry, physics, and mathematics. The fourth year of clinical/professional study takes place in a clinical laboratory setting at any one of our affiliated hospital schools of medical technology. Acceptance to this last year of study is on a competitive basis and is not guaranteed to individual students in the program. Students enroll at SIUE for fifty-five hours of credit during the clinical year. The credits are earned through courses in blood banking, chemistry, coagulation, hematology, microbiology, mycology, parasitology, serology, urinalysis, and other subjects as specified in the agreement with each hospital affiliate. Students are awarded the Bachelor of Science in Biology/Medical Technology degree by SIUE upon successful completion of all four years of this program. At this time students are eligible to apply for examination by the Board of Registry of the American Society of Clinical Pathologists and, if successful, are certified as MTs (ASCP).

Students in this program should seek advisement early in their academic careers from the Biology/Medical Technology adviser because there is a specified time sequence for the completion of requirements. Careful scheduling is essential to completion of the on-campus academic portion of the program in three years.

DEGREE REQUIREMENTS

BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCES WITH A SPECIALIZATION IN MEDICAL TECHNOLOGY

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Biology Requirements 45
112, 113, 220, 331, 350, 270 or 280, 335, 340 37-42
Electives 3-8
Electives may be chosen from any Biology courses permitted for major credit. Particularly appropriate electives include 332 or 430, 337, 351, 412, 441, 445, 451, 455, 482.

Chemistry Requirements 31
125, 126, 241, 245a, 335 31
Mathematics/Physics Requirements 13-17
Phys 111, MSCS 120 9
A course in statistics or MSCS 150 4-8

Clinical Education at Hospital School of Medical Technology (495) 55

Minimum Required 200-208

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, BIOLOGICAL SCIENCES, SCHOOL OF EDUCATION

For this degree the requirements for a major in biology are as listed above, under Bachelor of Arts degree, with the following exceptions: no foreign language is required and a minimum grade of C is required in each of the following courses: 112, 113, 220, and 331, and any two of 270, 280, and 350. An overall biology grade point average of 3.2 is required for entrance into the program and for student teaching approval. (For more details, see Secondary Education requirements.)

COMBINED BACHELOR OF SCIENCE AND MASTER OF SCIENCE PROGRAM

Seniors with a grade point average of 4.0 or better, with approval of the Graduate Committee in Biology and the Dean of the Graduate School, may pursue graduate work while completing the baccalaureate degree. It is expected that both degrees could be completed within five years under this arrangement.

MINOR REQUIREMENTS IN BIOLOGICAL SCIENCES

Students wishing to complete a minor in the biological sciences must take a minimum of 27 hours of biology courses, at least 12 of which must be completed at SIUE.

Courses must include the following:

1) Biology 112, 113, or equivalent, and Biology 220
2) One of Biology 331, 340, or 350 and one of Biology 270 or 280; 240(10) may be substituted for 340(5), but only 5 hours will count toward the minor.
   All the courses in this group have a chemistry prerequisite. Consult the biology adviser for details.
3) Electives: The remaining hours may be completed with any courses in the biological sciences except 491, 493, and 494. No more than 4 hours may be counted from 202, 203, 204, 205, 206, 207. (Biology 111 may not be used for minor credit.)

CHEMISTRY

Professors:
Bouman, T. D.; Firsching, F. H.; Jason, E. F. (Chairperson); Matta, M. S.; Patrick, T. B.; Rands, D. G.; Spencer, J. A.; White, J. E.; Wilbraham, A. C.

Assistant Professors:
Carter, V. B.; Khazaeli, S.; McClure, J. R.

Students who want to major in chemistry, or think that they may, should visit or call the Department of Chemistry (Science Laboratory Building, Room 2325; telephone 692-2042) as early as possible. They will be assigned to a faculty adviser, who will help them plan an academic program. Early advisement will enable students to complete their programs with minimum conflicts and within the shortest possible time.

CAREER OPPORTUNITIES

The undergraduate chemistry curriculum prepares students for a variety of careers. Many chemistry majors choose to continue their studies with graduate work in chemistry or biochemistry.

Others enter schools of medicine, dentistry, veterinary medicine, or pharmacy. Still others begin careers in industry.

Other opportunities to make significant contributions to society are available to chemistry graduates who have additional training in fields such as computer science, ecology, economics, law, library science, marketing, medicine, and technical writing.

DEGREES AND SPECIALIZATIONS

The Department of Chemistry offers Bachelor of Science and Bachelor of Arts degrees. The B.S. curriculum satisfies the guidelines of the American Chemical Society (ACS) for the training of professional chemists, and all graduates with this degree will be certified by the ACS as having completed an approved program. The B.A. curriculum has fewer chemistry requirements than the B.S. curriculum in order to accommodate a variety of student goals. Three specializations are available: (a) a very flexible program, which gives a general introduction to chemistry, and which is supplemented by electives in chemistry or other fields; (b) a more structured program, which provides preprofessional training for the medical science professions; and (c) a program which leads to certification for teaching high school chemistry. Requirements and courses may change; advisers will have the most recent information. The degree requirements which follow are in addition to the graduation requirements of the University and the School of Sciences.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, CHEMISTRY - AMERICAN CHEMICAL SOCIETY (ACS) APPROVED

The B.S. degree does not require a minor.

General Education Requirements

The General Education Curriculum requires 72 or 76 hours of General Education credit. This degree requires 76 hours of General Education credit. A total of 32 of these hours, including Option B, is satisfied by required courses: Foreign Language (12), Natural Science and Mathematics (16), and Computer Science (4).

Foreign Language Requirement 12

Chemistry Requirements 62-64

- Chemistry 125a, b, c 12
- Chemistry 126a, b, c 3
- Chemistry 241a, b, c 9
- Chemistry 245a, b 4
- Chemistry 335 5
- Chemistry 345 3
- Chemistry 361a, b, c 9
- Chemistry 365a, b 4
- Chemistry 411 4
- Chemistry 432a 4
- Chemistry 451a[1] 3
- Chemistry Elective[2] 2-4

Mathematics Requirements 20

- Mathematics 150a, b 8
- Mathematics 260a, b 8
- Computer Science 170, 172, *or* 270a 4

Physics Requirements 14

- Physics 211a, b, c 12
- Physics 212a, b 2

Electives (must include one science course) 40-38

Minimum Required 192

[1]Biology 332 (4) or Biology 430a (3) may be substituted for this course.

[2]Chemistry 396 or a chemistry course at the 400 level.

BACHELOR OF ARTS DEGREE, CHEMISTRY - BASIC SPECIALIZATION[1]

General Education Requirements

The General Education Curriculum requires 72 or 76 hours of General Education credit. This degree requires 76 hours of General Education credit. A total of 28 of these hours, including Option B, is satisfied by required courses: Foreign Language (12), and Natural Science and Mathematics (16).

Foreign Language Requirement 12

Chemistry Requirements 53

- Chemistry 125a, b, c 12
- Chemistry 126a, b, c 3
- Chemistry 241a, b, c 9
- Chemistry 245a 2
- Chemistry 335 5
- Chemistry 361a, b, c, 365a, b[2] 10-13
- Chemistry Electives 12-9

Mathematics Requirements 8

- Mathematics 150a, b 8
- Physics Requirements ..... 12 or 15
- Physics 211a, b, c or 206a, b, c ..... 12 or 15

Approved Supporting Courses or Minor 16-27

Electives

(may include science and/or chemistry courses) 43-29

Minimum Required 192

[1]Students may take a minor or they may take a group of courses from more than one department which will support their major educational and career objectives. If they choose the second alternative, the program must include at least four supporting courses that total at least 16 hours of credit; the physics and mathematics courses required for the B.A. program do not count as supporting courses.

[2]Credits in this group must total at least 10 hours.

BACHELOR OF ARTS DEGREE, CHEMISTRY - MEDICAL SCIENCE SPECIALIZATION[1]

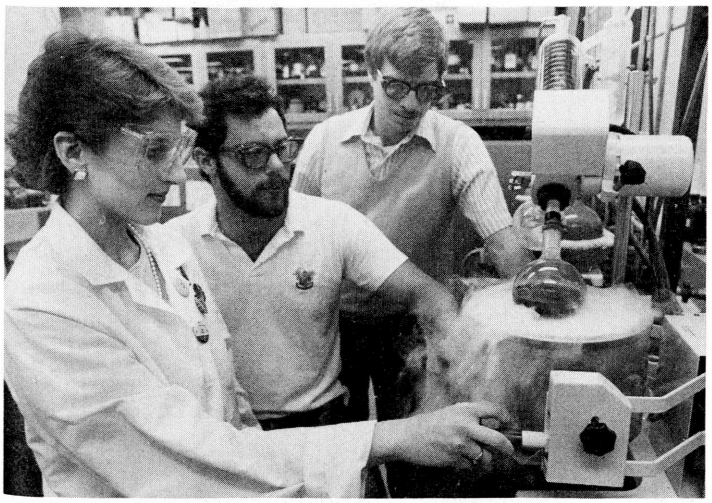
General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. This degree requires 76 hours of General Education credit. A total of 28 of these hours, including Option B, is satisfied by required courses: Foreign Language (12), and Natural Science and Mathematics (16).

Foreign Language Requirement	12
Chemistry Requirements	49
Chemistry 125a, b, c	12
Chemistry 126a, b, c	3
Chemistry 241a, b, c	9
Chemistry 245a, b	4
Chemistry 335	5
Chemistry 451a[2]	3
Chemistry 361a, b, c, 365a, b[3]	10-13
Chemistry Electives	3-0
Mathematics Requirements	8
Mathematics 150a, b	8
Physics Requirements	12 or 15
Physics 211a, b, c or 206a, b, c	12 or 15
Biology Requirements	12
Biology 101	4
Biology 331	5
Biology Electives	3
Electives (additional Chemistry and Biology recommended)	51-48
Minimum Required	192

[1]Students admitted to a medical school at the end of their junior year may transfer appropriate medical school credits to complete the requirements for a degree in chemistry from SIUE.

[2]Biology 332(4) or Biology 430a(3) may be substituted for this course.

[3]Credits in this group must total at least 10 hours.



BACHELOR OF ARTS DEGREE, CHEMISTRY-SECONDARY EDUCATION[1] SPECIALIZATION

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. This degree requires 76 hours of General Education credit. A total of 28 of these hours, including Option B, is satisfied by required courses: Foreign Language (12), and Natural Science and Mathematics (16).

Foreign Language Requirement	12
Chemistry Requirements	47
Chemistry 125a, b, c	12
Chemistry 126a, b, c	3
Chemistry 241a, b, c	9
Chemistry 245a	2
Chemistry 335	5
Chemistry 361a, b, c, 365a, b	10-13
Chemistry 245b or 311 or 451a	2-3
Chemistry Electives	4-0
Mathematics Requirements	8
Mathematics 150a, b	8
Physics Requirements	12 or 15
Physics 211a, b, c or 206a, b, c	12 or 15
Professional Education Requirements	47
Secondary Education 215	4
Education 305	4
Education Foundations 380	4
Secondary Education 401b or Secondary Education 315 plus elective	9
Secondary Education 401c or Secondary Education 352	16
Special Education 400	4
Health Education 201	3
Physical Education	3
Electives	18-15
Minimum Required	192

[1]Scheduling for the third and fourth years involves coordination between the chemistry and secondary education departments. Students should contact the Department of Chemistry undergraduate adviser for specific program details.

MINOR REQUIREMENTS

A minor in chemistry normally includes Chemistry 125a, b, c, 126a, b, c, and additional chemistry courses at the 200 level or higher to total at least 27 hours; at least 8 hours must be taken at SIUE. Chemistry 115 is not acceptable for a minor. Students must obtain written approval from the Chairperson of the Department of Chemistry for a minor program which does not include Chemistry 125a, b, c and 126a, b, c. This approval should be requested early in the program planning.

COMPUTER SCIENCE

Professors:
Bennewitz, W. C.; Hattemer, J. R. (Acting Chairperson); Isaacson, J. D.; Livingston, M. L.; Peterson, G. E.; Stephen, G. G.

Associate Professor:
Verderber, N. L.

Assistant Professors:
Wu, T.; Xu, C. W.

Computer science is concerned with the study of computers and related phenomena, in particular, algorithms, programs, and programming. A major objective is the production of solutions to technological problems using knowledge of the properties and applicability of current computing technology. An equally important objective of the discipline is the formulation of a systematic body of knowledge, theories, and models to explain the properties of computer-related phenomena. Unlike the natural sciences, computer science studies objects and systems that are artificial. The objects and systems can be modified by the scientist, which is both a problem and an advantage. As computer systems often exhibit extremely complex structure and behavior, techniques for quantifying and managing complexity are central to computer science.

Computer science borrows heavily from mathematics, using analysis and reasoning techniques, but it is not exclusively a formal quantitative field. The problem-solving applications of the discipline and the need to produce practical systems suitable for human use give some work of computer scientists affinities with engineering: they must use design and modeling techniques from engineering and be able to evaluate alternative solutions on the basis of criteria such as cost and efficiency.

An academic program in computer science must have lasting value despite changes in technology and applications of the technology. The goal is to prepare students for a profession where change will be a constant feature. This is accomplished by providing a solid conceptual foundation in the context of current applications. However, the ability to grow and change requires more than just technical expertise. Writing skills, mathematics skills, and a sound general education in the basic sciences and the humanities are critically important if one is to have the capacity and perspective to live with and control change. Because computer technology has a significant impact on many lives, computer science professionals must also understand the societal context of their work so that they can make informed, responsible technical decisions.

Students declaring computer science as a major or minor should familiarize themselves with the regulations of the School of Sciences. These specify the grade point average requirements of the School and the minimum conditions a student must meet to pursue a degree program in the School.

Please note that most of the courses in this department have other courses as prerequisites. Before enrolling in a course in computer science, students should complete the prerequisite(s) with a grade of C or higher. A grade of D in a prerequisite course implies inadequate preparation to continue to the next course.

CAREER OPPORTUNITIES

The outlook for persons with bachelor's degrees in computer science remains good. While the number of persons obtaining this degree has risen dramatically, the areas of application have also been expanding rapidly, maintaining the demand.

Departmental advisors can provide information about career possibilities in computer science and can suggest elective courses and minors that would be appropriate to various career goals and interests, including the intention to pursue graduate studies.

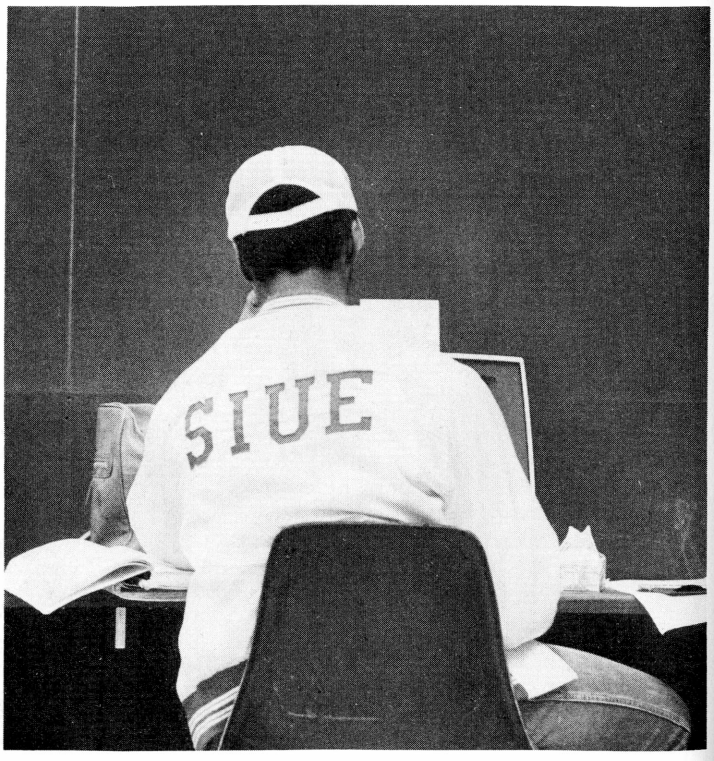
DEGREE REQUIREMENTS

The Department of Computer Science offers a program leading to the Bachelor of Arts or Bachelor of Science degree with a major in Computer Science.

In order to be admitted to the computer science program, students must satisfy the requirements for admission to a program in the School of Sciences and must satisfy one of the following:

1. Complete MATH 125 or a mathematics course having MATH 125 as a Prerequisite (or an equivalent course at another accredited institution of higher education), have a GPA of 3.0 or higher in all college mathematics courses, and have a GPA of 3.0 or higher in all college courses taken.
2. Complete, in high school, seven semesters of college preparatory mathematics including a course in trigonometry, have no semester grade lower than a C in those courses, and have an ACT composite score of 23 or higher.

Students who do not qualify for admission to the computer science program but hope to seek admission later are encouraged to obtain advice from a faculty member in the department.



BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, COMPUTER SCIENCE

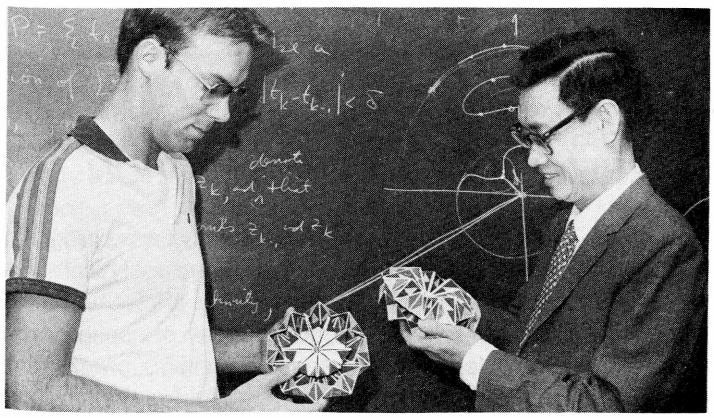
General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Computer Science Core Requirements 270, 311, 361, 411, 431, 443, 451, 453	48
Computer Science Electives Selected from 415, 424, 436, 446, 465a, 478, 481	8
Supporting Mathematics/Statistics Courses Math 150, 260a, 223, 321, 323, Stat 380	28
Supporting Science Courses Either Physics 211, 212 or Chemistry 125, 126	14-15
Electives	37-38
Minimum Required	192

The supporting mathematics courses required for the computer science major satisfy the requirements for a minor in mathematics. Therefore, students who complete the computer science major will have completed a minor in mathematics provided they meet the grade point average and residency requirements of the minor.

MINOR REQUIREMENTS

The minor in computer science must include CS 270, CS 311, and two additional courses selected from the computer science core and computer science elective pool (see the description of the computer science major for a listing of these courses). The residency and grade point average requirements of the School of Sciences must be met.



MATHEMATICS AND STATISTICS

Professors:
Clemans, K. G.; Cooper, M. W.; Garder, A. O.; Ho, C.; Lazerson, E. E. (President); Livingston, M.; Pendergrass, R. N. (Chairperson); Phillips, P. H.; Steinberg, D. I.; Wilson, H. K.

Associate Professors:
Holden, L. S.; Pal, A.; Verderber, N. L.

Assistant Professors:
Feldman, M.; Karimpour, R.; Rigdon, S. E.; Shiue, W. K.

Mathematics, the "queen of the sciences," is both a language and a science. As a language, mathematics is used to translate relationships within our universe into mathematical expressions and equations, that is, into mathematical models. The importance of mathematics in this regard was emphasized by Galileo more than three centuries ago when he said that "the laws of nature are written in the language of mathematics." Throughout history, mathematics has played an extremely important role in the efforts of the human race to understand the world and to control the environment. As a science, mathematics is concerned not only with computation but, more importantly, with the study of relations, interdependencies, and inferential structure. It is a rapidly growing field of study, concerned with problems from within mathematics and from the other sciences, the social sciences as well as the natural sciences. Consequently, students who major in mathematics have a wide range of career opportunities open to them.

Knowledge of the mathematical sciences is more important today than ever before. After having played a central role in the natural sciences for many years, mathematics has recently become more and more useful in the social sciences and, to a lesser extent, in the humanities. Economics, political science, sociology, psychology and other social sciences now rely on mathematics, particularly statistics, to understand, to control, and to predict social phenomena.

The Department of Mathematics and Statistics offers programs leading to a Bachelor of Arts or Bachelor of Science degree with a major in mathematical studies. In addition, as a result of the various applications of mathematical sciences, the department offers a variety of service courses for students majoring in other disciplines.

Students declaring mathematics as a major or minor should familiarize themselves with the regulations of the School of Sciences. These specify the grade point average requirements of the School and the minimum conditions a student must meet to pursue a degree program in the School.

Please note that most of the courses in this Department have other courses as prerequisites. Before enrolling in a course in mathematics (MATH), statistics (STAT), or operations research (OR), students should complete the prerequisite(s) with a grade of C or higher. A grade of D in a prerequisite course implies inadequate preparation to continue to the next course.

CAREER OPPORTUNITIES

Many people with mathematical ability pursue careers in the mathematical sciences or related areas. They do this as computer scientists, engineers, statisticians, physicists, economists, mathematicians, and in a variety of other ways. For a computer science, electrical engineering, industrial engineering, or physics student, a mathematics major may be a useful and easily attainable second major. A mathematics major is also appropriate preparation for graduate studies in several areas including mathematics, operations research, statistics, and engineering mathematics. Statistics provides career possibilities that deserve special mention. Students with undergraduate majors in statistics may find positions doing actuarial work with insurance companies or doing work in quality control or reliability with industrial firms. Also, recent job studies indicate shortages in government and industry of statisticians trained at the graduate level. Some students enter professional programs in business, law, and medicine after completing a mathematics major. And, of course, the continuing need for highly motivated, well-trained mathematics teachers in the schools has been well publicized.

Departmental advisers can provide information about career possibilities in the mathematical sciences and can suggest elective courses that would be appropriate to various career goals and interests, including the intention to pursue graduate studies.

DEGREE REQUIREMENTS

The distinction between the Bachelor of Arts and Bachelor of Science degrees obtainable through the Department of Mathematics and Statistics is the language requirement. A student majoring in this Department may choose to be awarded the B.A. degree rather than the B.S. degree provided the electives include 12 hours credit in a foreign language which is neither English nor the individual's native language.

Four programs are described below: a major with three options in mathematical studies, and a major in mathematics for secondary school teachers. Through a choice of electives, students may adjust these programs to their goals and interests.

In order to be admitted to the mathematics and statistics program, a student must satisfy the requirements for admission to a program in the School of Sciences and must satisfy one of the following:

1. Complete MATH 125 or a mathematics course having MATH 125 as a prerequisite (or an equivalent course at another accredited institution of higher education), have a GPA of 3.0 or higher in all college mathematics, and have a GPA of 3.0 or higher in all college courses taken.

2. Complete, in high school, seven semesters of college preparatory mathematics including a course in trigonometry, have no semester grade lower than a C in those courses, and have an ACT composite score of 23 or higher.

Students who do not qualify for admission to the program but hope to seek admission later are encouraged to obtain advice from a faculty member in the department.

MATHEMATICAL STUDIES MAJOR

The Mathematical Studies Major is a flexible program that permits students to select courses to meet individual needs and interests. It is recommended for students who want mathematics as the core of a liberal education and for other students (for example, computer science, economics, engineering, or physics students) whose interests and needs do not permit the completion of the mathematical sciences option.

DEGREE REQUIREMENTS

MATHEMATICS, BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, GENERAL MAJOR

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Mathematics Core Requirements 28
150, 223, 260, 321 (Satisfies 8 hours of the advanced General Education requirement)..... 28
Physics 211a*,b 8
*(Satisfies 4 hours of the introductory General Education requirement)
General Major 28-36
Either CS 172-4 and MATH 465a-4, or CS 270-12 (Satisfies GE skills requirement in computer programming) .....8 or 12
MATH 305 or 323.....4
STAT 380-4 or 480-8 (Satisfies GE skills requirement in statistics) .....4 or 8
MATH, STAT, or Operations Research Electives at 400 level..... 12
Minor (Must be approved by major adviser)..... 27
Electives (12 hours must be in foreign language for B.A. degree)..... 37-45

Minimum Required 192

MATHEMATICS MAJOR, MATHEMATICAL SCIENCES OPTION

The Mathematical Sciences option is a broadly based program that is designed to develop attitudes of mind and analytical skills required for efficient use and understanding of mathematics. Most of the courses will involve an interplay of applications, mathematical problem-solving, and theory. This program is recommended for students who plan to continue the study of

mathematics in graduate school, as well as for students who plan to seek employment in mathematics, or in an area related to mathematics, after earning a bachelor's degree.

DEGREE REQUIREMENTS

MATHEMATICS MAJOR, BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, MATHEMATICAL SCIENCES OPTION

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Mathematics Core Requirements 28
150, 223, 260, 321 (Satisfies 8 hours of advanced General Education requirement)
Physics 211a*,b 8
*(Satisfies 4 hours of the introductory General Education requirement)
Mathematical Sciences Specialization 36-44
Either CS 172-4 and MATH 465a-4, or CS 270-12 (Satisfies GE skills requirement in computer programming) .....8 or 12
MATH 305 or 323.....4
STAT 380-4 or 480-8 (Satisfies GE skills requirement in Statistics) .....4 or 8
Operations Research 440 or 441 4
MATH 450 and either 420 or 421 16
Electives (12 hours must be in a foreign language for B.A. degree)..... 56-64

Minimum Required 192

MATHEMATICS MAJOR, STATISTICS OPTION

Part of the information about the universe in which we live has been obtained by statistical methods that provide numerical descriptions of characteristics of the world and its inhabitants. Statistics is used extensively with problems in business, biology, chemistry, education, engineering, physics, political science, psychology, and other fields. The fact that statistical procedures are very useful for reaching decisions when chance is involved has led to a definition of statistics as "the science of decision-making in the face of uncertainty." The Statistics option described below is designed to acquaint students with this important field and to open up for students opportunities for careers in which shortages of trained personnel now exist.

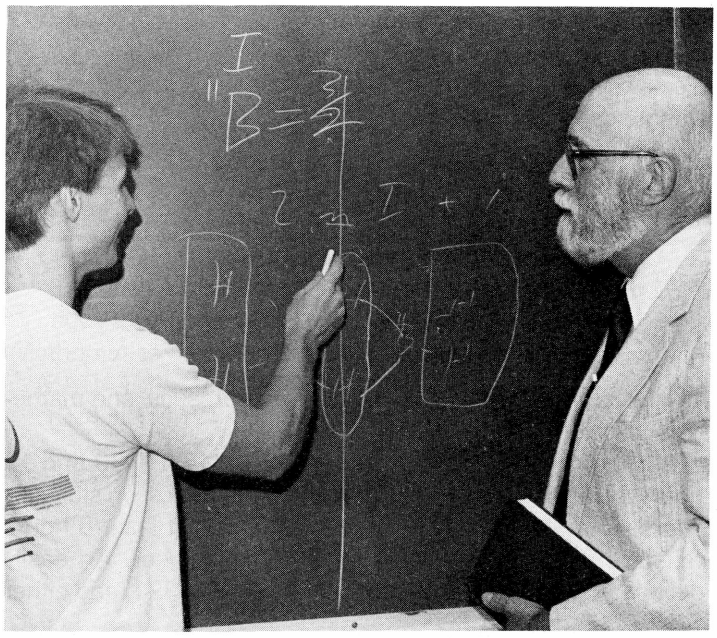
DEGREE REQUIREMENTS

MATHEMATICS MAJOR, BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, STATISTICS OPTION

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Mathematics Core Requirements 28
150, 223, 260, 321 (Satisfies 8 hours of the advanced General Education requirement)
Physics 211a*,b 8
*(Satisfies 4 hours of the introductory General Education requirement)
Statistics Specialization ..... 32 or 36
Required Courses .....20 or 24
CS 172-4 or CS 270a,b-8
MATH 305-4
STAT 480, 481
Electives 12
From STAT 482, 483, 484, 485, 487
(GE skills requirements in computer programming and statistics are satisfied.)
Minor (Must be approved by major adviser)..... 27
Electives (12 hours must be in a foreign language for B.A. degree)..... 33-41

Minimum Required 192



MATHEMATICS FOR SECONDARY SCHOOL TEACHERS

Prospective teachers can meet certification requirements for teaching mathematics in Illinois by completing the program described below. This program is a joint endeavor under the auspices of the Department of Mathematics and Statistics and the Department of Secondary Education.

DEGREE REQUIREMENTS

MATHEMATICS MAJOR, BACHELOR OF SCIENCE DEGREE, SCHOOL OF EDUCATION

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements and the 4 hour Skills requirement in Statistics/Computer Programming. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Mathematics Core Requirements 24
150, 172, 260, 321 (Satisfies 8 hours of the advanced General Education requirement)

Computer Science 172-4 or 270a,b-8 ..... 4 or 8
(Satisfies GE skills requirement in computer programming)

Physics 211a*,b 8
*(Satisfies 4 hours of the introductory General Education requirement)

Mathematics and/or statistics electives 20
(Must be approved by major adviser)
300-level or higher 8
400-level 12

Professional Education Requirements 37
(See Secondary Education)

Electives (12 hours must be in a foreign language for B.A. degree) 16

Minimum Required 192

MINOR REQUIREMENTS

The Department offers two minors: mathematics, and mathematical sciences.

A minor in mathematics must include MATH 150 and 19 hours selected from CS 172 and mathematics or statistics courses numbered 200 or higher, of which at least 8 hours must be from courses numbered 300 or higher. An easily delineated minor consists of MATH 150, 260, 321, and either MATH 305 or STAT 380.

A minor in mathematical sciences consists of MATH 150, 223, 321, CS 270a,b, and STAT 380.

Students may have a major in mathematics and a major or minor in computer science and vice versa. Selection of a major in one mathematics option and a major or minor in another mathematics option is not permissible.

At least 8 hours counted towards the minor must be taken in residence at SIUE, either at the 300-level or higher or in courses which have had prior approval by the department chairperson. A grade point average of 3.00 must be maintained in the minor.

PHYSICS

Professors:
Boedeker, R. R.; Braundmeier, A. J.; Hakeem, M. A.; Henderson, G. A.; Kang, I-J.; McAneny, L. R.; Swamy, P. N. (Chairperson)

Associate Professors:
Chow, H. C.; Hill, R. C.; Zurheide, F. W.

Physics is the study of the basic building blocks of the universe and of the laws which govern their interactions.Students of physics attempt to develop images or descriptions of the universe using mathematical and conceptual models which are continually revised in the light of new observations and discoveries. The models also help to predict properties of nature which have so far not been observed.

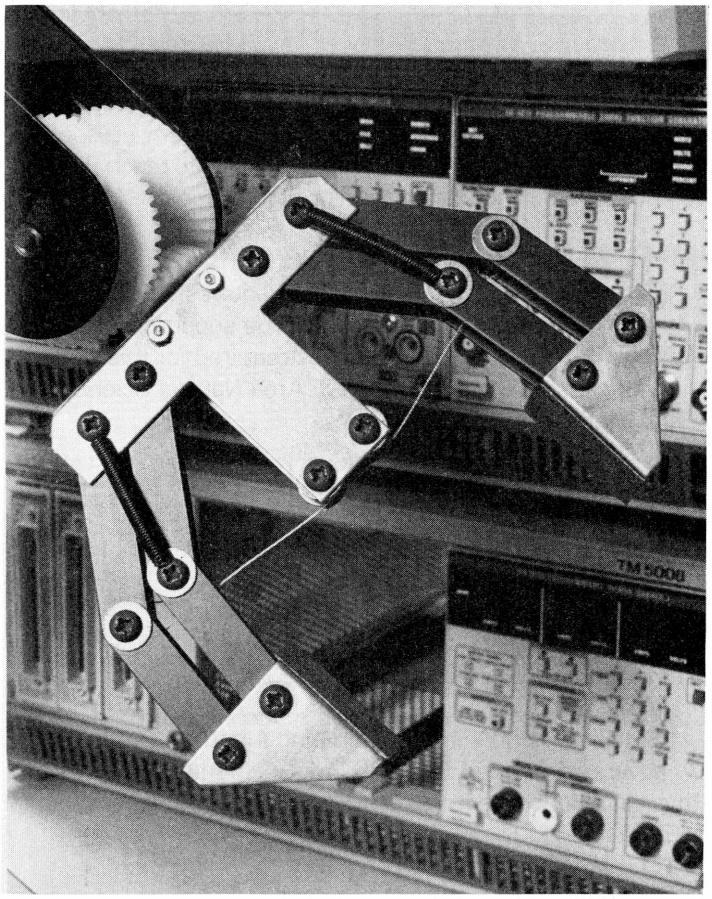
The study of physics will lead students through classical physics (the physics of Newton and Maxwell), Einstein's theory of relativity, Bohr's theory (which forms a bridge between classical physics and modern physics), and, of course, modern physics, including quantum theory and atomic and nuclear physics.

Throughout their study of physics, students learn applications which lead to a variety of specialized fields of study. For example, solid state theory of semiconductors and transistors brings students into contact with electrical engineering and the electronics industry; classical mechanics introduces the techniques of the mechanical and civil engineer; and, nuclear physics acquaints the student with nuclear fission and nuclear fusion reactions.

The Physics Department provides three degree programs for students wishing to study physics: the Bachelor of Science, the Bachelor of Arts, and the Bachelor of Science in Education, majoring in Physics and Physical Science. The Bachelor of Science degree is recommended for those students planning to work in industry immediately upon graduating. The program is somewhat more rigid than the Bachelor of Arts program in that it contains fewer electives, although approximately the same number of required hours. Within the Bachelor of Science program, students may choose a curriculum emphasizing Applied Physics. In addition to the traditional physics courses, the Applied Physics curriculum includes courses in Electrical Engineering to better prepare students for immediate employment in high technology industries and for graduate study in Physics or Electrical Engineering. Qualified students who complete this curriculum fulfill the admission requirements for

the M.S. program in Electrical Engineering at SIUE and may complete a B.S. degree in Physics followed by an M.S. degree in Electrical Engineering within five years.

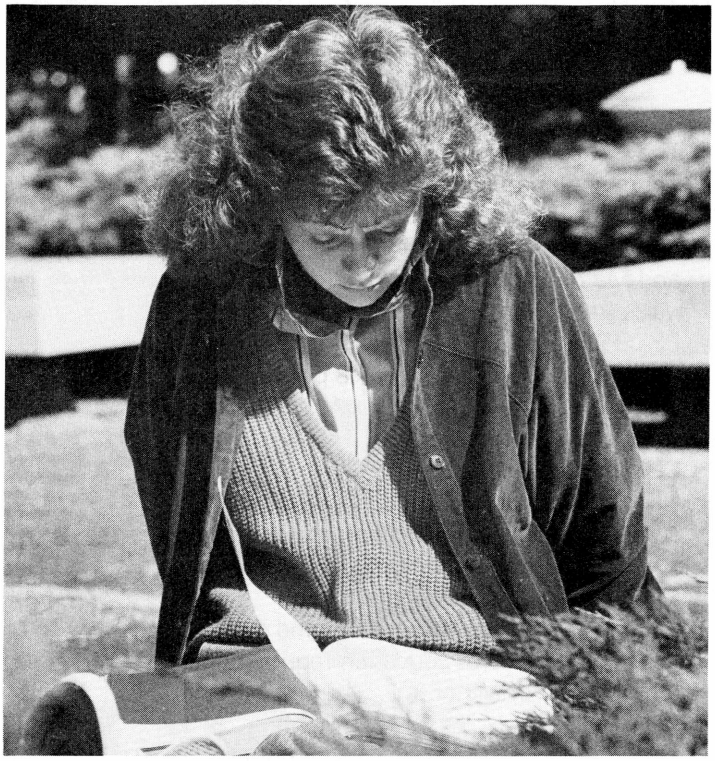
The Bachelor of Arts degree requires one year of foreign language and allows students more choice among Physics courses. The majority of physics students take many more than the minimum of 48 hours in physics, thereby satisfying the physics requirements for either degree. If they also meet the foreign language requirement, the choice of degree becomes a matter of personal preference. Students wishing to pursue a career in teaching may obtain certification with either degree by meeting additional requirements or may elect the Bachelor of Science in Education degree with a major in physics.



CAREER OPPORTUNITIES

Because physics is the most fundamental of the sciences, physics graduates are necessarily generalists. However, they are generalists trained to solve problems from first principles rather than from handbook procedures. Thus they are well prepared for a variety of technical functions in industry for which an engineer might be too specialized. Such industrial functions would include research and development in electro-optics, radiation damage, and measurement and control.

Because of the fundamental nature of the subject, a bachelor's degree in physics is an ideal point of departure for specialized study in almost any field from astronomy to philosophy or music. Teaching at any level from primary through college is one of the career possibilities.



DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, PHYSICS

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements. For the Bachelor of Arts degree, Skills Option B (12 hours of Foreign Languages) is required.

Physics Requirements 48
PHYS 211a, b, c, 212a, b, 308a, b, 312a, b, 405a, b, 418, plus 6 hours electives above 302

Foreign Language Requirement 12
Equivalent of one year*
*(Satisfies 12 hours of Option B General Education requirements.)

Chemistry Requirements 10
CHEM 125a*, b*, 126a, b
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)

Mathematics Requirements 16
MATH 150a*, b*, 260a, b
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)

Electives and/or Minor 58

Minimum Required 192

BACHELOR OF SCIENCE DEGREE, PHYSICS

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements.
Physics Requirements 48
PHYS 211a, b, c, 212a, b, 302a, b, 308a, b, 312a, b, 405a, b, 415a, 418 plus 2 hours electives above 302 but excluding 350-359
Chemistry Requirements 10
CHEM 125a*, b*, 126a, b
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Mathematics Requirements 24
MATH 150a*, b*, 260a, b, c, 305
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Electives[1] and/or Minor 54

Minimum Required 192

[1]For the Applied Physics Emphasis, the electives should include the following courses which constitute an approved minor in Electrical Engineering: EE 210, 301a, b, c, 310, 326, 327, 351, 352 and 382 (total 29 hours). These courses fulfill the entrance requirements for the Master of Science Program in Electrical Engineering.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, PHYSICS, SCHOOL OF EDUCATION

Prospective teachers can meet certification requirements for teaching physics in Illinois high schools by completing the program described below. This program is a joint endeavor between the Physics Department and the School of Education with Physics as a primary teaching field. For more details, consult the Department of Secondary Education.

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements.
Physics Requirements 48
PHYS 211a, b, c, 212a, b, 302a, b, 308a, b, 312a, b, 405 a, b, 415a, 418, plus 2 hours of electives above 302
Chemistry Requirements 10
CHEM 125a*, b*, 126a, b
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Mathematics Requirements 24
MATH 150a*, b*, 260a, b, c, 305
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Professional Education Requirements 41
Ed.S 215, 401a, b, c, Sp. Ed. 400 (An alternative program includes C. Ed. 305, Ed.S. 315, 352, Ed. Fd. 355 plus 4 hours to total 41 hours.)
Electives 13

Minimum Required 192

BACHELOR OF SCIENCE DEGREE, PHYSICAL SCIENCE, SCHOOL OF EDUCATION

The Physics Department, in cooperation with the Department of Secondary Education, has developed a broad teaching field program in Physical Science. Through this program, prospective teachers can meet certification requirements to teach Physical Science in Illinois junior and senior high schools.

General Education Requirements
The General Education Curriculum requires 72 or 76 hours of General Education credit. The supporting mathematics and science courses required for this major satisfy 16 hours of the GE Area Natural Science and Mathematics requirements.
Physics Requirements 31
PHYS 111, 206a, b, c, 356 plus 8 hours from the following: 350, 351, 352, 355
Chemistry Requirements 15
CHEM 125a*, b*, c, 126a, b, c
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Mathematics Requirements 8
MATH 150a*, b*
*(Satisfies 4 hours introductory and 4 hours advanced General Education requirements.)
Physical Science Requirements 21
ESCI 111, 200
SCI 401, 403, 416
Professional Education Requirements 41
Ed.S 215, 401a, b, c, Sp. Ed. 400 (An alternative program includes C. Ed. 305, Ed. S. 315, 352, Ed. Fd. 355, plus 4 hours to total 41 hours.)
Electives 20

Minimum Required 192

MINOR REQUIREMENTS

The minor program in Physics consists of 27 hours, which include 211, 212, 302. The remaining 5 hours of elective courses are physics courses above 302 subject to approval by the Physics Department Chairperson. Students pursuing the minor are encouraged to seek this approval as early as possible.

School of

Social Sciences

SCHOOL OF

SOCIAL SCIENCES

SAMUEL PEARSON, DEAN

The School of Social Sciences offers baccalaureate degree programs in anthropology, earth science, economics, geography, government (political science), history, sociology, and social work. The School also offers master's degree programs in geography, political science, history, policy analysis, public administration, and sociology.

Undergraduate programs in these fields prepare students for a variety of careers in government, teaching, and private enterprise as well as for more advanced education at the master's and doctoral levels. Undergraduate courses in the School also provide an important component of a general liberal arts education appropriate to all University students.

While the primary focus of the School is instructional, most of the faculty are also active in basic or applied research and in professional service. There is a special commitment to using the professional skills of the faculty to assist in the social, economic, and cultural development of the southern Illinois region. The School takes an active role in improving the quality of the environment, in conservation of natural resources, in stimulating interest in local history, and in improving the quality of local government services.

ANTHROPOLOGY

Professors:
Aschenbrenner, J. C.; Denny, S. G.; Frisbie, C. J. (Chairperson); Frisbie, T. R.; Maloney, T. J.; Schusky, E. L.

Anthropologists study humans and their physical and cultural development through time and space. Anthropology seeks to develop an understanding of the potentials and limits of being human, respect for the various ways of life followed by others, and knowledge of the reasons for these practices. Students in anthropology acquire familiarity with physical anthropology (human evolution and the relationship of humans to other living organisms); anthropological linguistics (the structure, history, nature, variety, and importance of communication); archaeology (the study of the prehistoric past); social anthropology (the diversity and organization of human groups and institutions); and ethnology (the variety and range of human customs, beliefs, and other aspects of culture). Particular strengths of the Department of Anthropology at SIUE lie in faculty expertise in contemporary American Indians, urban anthropology, human ecology, and the archaeology of North America. In addition, the faculty participates in several interdisciplinary programs, such as Environmental Studies, Latin American Studies, Women's Studies, and Gerontology. Unique features of the program include opportunities for supervised archaeological and ethnographic fieldwork, for training in museum work in conjunction with the Anthropology Teaching Museum, for field trips and involvement in urban community projects, and for participation, by qualified majors, in the Alpha Chapter of Illinois of Lambda Alpha, the National Collegiate Honors Society for Anthropology.

Students in good standing wishing to declare a major or minor may enter the program by filing a formal declaration of major or minor and consulting with one of the department undergraduate advisers. Quarterly preregistration advisement is mandatory for all declared majors and minors. All majors and minors must have a 3.00 grade point average in anthropology courses.

CAREER OPPORTUNITIES

Traditionally, anthropology majors have pursued graduate degrees at both the master's and doctoral level; such degrees lead to careers in college teaching, museum work, contract archaeology, or government service. More recently, however, undergraduate anthropology majors have entered the job market in a number of non-traditional areas, including secondary education, industry, cultural resource management, environmental studies, and human services. Because of the diversity of subject matter in anthropology, students have frequently combined anthropology with other disciplines such as history, sociology, geology, earth science, biology, psychology, medicine, law, and the arts. Such combinations enable students to understand diverse community problems and many issues of contemporary life and thus greatly expand their opportunities for interesting and rewarding careers.

DEGREE REQUIREMENTS

BACHELOR OF ARTS DEGREE, ANTHROPOLOGY

The Bachelor of Arts degree, designed primarily to prepare students for advanced study in anthropology, includes a foreign language requirement.

General Education Requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
Foreign Language Requirement	12
Requirements for Major in Anthropology	48
Anthropology 365	4
Anthropology 400, 408, 411, 442	16
One ethnography course to be taken from 305a, b, c, d, 311, 482	4
Anthropology 301 or 401 (English 400)	4
Anthropology electives chosen in consultation with undergraduate adviser	20
Minor	27
Electives	33 or 29
	192

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, ANTHROPOLOGY

The Bachelor of Science degree is designed for students desiring to pursue anthropology as an avocation or in preparation for government service, industry, salvage archaeology, museology, or Foreign Service, where advanced graduate

degrees may not be required.

The Bachelor of Science degree differs from the Bachelor of Arts degree by requiring 12 hours in field methods courses—373 (4-8), 375 (4-8), 473 (4) and/or 475 (4), or the presentation of acceptable evidence of previous fieldwork experience—in lieu of the 12 hours of foreign language required in the Bachelor of Arts program.

MINOR REQUIREMENTS

A minor in anthropology consists of 28 hours. Twenty of these hours must be in junior or senior level courses. Students are required to take an introductory anthropology course, one physical anthropology course, and one cultural anthropology course. The remaining hours consist of anthropology electives selected in consultation with one of the undergraduate anthropology advisers.

ECONOMICS

Professors:
Ault, D. E.; Hollenhorst, J. J.; Kohn, R. E.; Lin, A. Y.; Luan, D. C.; Rutman, G. L. (Chairperson); Schwier, A. S.; Sultan, P. E.

Associate Professors:
Edmonds, R. G. Jr.; Elliott, D. S. Jr.; Hashimi, R. M.; Levin, S. L.; Meisel, J. B.

Instructors:
Biederman, D. K.; Sharp, J. F.

Economics is the study of how different economic systems determine what goods and services will be produced, the prices and quantities of those goods and services, and who will receive them. All societies, from the most primitive to the most complex, must have economic systems that decide how resources (land, raw materials, labor, machinery, and physical structures) will be used to satisfy the demands of the people living in those societies. Knowledge of economics is essential to understanding problems that range from the shopper's decision to purchase one brand of bread over another, to the effects of an oil embargo on the price of medicine and plastics, to the use of government spending and taxation to fight inflation. Lawyers, bankers, managers of large and small businesses, government planners, and journalists find economics an extremely useful tool in solving problems which they encounter in their professions.

Students choosing economics as their major pursue a core program designed to provide a thorough grounding in economic theory followed by more specialized study in such areas as money and banking, labor and industrial relations, international economics, urban and regional economics, industrial organization and antitrust policy, comparative economic systems, economic history, public finance and taxation, and mathematical economics. Students develop their programs in cooperation with an undergraduate economics adviser.

The Department of Economics, which is housed in the School of Business, offers two degrees under the auspices of the School of Social Sciences: a Bachelor of Arts degree with a major in economics and a Bachelor of Science degree with a major in economics. Candidates for either of these degrees must complete 48 hours in economics and complete a minor in any other social science, business area, mathematics, or another field. Those students planning to enter Ph.D. programs in economics are strongly advised to take their minor in mathematics. Students who plan to seek employment upon completion of their baccalaureate or to pursue graduate work in some other field are advised to elect a minor in a field related to their chosen career.

CAREER OPPORTUNITIES

Economists are employed in all areas of private industry; in state, local, and federal government agencies; in international organizations such as the United Nations and the World Bank; in labor unions; and in colleges and universities. Examples of duties performed by professional economists include market research, forecasting, corporate planning, policy evaluation, writing economic impact studies, participating in antitrust litigation, and testifying in utility rate hearings.

In the past several years, graduates of SIUE programs in economics (including the graduate program) have obtained employment in a variety of institutions. These include commercial banks, government agencies, public utilities, state legislatures, industrial firms, private and consulting organizations, and community and small liberal arts colleges. Some graduates have been admitted to highly competitive Ph.D. programs.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE OR BACHELOR OF ARTS DEGREE, ECONOMICS

General Education Requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
General Requirements	9
MATH 120	
STAT 244	
Requirements for Major in Economics	48
Economics 111, 112, 321, 401, 402	20
Economics Electives	28
Minor	28
(The minor must be approved by the student's adviser.)	
Electives	31-35
	192

The Bachelor of Arts degree program, otherwise identical to the Bachelor of Science degree program, requires that students

study a foreign language. The language requirement of 12 hours reduces the elective hours by 12. Students in all programs are required to maintain a 3.00 grade point average in economics.

MINOR REQUIREMENTS IN ECONOMICS OR BUSINESS ECONOMICS

The minors in economics or business economics consist of 28 quarter hours in economics including 111, 112, 401, and 402. The remaining 12 hours are electives in economics chosen in consultation with an adviser from the Department of Economics.

GEOGRAPHY AND EARTH SCIENCE

Professors:
Baker, W. B.; Hess, C. F.; Kahn, A.; Koepke, R. L.; Lossau, C. S.; Mendelson, R. E.; Thornton, C. A. (Chairperson); Yarbrough, R. E.

Associate Professors:
Bagchi, D. M.; Clements, D. W.; Lampe, F. A.; Marlow, L. D.; Stueber, A. M.; Thompson, N. R.

Assistant Professors:
Guensburg, T. E.; Smith, P. A.

The Department of Geography and Earth Science offers the Bachelor of Science and the Bachelor of Arts in Geography and the Bachelor of Science in Earth Science. Majors who want to teach in geography and earth science may take a curriculum that leads to the Bachelor of Science degree offered in the School of Education. Degrees in geography and earth science require a minimum grade point average of 3.00 in major courses.

Geography. Geography, concerned with the earth as the home for people, sustains a particular emphasis on understanding why human activities are located where they are and how these human activities are interrelated with the natural environment. While geography is one of the most time-honored disciplines, reflecting curiosity about people and places, it is also a new applied discipline which can offer expertise on such issues as where new housing developments, airports, power plants, schools, highways, or fast food restaurants should be located.

Geography, a broad field, accommodates students with a wide diversity of interests and goals. Of particular importance at SIUE are courses leading to emphases in cartography (map making) and computer graphics, applied economic geography and area development, urban geography and urban planning, conservation and environmental studies, regional studies, historical and cultural geographic studies, and physical geography. Brochures available from the department describe in more detail each of these areas and provide lists of geography courses and available supporting courses from other disciplines recommended for each of these areas of emphasis.

A broad background in other fields is of great importance to a geographer. Thus, geography students should use their elective hours to take work in recommended subjects. Students interested in physical geography should consider taking elective courses in geology, botany, zoology, chemistry, and physics. Students interested in economic geography or planning can profit from work in economics, government, sociology, marketing, and transportation. Students specializing in cultural geography will find courses in sociology, anthropology, history, and government particularly useful. Students interested in the geography of a particular area of the world are encouraged to take courses such as government, history, and foreign languages that are related to such areas of interest. Students who plan to major in geography are urged to take quantitative methods and computer-related courses. High school algebra or its equivalent is a minimal expectation. Geography 111, Earth Science 111, and Economics 111 are recommended introductory level general education courses that will complement a major or minor in the department.

Earth Science. Earth Science is concerned with understanding the natural processes that produce the atmosphere and the surface and interior features of the earth. It is a scientific discipline which can determine the best location for wells and mines, the age and significance of fossils, the causes of mine subsidence, and the likelihood of earthquakes.

Earth scientists should enjoy the outdoors and possess an interest in travel, an ability to adapt to changing conditions, an ability to notice details and recognize their significance, an aptitude for solving puzzles, and most of all, an inquiring mind not always satisfied with what it reads or hears.

Students interested in earth science should have the equivalent of high school chemistry and college algebra. A college level chemistry course and precalculus or its equivalent are prerequisites for several of the earth science courses. Biology 111, Earth Science 111, and Physics 111 are recommended introductory general education courses that will complement a major or minor in earth science. Majors are also urged to take elective courses in physical anthropology, biology, computer science, engineering, physical geography and physics.

CAREER OPPORTUNITIES

Students with bachelor's degrees in geography have the opportunity to find employment in a wide variety of business and government organizations. Geography majors have found employment in such areas as travel and tourism, location and marketing analysis, land use planning, environmental impact analysis, conservation, intelligence, industrial development, ecology, foreign area analysis, cartography, and historic preservation. Students interested in urban and regional planning will find that the geography program provides a solid base for pursuit of advanced planning degrees.

Cartography, a traditional specialty within geography, offers employment opportunity in various private and government mapping agencies. Because cartography is becoming more

automated, students planning to take this specialization are required to take a 12 hour sequence through elementary calculus and analytic geometry and a 16 hour sequence of computer programming courses in Management Information Systems and Computer Science.

Programs leading to a Bachelor of Science degree in the School of Education provide preparation to teach geography or earth science in junior high or secondary schools. With additional graduate work, one could also teach in a community college. Departmental courses also aid in preparation for the broader teaching fields of physical science and social science.

The earth science major is designed to give students a broad scientific background which prepares them for professional positions with environmental agencies or work related to natural resources or conservation. This major serves as a partial foundation for graduate study in such fields as geology, hydrology, meteorology, environmental studies and urban-regional planning. For students wishing to concentrate on geology as an undergraduate focus, the Earth Science Program offers a geology track which closely parallels the requirements of the American Institute of Professional Geologists.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE IN GEOGRAPHY OR EARTH SCIENCE, SCHOOL OF EDUCATION

Students who intend to teach at the secondary level may choose the Bachelor of Science degree in the School of Education with a major in geography or earth science. These majors constitute the teaching field specialization for the education degree. Both degrees require a minor. A 36-hour major is acceptable with two teaching minors.

For the earth science major, students must take Earth Science 444, Teaching of Earth Science, and are urged to take a minor in such fields as biology, chemistry, computer science, physics, mathematics, or environmental studies. For geography majors, either Geography 443 or 480 is recommended.

MINOR IN GEOGRAPHY OR EARTH SCIENCE REQUIREMENTS

Students working for a 28-hour minor in geography must take Geography 204 or 206, 212 and 308. (Substitutions require consent of adviser.)

A minor in earth science consists of 28 hours selected from those courses required for a major.

BACHELOR OF SCIENCE OR BACHELOR OF ARTS DEGREE, GEOGRAPHY GENERAL MAJOR

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
(Candidates for the B.A. degree must elect option B in the general education skills area.)
Geography Core Requirements[1] 36
204**, 206**, 210, 212*, 213* or 214*, 308, 410, one 300** level regional course and one of the following: 205, 406 or 407

*satisfies four hours of the advanced general education science requirement
**satisfies four hours of the advanced general education social science requirement

General Major 20
any one of the 400 level regional courses 4
remaining electives 16
Electives or minor and electives ..... 60 or 64

192

[1]Geography majors may apply eight hours of the applicable core courses towards the advanced science or social science General Education requirement, but not both.

DEGREE REQUIREMENTS

GEOGRAPHY, BACHELOR OF SCIENCE DEGREE, (CARTOGRAPHY TRACK)

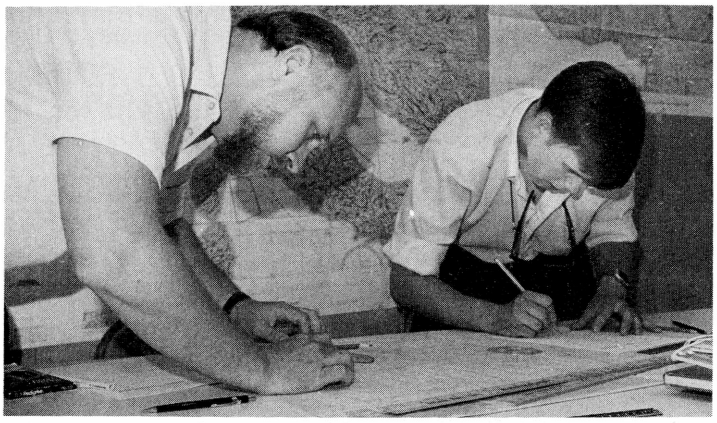
General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
Geography Core Requirements[1] 28
210, 212*, 213* or 214*, 308, 410 and any two courses from the following: 204**, 206**, one 300** level regional course.

*satisfies up to eight hours of the advanced General Education science requirement.
**satisfies up to eight hours of the advanced General Education social science requirement.

Cartography Core Requirements 28
310, 311, 317, 318, 412, 416, 417
Mathematics 120*, 125*, 150a 12
*can satisfy four hours of the introductory General Education science requirement.
Management Information Systems 108 4
Computer Science 270a, b 8
Electives or minor and electives ..... 36 to 40

192

[1]Geography majors may apply eight hours of the applicable core courses towards the advanced science or social science General Education requirement, but not both.



DEGREE REQUIREMENTS

EARTH SCIENCE, BACHELOR OF SCIENCE DEGREE GENERAL MAJOR

General Education Requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
Earth Science Core Requirements	44
201, 202, 203, 210, 213 or 214, 215, 216, 217, 325, 400, and 403	
Chemistry 105 or equivalent	4
Mathematics 120*, 125*	8
*satisfies four hours of the advanced science General Education requirement	
General Major	8
Electives or minor and electives	56 to 60
	192

DEGREE REQUIREMENTS

EARTH SCIENCE, BACHELOR OF SCIENCE DEGREE, (GEOLOGY TRACK)

General Education Requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
Earth Science Core Requirements	44
201, 202, 203, 215, 216, 217, 325, 342, 375, 403, and 441	
Chemistry 125a*, b, c; 126a, b, c	15
Physics 205a*, b, c	15
Mathematics 120*, 125*, 150a	12
General Major	8
Electives	22 to 26
	192

*satisfies four hours of the introductory science General Education requirement.

MINOR IN GEOGRAPHY OR EARTH SCIENCE REQUIREMENTS

Students working for a 28-hour minor in geography must take Geography 302, 304 or 306, and 308. (Substitutions require consent of adviser.)

A minor in earth science consists of 28 hours selected from those courses required for a major.

HISTORY

Professors:
Astour, M. C.; Gallaher, J. G.; Haas, J. M.; Jacobitti, E. E.; Kimball, S. B.; Millett, R. L.; Nordhauser, N. E.; Pearson, S. C. (Dean, School of Social Sciences); Weingartner, J. J.; Weiss, S. L.

Associate Professors:
Chen, C-C.; Grant, S. B. (Chairperson); Santoni, W. D.; Steckling, R. A.; Taylor, J. A.

Assistant Professor:
Carlson, S. J.

History is the study of the human past in the quest for greater understanding of ourselves and of others. History begins with the questions of how things came to be as they are or were, what human decisions and natural events contributed to this state of affairs, and how the participants in the life of past times and societies viewed themselves and their actions.

Historians approach the study of the past in many ways. Some concern themselves with particular periods or with particular nations or peoples. Others concern themselves with particular institutions, such as the family, science, or the church; still others trace the history of ideas. For some historians the methodology of the social sciences becomes a critical tool for the study of the past, while for others historical methodology is similar to the methods of literary criticism.

By studying the past, historians come to a better understanding of the present. From the past, they seek insights into the behavior of individuals, institutions, and societies which contribute to the quality and significance of their own lives. Though every age is unique and the study of history cannot prepare an individual to predict the future, it does prepare persons for meaningful participation in the families, communities, nations, and world of today.

CAREER OPPORTUNITIES

The department presently has three options within its Bachelor's Degree program. The Bachelor of Arts degree is often the first step in preparation for a career as a professional historian. It is also excellent for the study of law or for many other kinds of professional training. The Bachelor of Science degree may be preferred by students thinking of careers in the business world, government service, journalism, and editing. Finally, the Bache-

lor of Science in Education with a concentration in history is designed for students planning to teach at the public school level. Any one of these programs provides an opportunity to study subjects of great interest while helping to develop skills that open up a variety of career options. Whichever program students intend to pursue, they should arrange an interview with the undergraduate adviser in history as soon as possible after declaring a major.

DEGREE REQUIREMENTS

HISTORY, BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, GENERAL MAJOR

General Education requirements	72-76
(Some general education requirements may be satisfied while completing this major concentration.)	
(For a B.A. degree, students must elect option B in the general education skills area.)	
General Major	52
Four courses (at least one in U.S. History) from HIST 111a,b,c,d, 115, 200, 201, 202 (Satisfies 8 hours of the advanced General Education requirements)	16
History 452	4
Eight history courses elected by the student at the junior-senior level (301-499; two history 300 minicourses may be substituted for one of the eight history courses)	32
Minor	28-32
Electives	32-40
Total	192

The Bachelor of Arts degree (Honors Program) is identical to the above program, except that students must complete 400 and either 451a or 451b as two of the eight elective courses in history and must complete two years of foreign language, thereby increasing the language requirement and decreasing the elective requirement by 8 hours.

The Bachelor of Science degree program is identical to the Bachelor of Arts degree program, except that students are not required to study a foreign language. Students in all programs are required to maintain a 3.00 grade point average in history.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, HISTORY, SCHOOL OF EDUCATION

Students who intend to teach at the secondary level may choose the degree Bachelor of Science in the School of Education with a major in history. This major constitutes the teaching field specialization for the education degree. The requirements for this major are the same as those for the Bachelor of Science degree in history offered in the School of Social Sciences.

MINOR REQUIREMENTS

The minor requires that students select three courses from History 111a,b,c,d, 115, 200, 201, 202. In addition, five history courses numbered between 301 and 499 should be completed. Two history 300 minicourses may be substituted for one of the five upper-level courses.

MINOR IN LATIN AMERICAN STUDIES REQUIREMENTS

The minor in Latin American Studies is designed for students interested in a multidisciplinary understanding of the lands and peoples of Latin America. It consists of 28 hours, which must include History 352c, Government 355a, and two quarters of 300-level courses in Spanish-American literature; one course chosen from the following: any 400-level Latin American history course, History 352a, History 352b, or Anthropology 367; and any two of the following four courses: Economics 463, Geography 367, Geography 368, or Anthropology 305c.

POLITICAL SCIENCE

Professors:
Feeney, W. R.; Hsiao, G. T.; Kerr, J. R.; Stahnke, A. A. (Chairperson); Teters, B. J. (Vice President and Provost)

Associate Professors:
Jacobitti, S. D.; McCabe, D. F.; Schwartz, D. F.; Westefield, L. P.

Assistant Professor:
Farrell, J. V.

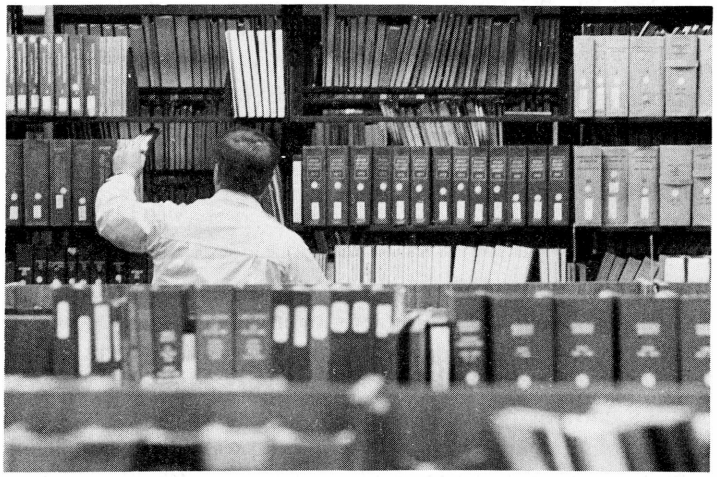
The Department of Political Science offers courses broadly concerned with the study of government and politics. In American politics, students examine various aspects of the American political system, including legislatures, executives, parties, campaigns and elections, and issues of public policy. In comparative politics, students explore the political, legal, and administrative processes of other countries. Students in international relations study the relations among nations and relations with international bodies such as the United Nations. In political theory, students examine the attempts of important thinkers to define the functions of the state and the rights and obligations of citizens. Students in this field also study efforts to develop comprehensive theories of politics through analysis and the evaluation of political behavior. In public administration, students explore ways in which the bureaucracy conducts the public's business. In public law, students examine the nature of the judicial process and the role of the courts in interpreting and applying the Constitution of the United States.

The study of political science can serve as preparation for a number of different careers, as the core of a liberal education, or as a source of interesting and valuable electives. In an era in which government has come to play a central role in our daily lives, knowledge of government and its processes is vital if

citizens are to be able to cope with or influence it.

There are no formal entry requirements to the Bachelor of Arts or Bachelor of Science programs in Political Science. Students should, however, consult the department's undergraduate adviser as soon as possible after declaring a major. The adviser will provide students with initial orientation to the department's programs and will guide them to a faculty member for detailed advisement. Two pre-law advisers aid students in preparing courses of study and can provide useful information about law school admission. Faculty members in public administration can provide course work, information, and guidance for undergraduates planning a career in public service.

The department conducts two internship programs in which students can get both practical experience and an opportunity to evaluate potential careers. The Legal Aid Internship places top pre-law students in the offices of public defenders and legal aid societies. The Internship in Government provides an opportunity for students to work in the offices of local, county, or state officials. Among the resources available to students is the Political Science Laboratory, which contains a growing collection of reference materials, including guides to the data of the Inter-University Consortium for Political and Social Research. The department's microcomputer and computer terminals, which give students access to the large computer system of the Educational Computing Network, also are available.



CAREER OPPORTUNITIES

Students who major in political science have entered careers in business, government service (at the federal, state, or local levels), law, teaching, journalism, and public and private interest groups. Recent projections by both government and public agencies indicate demand will continue near the present level for government employees, for lawyers, and for college graduates interested in careers in business. For students seeking careers in government, a major in political science provides knowledge of political and bureaucratic processes and analytical skills. Such students will have as well an opportunity to develop specialized knowledge in a number of policy areas. Careers in business organizations or with interest groups often call for similar skills. Many students have found this major a useful preparation for law school as well as for the practice of law. In all of these areas experience gained in an internship can be a significant advantage. Opportunities for employment in teaching and journalism may become more limited, but careful development of skills and specialties can make it easier for students to find positions in these areas. In addition to preparation for specific careers, a major in political science can provide general career-building skills. Courses which focus on the analysis of political and social data will help students develop analytical and reasoning skills. Students will also have opportunities to become familiar with statistical techniques and with computer usage. They will have numerous chances to hone a crucial skill—the ability to write clearly and forcefully.

DEGREE REQUIREMENTS

BACHELOR OF ARTS OR BACHELOR OF SCIENCE DEGREE, POLITICAL SCIENCE

General Education Requirements 72-76
(Some general education requirements may be satisfied while completing this major concentration.)
(For Bachelor of Arts, option B in general education skills area must be chosen.)
Requirements for Major in Political Science 48
A minimum of 48 hours including 111, and 112 and at least 4 hours in four of the six areas of specialization:
American government and politics: 340 or 345 or equivalent.
Comparative politics: 350 or 355 or equivalent.
International relations: 370 or equivalent.
Political Theory: 385 or equivalent.
Public administration: 320 or equivalent.
Public law: 340c or equivalent.
Minor 28
Electives 40-44

192

Requirements for the Bachelor of Science degree differ from those for the Bachelor of Arts degree in that a foreign language is not required; elective hours are thus increased by 12. For both degrees a minimum grade point average of 3.00 is required in major courses.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE DEGREE, POLITICAL SCIENCE, SCHOOL OF EDUCATION

Students who intend to teach at the secondary level may choose the degree Bachelor of Science in the School of Education with a major in political science. This major constitutes the teaching field specialization for the education degree. The requirements for this major total 48 hours in political

science, depending on whether the student has one minor or two. They must include 111 and 112 and at least 4 hours (but no more than 20 hours) must be taken in four of the six areas of specialization listed above. Students interested in the Secondary Education requirements should refer to the Secondary Education section of this bulletin.

MINOR REQUIREMENTS

A minor is 28 hours and must include 111 and 112 and at least one course in three of the six areas of specialization. A minimum grade point average of 3.00 is required in minor courses.

SOCIOLOGY

Professors:
Blain, R. R.; Farley, J. E.; Handel, W. H.; Henslin, J. M.

Associate Professors:
Barlow, H. D.; Riley, L. E. (Chairperson)

Sociology involves the scientific study of the group life of human beings and the product of their group living. The sociologist is interested in the values, customs, and traditions which emerge from group living, and in the way group living is affected by these values, customs and traditions. Sociologists study the way people and groups interact with one another and the social patterns and processes which emerge from such interactions. Sociology is a general, not a specialized, social science. Sociologists seek out the principles that govern all human interaction and human relationships, regardless of the area of human life in which they occur. The sociologist's interest lies in the general characteristics of all social behavior; however, sociology can involve the study of particular institutions, such as the family, education, religion, the economy, health care, and legal institutions. For this reason, students majoring in other fields often find specific sociology courses relevant to their studies.

CAREER OPPORTUNITIES

Persons with an undergraduate degree in sociology may find employment with a variety of employers, including government agencies and business firms. Many employers believe a good general education makes an excellent foundation for specialized skills that can be learned on the job. A slightly more specialized perspective is found among employers who prefer college graduates with majors in one of the social sciences. Government and private social service agencies at the state and local levels may employ persons with undergraduate degrees in sociology. Some Sociology majors obtain positions in social case work, in probation, and in employment and welfare agencies. There are job opportunities in research, administration, and college teaching for persons who continue their sociology training and obtain advanced degrees.

Students working toward a major or minor in sociology should contact the undergraduate adviser for further information.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE OR BACHELOR OF ARTS DEGREE, SOCIOLOGY

General Education Requirements ..... 72 (BS) or 76 (BA)*
(Some general education requirements may be satisfied while completing this major concentration.)
Requirements for Major in Sociology 48
Sociology 312 and 451 8
Statistics 107 4
Sociology electives 36
Minor 28
Electives ..... 40 (BA) or 44 (BA)

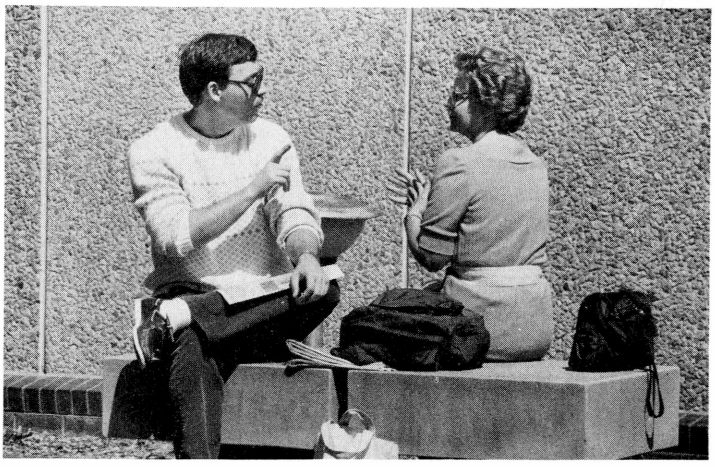
Total 192

*The Bachelor of Science degree requires 72 hours of general education courses. Students seeking this degree will select Option A in the general education curriculum. The Bachelor of Arts degree requires 76 hours of general education requirements including 12 hours of foreign language. Students seeking this degree will select Option B.

The Bachelor of Science and Bachelor of Arts degrees in sociology require 48 hours of sociology, including the required courses 312 and 451 and Statistics 107. Social Work courses do not count toward a sociology major or minor. Majors must maintain a 3.00 grade point average in both their major and minor courses.

A minor in sociology requires 28 hours of sociology, all of which are elective hours. Sociology minors must maintain a grade point average of 3.00 in sociology courses.

Ordinarily minors may transfer up to 12 hours of credit. Ordinarily majors may transfer up to 24 hours of credit, 12 of which must be from four-year institutions. Transfer course grades must be C or better.



SOCIAL WORK

Associate Professors:
Cingolani, J.; Swaine, R. L.

Assistant Professor:
Spencer, D. M.; Trent, J.

The undergraduate social work program, housed in the Department of Sociology and Social Work, focuses on the knowledge, values, and skills needed for social work practice. The program has been accredited by the Council on Social Work Education to prepare students for beginning professional social work practice at the baccalaureate level. Although the program prepares generalists, it offers ample opportunity to explore specific interests through the selection of electives and the field placement setting.

The program consists of specified courses in the General Education program and social work courses concentrated at the upper division level.

Social work is a profession concerned with helping to solve problems in the interactions between people and their social environments. The social worker acts as a facilitator of change with individuals, families, groups, organizations, and communities; promotes positive change in social conditions; and serves as an advocate for individuals and groups discriminated against or disadvantaged.

Professional social work is a creative blending of knowledge, professional values and ethics, and skills of working with people.

Students admitted into the social work program are required to take Social Work practicum, SocW 482, for 16 credit hours. The practicum, which requires four hundred hours in a social work practice setting and may be taken over a two-quarter period, is an individualized and closely supervised learning experience. It gives the student an opportunity to apply classroom learning and develop practice skills. Field placements are arranged in advance with the Practicum Coordinator and are designed to meet students' needs and interests within the context of the educational objectives of the program.

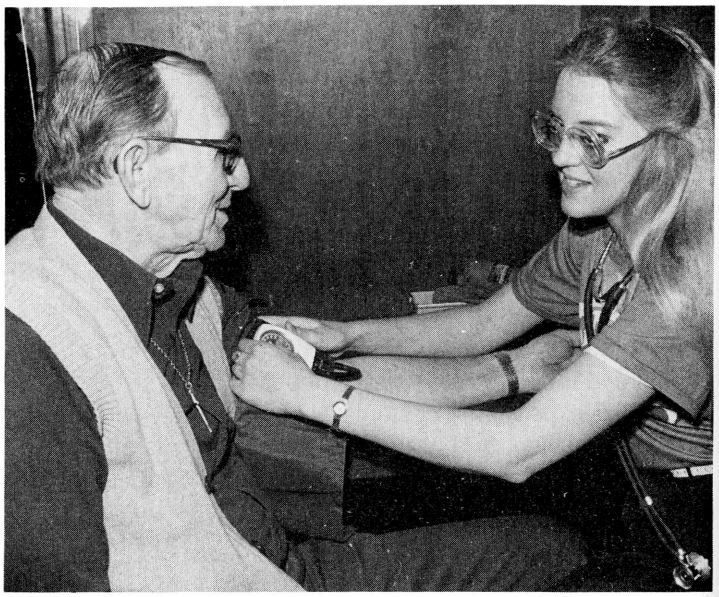
ADMISSIONS

Recruitment and admissions procedures are designed to encourage a diverse student population, to assist prospective social work majors to gain a realistic perspective on the demands and rewards of a career in social work, and to help students assess their interest and ability to function effectively as professional social workers.

The social work program seeks students who can master the necessary knowledge and skills, and who, in addition, show the capacity to assume the roles and responsibilities of the professional social worker. Social work requires not only knowledge and skills, but also professional values and the ability to relate well to people in a variety of situations. Much of this can be taught in a formal setting, but students' personal characteristics are also a factor in successful learning.

In addition, the program seeks students who can contribute to a diverse, creative educational milieu by virtue of their age, sex, ethnic or racial identity, career interests, and past life experiences.

The faculty assumes a responsibility to the profession, to students, and to the consumers of social services to admit to the program those with potential for effective professional practice. Early screening enables the faculty to discourage students from an unwise career choice before they invest excessive time in the program. For those accepted, the admissions process is designed to identify strengths and learning needs, enabling the development of individual plans for learning.



Admissions Requirements and Criteria

1. Completion of at least 30 quarter hours of college work with an overall GPA of at least 3.00
2. Completion of SocW 200 with a grade of C or better

In addition to academic achievement, criteria examined in the admissions process are:

1. The ability to communicate thoughts and feelings effectively
2. Evidence of interest and initial commitment to social work as a career
3. The ability to work effectively with others

Sources of information include students' performances in social work courses; interviews with the adviser, the Admissions Committee or other faculty; and information from the field experience in SocW 200 (or its equivalent, if SocW 200 is waived). Other information may also be considered with the informed consent of the students.

Students who plan to anter the program should arrange to meet with the social work adviser as early in their academic careers as possible. It is important that students become familiar with the sequence of and prerequisites for courses in this major and the various recommended and required courses offered by collaborating departments.

CAREER OPPORTUNITIES

The bachelor's degree in social work qualifies the graduate for beginning practice in entry-level positions in a wide range of social service settings such as medical and health care settings, family and children's services, programs for the aged, vocational rehabilitation, youth and adult corrections, school social work, child protection and advocacy, mental health settings, crisis intervention, neighborhood centers, drug and alcohol abuse programs, family planning, adoption and child placement, child welfare programs, military programs, YMCA, YWCA, Scouting, and the Veteran's Administration.

DEGREE REQUIREMENTS

BACHELOR OF SCIENCE[1]
BACHELOR OF ARTS DEGREE, SOCIAL WORK

General Education Requirements 72-76
Additional General Education Requirements 20-16
Skills Courses (to be completed by the end of the sophomore year) 20
- Written Expression 8
  - English 101 - English Composition I
  - English 102 - English Composition II
- Oral Communication 4
  - Speech Communication 103 - Interpersonal Communication Skills
  - or Speech Communication 104 - Oral Argumentation Skills
  - or Speech Communication 105 - Public Speaking
- Critical Thinking 4
  - Mathematics 106 - Reasoning & Problem Solving
  - or Philosophy 106 - Critical Thinking
- Statistics 4
  - Statistics 107 - Concepts and Controversies in Statistics

Introductory Courses (may be taken at any time) 32
- GE Area—Fine Arts and Humanities 8
  - (NOTE: Social Work majors are required to enroll in one literature and one Philosophy course. These courses may both be taken at the introductory level, the advanced level or one course at each level.
- GE Area—Natural Sciences and Mathematics ... 8
  - Biology 111-Contemporary Biology Introductory Course
- GE Area—Social Sciences 16
  - Economics 111-Principles in Macroeconomics
  - Psychology 111-Foundations of Psychology
  - History 111c and 111d-Introduction to the History of Western Civilization

Advanced Courses (may be taken at any time) 36
- GE Area—Fine Arts and Humanities 8
  - Advanced Course
  - Advanced Course
- GE Area—Natural Science and Mathematics 8
  - Two of the following:
    - Biology 203-Human Sexuality and Reproduction
    - Biology 204-Human Heredity and Society
    - Biology 205-Human Diseases
  - or One of three courses listed above and one advanced NSM course.
- GE Area—Social Sciences 20
  - Sociology 300-Contemporary Social Problems
  - Sociology 304-Race and Ethnic Relations
  - Sociology 312-Social Research Methods
  - Economics 327-Social Economics: Issues in Income Distribution, Employment and Social Policy
  - Government 342-Issues in American Public Policy

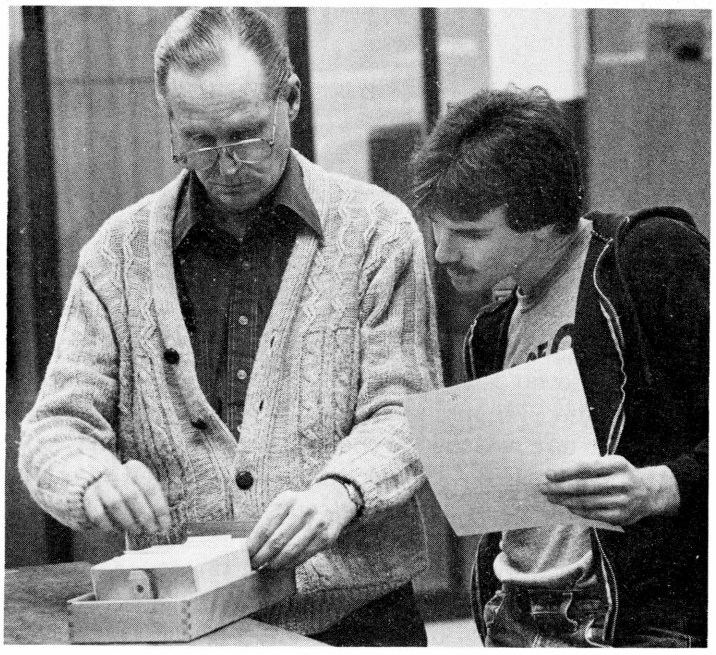
Interdisciplinary Course (Junior or Senior standing required) 4

Social Work Requirements 68
- Social Work 200, 375, 381, 383, 384, 385a,b, 400, 475, 479, 480, 481, 482a,b, and 490

Electives 32

192

[1]The Bachelor of Arts degree requires 12 hours in foreign language in addition to the other requirements and in place of 12 hours of electives.



MINOR PROGRAMS OF STUDY

AEROSPACE STUDIES

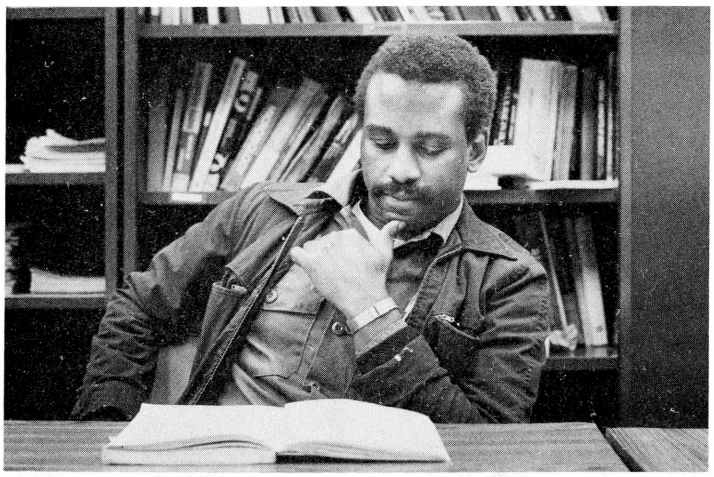
Students interested in the Aerospace Studies minor should refer to the section of this catalog entitled University College.

AMERICAN STUDIES

American Studies, an interdisciplinary approach to a study of American culture, is an appropriate minor for students majoring in such disciplines as government, business, journalism, history, geography, or anthropology.

MINOR REQUIREMENTS

A 28-hour multi-disciplinary minor in American Studies includes courses in American studies, American literature, American history, American philosophy, and American art or jazz. One elective from American studies, American literature, American history, economics, government, or sociology should be selected with the approval of the student's major adviser in consultation with the American Studies Adviser, currently Jules Zanger, Peck Building, Room 2214.



BLACK AMERICAN STUDIES

The Black American Studies minor is multi-disciplinary, with courses in seven departments.

Within the 27 hours required for this minor a student is required to take two specific courses: English 340 and History 309. The remaining 19 elective hours selected from the following courses must include courses from three different departments, and at least three courses related to the black experience in America: English 205, 341, 342; Music 338; Anthropology 311, 411; Art 469a; Government 342, 442; History 316a, b, c; Sociology 304, 402, 409.

For additional information regarding this minor or any of the courses, contact the Black Studies adviser, currently Rudolph Wilson, Building II, Room 1142. A description of the program and a schedule of courses offered each quarter are available at the office.

CLASSICAL STUDIES

The minor in Classical Studies is a multi-disciplinary program sponsored by the School of Humanities and supported by the Departments of English Language and Literature, Foreign Languages and Literature, and Philosophical Studies, as well as by the Department of Historical Studies in the School of Social Sciences and the Department of Art and Design in the School of Fine Arts and Communications.

Classical Studies contributes to cultural enrichment through the study of Latin, Greek, and the history, philosophy, literature, and art of the Greek and Roman civilizations; to language sensitivity by close attention to the grammatical and syntactical structure of Latin and/or Greek and by the careful analysis of texts; to expansion of a general working vocabulary; and to knowledge of special vocabularies of such fields as medicine, law, theology, and foreign languages derived from Latin and Greek.

REQUIREMENTS

The requirements are 32 credit hours of courses designated Classical Studies. Of these, 12 hours are required either in Greek or in Latin. If a student chooses to include both languages in the minor, then 12 hours are required in one of the languages and 8 hours in the other.

COURSES

Greek 101, 102, 103 Introduction to Greek; 201, 202, 203 Intermediate Greek; 499 Readings in Ancient Greek; Latin 101, 102, 103 Introduction to Latin; 201, 202, 203 Intermediate Latin; 499 Readings in Latin; Foreign Languages and Literature 401 Comparative Latin and Greek Grammar; FL 141 Building Vocabulary Through Latin and Greek Word Elements; English 303 Literary Masterpieces of Antiquity; English 310 Classical Mythology and Its Influence; History 111A Survey of Ancient Civilization; 306 History of Rome; 338 History of Greece; 408b History of Ancient Near East: 1200 B.C. to 330 B.C.; Philosophy 385a History of Western Philosophy: Ancient; Philosophy/Government 484a Ancient and Medieval Political Theories; Art 225a History of World Art: Ancient and Classical; 447 Ancient Art.

Because the following electives have variable content, they require advance approval by the Coordinator of the Classical Studies minor. Please consult with the Coordinator before enrolling in Humanities 301, 302, 303, 400; Foreign Languages

and Literature 390; History 300, and Philosophy 490 and 495.

For additional information, please contact the Coordinator of Classical Studies, currently Edwin G. Lawrence, Peck Building, Room 0224.

PEACE STUDIES

The Peace Studies program is an interdisciplinary minor for students who wish to gain a comprehensive understanding of one of the major issues of contemporary society, the problem of eliminating war in favor of non-violent means of resolving disputes. Relevant information comes from the areas of government, philosophy, history, economics, anthropology, psychology, and sociology. By declaring a minor concentration in Peace Studies students can get explicit recognition for taking courses which are related to each other by virtue of the problem to which they are addressed even though they are taught by many different departments.

The Peace Studies minor is especially appropriate for those entering the professions of journalism, radio or TV newscasting, government service, teaching (at any level), law, or international business. It is also a good minor for those interested in preparing themselves for their role as citizens in a democracy.

For additional information and advisement assistance, please call 692-3376 or 692-2250, or see the Coordinator of the Peace Studies Program, currently Ronald Glossop, in Peck Building 2212.

REQUIREMENTS

The minor in Peace Studies requires 28 hours. No courses used by students for their major can be counted toward these 28 hours. Students planning to minor in Peace Studies must pay attention not only to the courses required but also to the prerequisites recommended for these courses. Requirements are listed below. Students should also take IS 340 (The Problem of War and Peace) their sophomore or junior year in order to acquire a background for other courses in the Peace Studies program.

Required Courses (20 hours): IS 340, Government 370, 472 or 474a, History 440b, and at least one of the following (others in the group may be taken as electives): Philosophy 388, Philosophy 342, History 424b, Economics 425, Government/Philosophy 484c.

Elective Courses (20 hours): IS 336; Aerospace Studies 100; Anthropology 305a, 305b, 452; Government 474b, Government/Philosophy 484a, 484b; History 427, 437, 440a; Sociology 461.

The following courses may also be accepted as electives when focused on appropriate subject matter (approval must be given by the Committee on Peace Studies): Anthropology 470, Special Topics in Anthropology; Economics 490, Independent Study in Economics; Government 479, Topics in International Relations; Government 489, Topics in Political Theory; History 410, Special Readings in History; Philosophy 490, Special Problems in Philosophy; Philosophy 495, Independent Readings in Philosophy; Sociology 396, Readings in Sociology.

WOMEN'S STUDIES

Women's Studies is an interdisciplinary field which examines the nature, experiences, and activities of women as well as beliefs, attitudes, and values which societies hold regarding them. The Women's Studies Program at SIUE offers students a minor concentration composed of courses drawn from a number of academic disciplines. The scheduled courses which may be offered toward fulfillment of the minor concentration requirements are announced quarterly by the Women's Studies Program, and only courses so designated are acceptable. Some of the courses which may be credited toward the minor concentration in Women's Studies with approval by the Program are: Biology 203, Anthropology 313, 426, Comparative Literature 210, English 341, Foundations of Education 451, History 313, 390, Humanities 301, 302, 303, Philosophy 320, 321, Psychology 414, Sociology 308, Women's Studies 200, 490, 495, 499.

Students interested in the Women's Studies minor concentration should contact Professor Joyce Aschenbrenner in Peck Building 0231.

REQUIREMENTS

The minor concentration in Women's Studies consists of 28 hours in courses designated as Women's Studies; not more than 12 hours may be taken at the lower division level. A grade point of average 3.50 is required in Women's Studies courses.

UNIVERSITY COLLEGE

University College serves as the academic home for the Bachelor of Liberal Studies program, the Air Force Reserve Officer Training Corps program, and the HONORS programs of the University College, including The Dean's College and the Presidential Scholars Program. The college is also responsible for conducting the Student Colloquium.

BACHELOR OF LIBERAL STUDIES

The Bachelor of Liberal Studies program is intended to give students a solid education in the liberal arts and sciences and the flexibility to pursue an individually designed, interdisciplinary course of study. Unlike other majors, it emphasizes breadth of study rather than depth of knowledge in a single field. It is intended to meet the needs of students whose interests do not coincide with more specific curricula and who have the integrative abilities necessary to plan and develop a program appropriate to those interests.

Admission to the degree program will be based upon a proposal prepared by the student in accord with requirements listed below. The proposal, including a statement of educational goals and the relevance of the BLS to those goals, will be submitted to the Bachelor of Liberal Studies Committee, which is responsible for reviewing application material and granting admission.

Once admitted to the program, the student is assigned a faculty adviser, who reviews the student's plan of study and may recommend changes for consideration by the BLS Committee. The adviser will continue to assist the student and to monitor the student's educational progress. Students may identify a faculty adviser in advance of application to the program and may request the adviser's aid in the preparation of the study plan. Any change of faculty adviser during the course of study requires approval of the BLS Committee.

An approved student proposal constitutes an educational contract, which may be modified only after consideration by the faculty adviser and the BLS Committee. The educational contract should reflect a curriculum with an interdisciplinary focus in broad area requirements as well as in elective courses.

Students who plan to pursue graduate study should develop a contract which can satisfy graduate admission requirements. Normally, students should declare a BLS major before their senior year. If students are admitted to the program as freshmen, their educational contracts should specify mostly general education courses. By this means, students will be enabled to make alternate curriculum decisions, if needed, without penalty.

CAREER OPPORTUNITIES

The Bachelor of Liberal Studies, unlike many major programs, is intended to enhance knowledge in a variety of areas. The extensive course alternatives available through this program allow students to tailor their curriculum to meet their individual needs.

The program is of special value to those who are not seeking a career based in a single discipline, to those who already possess occupational skills, and to those who seek an expansion of their personal and professional lives.

BACHELOR OF LIBERAL STUDIES DEGREE REQUIREMENTS

Each student should develop an educational contract which will satisfy the following requirements:

1. General Education ..... 72-76 hours
   - Skills ..... 20-24 hours
   - Fine Arts/Humanities ..... 16 hours
   - Natural Science & Mathematics ..... 16 hours
   - Social Sciences ..... 16 hours
   - Interdisciplinary Course ..... 4 hours

2. Arts and Sciences Distribution ..... 72 hours

   At least 24 credit hours, in addition to the General Education requirements, should be taken in each of the following broad areas:

   a) Natural and Physical Sciences ..... 24 hours
   b) Social Sciences ..... 24 hours
   c) Fine Arts and Humanities ..... 24 hours

   Not more than 12 of the 24 hours required in each area may be satisfied through General Education introductory courses or through introductory courses in major field(s).

3. Focused Electives ..... 44-48 hours

   A specific interdisciplinary focus will be developed and explained in the educational contract. The broad area requirements and the elective credits will explicitly relate to this focus and the relationship will be explained in the educational contract.

4. A "Capstone" Academic Experience ..... 8 hours

   A "capstone" experience will be required during the student's final year of study. The nature of the experience will be specified and approved as part of the contract. Among such experiences might be:

   - A practicum experience or internship
   - A comprehensive examination, oral or written
   - An integrative research paper or presentation
   - A creative project

   The capstone experience will constitute 8 of the focused elective hours.

192 hours

UNIVERSITY HONORS PROGRAMS

THE DEAN'S COLLEGE

The Dean's College was created to assist outstanding students in planning their academic programs. It enables talented students to study in one or two academic areas in depth. The Dean's College serves students from all subject areas.

Students admitted to The Dean's College plan their academic programs with the help of faculty advisers in their major areas of interest. Some of the usual graduation requirements are waived, so that students have the opportunity to explore a number of areas of interest and to study more intensively an area of concentration. At the same time, students take courses in subjects other than the major area of concentration so as to get a broad education and make the most of the opportunities offered by the University. (Each Dean's College student and Presidential Scholar must complete at least 12 quarter hours in each of the four areas of fine arts, humanities, sciences, and social sciences. For more detailed information, please inquire at the Office of The Dean's College.) Faculty advisers help students develop sound academic programs to fit their needs; advisers are available at given times to discuss academic and other problems with students. Under a faculty adviser's supervision, Dean's College students may take up to 4 hours of independent study (Dean's College Honors Hours) during each quarter of full-time enrollment.

Freshman, sophomore, and junior level students who have been admitted to the University and who have a grade point average of 4.5 (or higher) are eligible to apply. Letters of recommendation from five instructors who are familiar with the student's high school or University academic work are required. High-ranking high school seniors are encouraged to apply for admission to The Dean's College upon graduation from high school. Mature persons who have been away from academic life for a number of years may find The Dean's College particularly appropriate. A personal interview is required as the first step in applying.

Selection of Dean's College students is made by The Dean's College Coordinator on the basis of candidates' previous academic work together with the letters of recommendation from former instructors. Candidates complete the admission requirements by filing a four year program of courses that they have already taken and those that they plan to take.

PRESIDENTIAL SCHOLARS PROGRAM

The Presidential Scholars Program, funded principally by individual grants through the Southern Illinois University at Edwardsville Foundation, provides individualized educational opportunities to selected outstanding students.

Persons selected as Presidential Scholars will:

Receive a scholarship for up to twelve quarters covering all tuition and fees for undergraduate programs

Choose from a variety of special honors and advanced courses to provide a rich and challenging program of studies

Work with a mentor, a faculty member who, by reason of scholarship, interest, and sensitivity, is highly qualified to serve as a personal adviser and teacher

Become a member of The Dean's College and satisfy all Dean's College requirements

Assist in the promotion of scholarly activity and in the intellectual and cultural life of the University

Selection of Presidential Scholars is made by the Presidential Scholars Committee on the basis of the candidates' previous academic work and special talents. The Program is open to any student who is ready for university-level work but has not attended college. To be considered for the scholarship, an applicant must submit the following items.

An application for admission to the University

A letter expressing interest in the Program and an outline of educational goals

ACT or SAT scores

Three letters of recommendation from high school teachers or counselors

Evidence of special talents or abilities, if applicable

Evidence of extra curricular activities, if applicable

An official copy of the high school transcript, indicating rank in class (sixth semester is sufficient)

Students who wish to be considered for the program should mail materials by February 1 to the Presidential Scholars Program, Office of Admissions and Records, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1047.

AFROTC AEROSPACE STUDIES

AEROSPACE STUDIES

The objective of the Air Force Reserve Officer Training Corps (AFROTC) is to qualify students for appointment as second lieutenants in the United States Air Force. However, students may enroll in the freshman/sophomore level aerospace studies course with no military service obligation. Students who enroll in the junior/senior level courses incur a military obligation and may enroll in courses only with the permission of the Professor of Aerospace Studies.

The AFROTC faculty consists of commissioned officers assigned by the Department of the Air Force with the approval of the President of the University.

The Department of Aerospace Studies offers two- and four-year programs at SIUE. The AFROTC four-year program is designed for students with three or more years of undergraduate studies remaining. Students with junior standing or above may apply for entry into the two-year program. However, entry into the two-year program is competitive and is based on standardized test scores, academic major, grade point average, physical examination, a personal interview with the Professor of Aerospace Studies, and successful completion of a summer field training session at an Air Force base. Applicants must be full-time students at SIUE and must remain in good academic standing.

The AFROTC program is divided into the General Military Course (GMC), the freshman/sophomore level curriculum; and the Professional Officer Course (POC), the junior/senior level curriculum. The GMC covers two main themes: the Air Force Today and The Development of Air Power. The courses of the POC emphasize the professional development of the future Air Force officer. The curriculum covers American Defense Policy and Air Force Management and Leadership. Field trips to Air Force bases supplement classroom instruction and familiarize the cadet with Air Force operations and organization.

In order to be commissioned, AFROTC cadets must:

- Pass a medical examination at a military medical facility.
- Obtain a favorable evaluation on an Armed Forces personal history security investigation.
- Be at least 18 years old. Flying applicants must complete commissioning requirements before age 26½ and non-flying applicants must complete commissioning requirements by age 30. However, the age limit for non-flying applicants may be extended to age 35 for outstanding individuals.
- Be of good character (as determined by a favorable record with law enforcement authorities).
- Successfully complete all AFROTC course requirements.
- Complete a baccalaureate or higher degree.

AFROTC cadets must also successfully complete specific courses to enhance their performance as commissioned officers. These include university courses in English composition and mathematical reasoning. Such courses are designated by the Professor of Aerospace Studies.

AFROTC textbooks and uniforms are loaned to all cadets without charge. Students in the POC also receive a monthly subsistence allowance of $100 per month for a maximum of 20 months, an Air Force uniform, a summer field training allowance of more than $400, and an allowance for travel to and from the training location.

In addition to the AFROTC courses offered for academic credit, the Aerospace Studies Department sponsors the Arnold Air Society and Angel Flight. Arnold Air Society is a national honorary service organization open to selected AFROTC cadets. Angel Flight is an auxiliary organization of Arnold Air Society and membership is open to anyone interested in bringing to the local community a better understanding of the Air Force mission and its leaders.

FIELD AND FLIGHT TRAINING: AFROTC Field Training is offered during the summer months at selected Air Force bases throughout the United States. Following field training, qualified cadets interested in becoming Air Force pilots participate in a three-week Flight Screening Program (FSP). Cadets who successfully complete FSP enter Air Force Undergraduate Pilot Training after they are commissioned. Students in the four year program participate in four weeks of Field Training, usually between their sophomore and junior years. Major areas of study include: junior officer training, aircrew/aircraft orientation, career orientation, survival training, base functions and Air Force environment, and physical training. Students applying for entry into the two year program must successfully complete six weeks of Field Training prior to enrollment in the Professional Officer Course. The major areas of study included in the six-week Field Training program are General Military Courses and Leadership Laboratory. Students completing the four-week Field Training program do not enroll in General Military Courses or Leadership Laboratory since those requirements are met at SIUE. No direct academic credit is awarded for Field Training. However, students who successfully complete Field Training may apply for elective credit through the Aerospace Studies Department.

LEADERSHIP LABORATORY: Leadership Laboratory is taken for one hour per week throughout enrollment in AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop student leadership potential. Leadership Laboratory involves a study of Air Force customs and courtesies, drill and ceremonies, career opportunities in the Air Force, and the life and work of Air Force junior officers. It also includes field trips to Air Force installations.

ROTC SCHOLARSHIPS: The federal government and the State of Illinois both offer scholarships to qualified students. Specific details are contained in the Financial Information section of this catalog.

Adjunct Professor:
Freeman, W. B., Jr.

Adjunct Assistant Professors:
DiMarchi, D.O.; Uckert, M.B.; Schmidt, P.E.

Adjunct Instructors:
Frierson, E.H.; Spichalsky, S.J.

Aerospace Studies Minor

The aerospace studies minor educates students in the leadership and managerial responsibilities associated with administering aerospace operations. In addition, the program examines the past, present, and future of aerospace technology.

The program requires 27 hours and includes 18 hours in aerospace studies. The remaining 9 hours to complete the minor consist of electives from several closely related areas chosen in consultation with the student's adviser.

STUDENT COLLOQUIUM

Students wishing to study subjects not in the regular curriculum or to experiment with new approaches to learning may propose a Student Colloquium. Approved Student Colloquia enable students to plan and carry out a unit of study and to receive course credit for their work.

Five or more students who agree upon a subject for study during the quarter may form a class section. Students wishing to participate in a colloquium must have sophomore or higher standing at the time of registration. A minimum of five students must complete the colloquium and participate in the determination of grades.

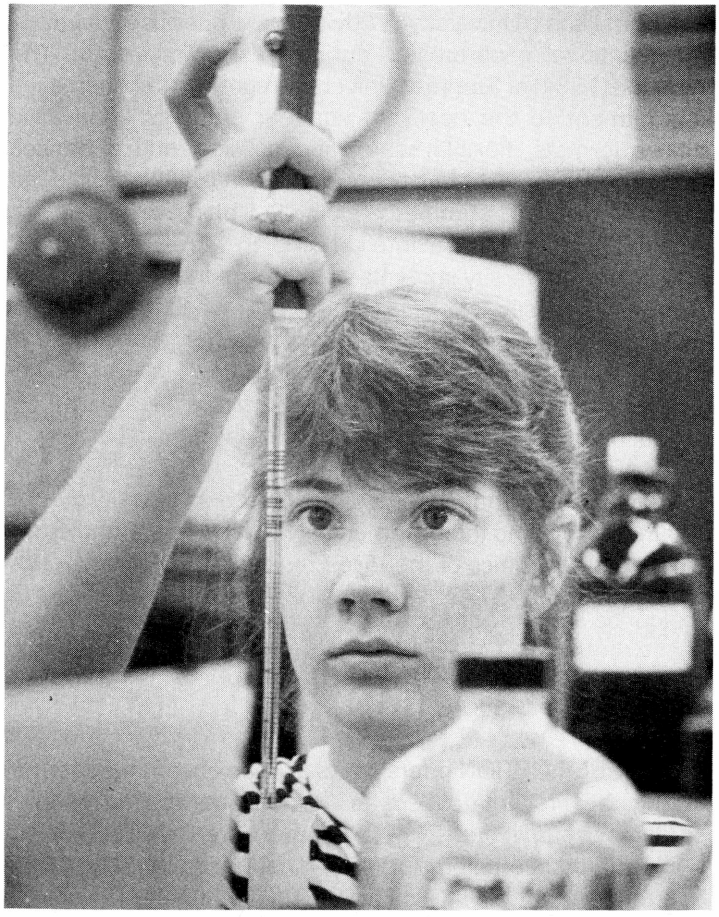
Students interested in forming a colloquium must identify a faculty member willing to serve as a sponsor for the group. The faculty sponsor must approve the topic and the terms of the proposal. The faculty sponsor, upon request of the participants, will be available for aid and direction during the course of the term.

After the faculty adviser has approved the colloquium proposal, the adviser will forward the proposal to the Dean of University College. The adviser will secure the appropriate forms for the proposal from the Office of the Vice President and Provost. Course proposals must reach the Dean in final form not later than the last day of registration for the quarter for which the colloquium is to be credited. The Dean will determine whether the proposed colloquium is appropriate for credit and the number of credit hours the colloquium course will receive. The Dean also makes certain that the proposed colloquium does not duplicate courses already available in the University curriculum.

In the final week of the quarter, the members of the colloquium summarize their accomplishments and evaluate their achievements; they submit a final report to the faculty adviser by the close of the final examination period of the quarter for which the colloquium is to be credited. The faculty adviser forwards the final report to the Dean recommending approval or disapproval along with the reasons supporting the recommendation. The Dean determines whether or not credit should be granted for the colloquium.

Students receive grades of "pass" or "no credit," as determined by the students participating in the colloquium.

Students may obtain up to 4 hours of colloquium credit in any one quarter, and may not obtain more than 8 hours of such credit during their undergraduate careers. Although colloquium credit normally applies only toward elective hours, in special cases appeal may be made by the students for General Education credit or for credit toward a major or minor field of study. In case of such appeal the Dean of University College or the undergraduate adviser of the department involved, whichever is appropriate, will decide the issue. The outcome of the request is made known as early as possible.



ADDITIONAL EDUCATIONAL PROGRAMS AND OPPORTUNITIES

CREDIT ALTERNATIVES

Students enrolled in the University will find a wide range of credit classes offered during the summer, in the evenings, and on weekends. These opportunities are designed to complement leisure and work schedules.

AEROSPACE STUDIES

The objective of the Air Force Reserve Officer Training Corps (AFROTC) is to qualify students for appointment as second lieutenants in the United States Air Force. However, students may enroll in the freshman/sophomore level aerospace studies courses with no military service obligation. The unit of Aerospace Studies offers two- and four-year programs. For more information, please refer to the section on Aerospace Studies under University College in this catalog.

SUMMER UNIVERSITY

Southern Illinois University at Edwardsville offers a wide range of educational opportunities during the summer term. The initiation (1984) of Summer University represents an increased commitment to the needs of summer students. Innovative course formats, flexible scheduling policies, and enhanced cultural and recreational opportunities make it possible for students to adapt summer educational plans to job needs, vacation plans, and other interests.

Summer University students may choose from a wide range of regular courses, offered in both the 8-week and 10-week sessions. In addition, many programs offer workshops in varying formats before, during, and after the 8-week session. Nearly all summer courses and workshops are taught by regular members of the Southern Illinois University at Edwardsville faculty.

Additional information regarding Summer University may be obtained by writing the Summer University Office, Rendleman Building 3102 (Office of the Vice President and Provost), or by calling (618) 692-3772.

SEPTEMBER OPTION

SEPTEMBER OPTION offers courses in a concentrated format during the first four weeks of the fall quarter and enables students to study intensively in a subject area and to complete work in a course before the traditional beginning date of the quarter.

Most students who participate in SEPTEMBER OPTION take only one course, because courses included in this offering meet 100 minutes a day, five days a week.

Participation in SEPTEMBER OPTION is voluntary. Students who do not wish to complete a course offered in an intensive format begin fall quarter classes on the traditional schedule in late September.

Not all disciplines offer courses in SEPTEMBER OPTION, but the schedule provides several choices at most levels and in many fields. Entering freshmen, persons seeking career change or advancement, students wishing additional academic preparation prior to beginning college classes, travellers wishing efficient exposure to a foreign language, and students desiring to accelerate thair educational progress may find SEPTEMBER OPTION a singular opportunity.

WEEK END UNIVERSITY

Many SIUE classes are available on Saturdays and Sunday afternoons through Week End University, which was designed to provide access to University classes for those who, because of work, family or other considerations, find it difficult to fit daytime or evening classes into their schedules. Classes meet once a week for the full number of weekly contact hours, and students earn regular University credit. Students may choose to attend only on weekends or may combine weekend study with day or evening classes. Week End University offers an alternative time schedule and provides services to support University study. All University policies apply although procedures may differ slightly.

The Week End University Office, located in the Office of Continuing Education, in Room 1330 of the Rendleman Building, is open each week day, as well as Saturdays and Sundays. To obtain class schedules, applications, general information, or weekend assistance, you may visit the office or call (618) 692-3775.

ALTERNATIVE LOCATIONS

EAST ST. LOUIS CAMPUS

The East St. Louis Campus of SIUE, located at 411 East Broadway in East St. Louis, is the base for many University activities in East St. Louis and the Metro-East area. The classrooms, laboratories, and library facilities there support the offering of University credit courses. The East St. Louis Campus also provides rooms and other facilities for community meetings, workshops, and seminars, many of which are planned and directed by University faculty and personnel as part of the

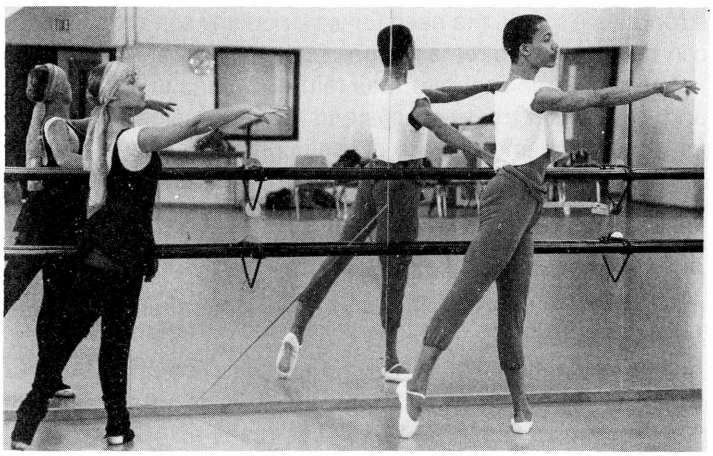
University's commitment to community and public service in Metro-East.

Utilizing the facilities of the East St. Louis Campus, the University offers upper-division and graduate credit courses in selected programs as determined by community needs. Offerings include courses in early childhood education, elementary education, accounting, data processing, black studies, counseling, special education, nursing, geography/earth science, music, English, educational administration, history, general education, and others as needed.

The Office of the Director of the East St. Louis Campus coordinates and directs academic support programs and service training programs, both on and off campus. These programs enable the University to provide quality education to all of its constituencies, in order to increase employment opportunities for area youth and adults, and to upgrade the quality of life for persons in the Metro-East area.

COMMUNITY SERVICE PROGRAMS

The East St. Louis Campus of SIUE is the site of many community service programs, academic and cultural. Some are initiated within the University, while others respond to requests for University assistance. Faculty and personnel plan or assist in the planning of many workshops, conferences, seminars, and programs designed to aid the citizens of Metro-East to enhance their lives, to understand and cooperate with their city government and municipal services, and to utilize the many state and federal agency services available to them.



The Katherine Dunham Center for the Performing Arts

This community service encourages youth and adults (preschoolers through senior citizens) of East St. Louis to develop alternative value systems and creative lives through understanding and participating in the performing arts. Classes offered by the Katherine Dunham Center, open to all area residents, include dance, drama, aerobics/body conditioning, and acrobatics. SIUE students from both campuses participate, but University enrollment is not required for participation in activities at the Katherine Dunham Center.

The unit sponsors two performing groups: the Performing Dance Company and the Unity Theatre Ensemble. The Performing Dance Company focuses upon dance and the interpretation of ethnic traditions as a means of expressing various observances and moods. This Company has gained a national reputation for excellence. The Unity Theatre Ensemble intermingles music, drama, and dance. The two groups maintain an active schedule of performances in area schools which serve as stimuli to encourage young observers to broaden their horizons and develop their own creative potential.

Upward Bound/Science Awareness

The Upward Bound/Science Awareness Project, funded by the United States Office of Education, is an alternative high school program for the eleventh and twelfth grades designed to provide highly motivated and capable students with a background in science, language arts, communications skills, and mathematics which can enable them to enter and succeed in science-based baccalaureate fields of study. Students take their academic classes at the centrally-located East St. Louis Campus, but they can participate in social and extra-curricular activities at their home schools, which accept Project credits toward the high school diploma. Some courses carry University credit, which is assigned upon matriculation. The ultimate objective of the Science Awareness Project is to increase the number of minority persons engaged in professions and careers based on the sciences. The format of the Science Awareness Program has been accepted by the United States Office of Education as a model to be disseminated nationally for implementation by post-secondary schools in urban areas.

Child Development Program

The East St. Louis Campus operates three Early Child Development Centers that serve working and college enrolled parents. The Centers enroll approximately 210 students.

Educational Opportunity Centers

The East St. Louis Campus operates several Educational Opportunity Centers. The Centers offer assistance in gaining access to post secondary institutions.

Head Start Program

The East St. Louis Campus administers seven Head Start Centers in St. Clair County. Approximately 715 pre-schoolers from 3 to 5 years of age are enrolled in the Centers.

Project Success

The East St. Louis Campus administers an after school education program for 40 children who have been placed in protective care. The education program is supplemented by social, cultural, and recreational activities.

RESIDENT CENTERS AND OTHER OFF-CAMPUS LOCATIONS

Resident centers have been established at Scott Air Force Base and other locations. Selected credit courses and degree programs, identical to on-campus programs in academic content and degree requirements, may be offered at these locations.

Numerous University credit courses are also offered at off-campus sites in response to specific requests in order to meet particular educational needs in area communities. Sites used have included local schools, community colleges, hospitals and government facilities. Institutions, agencies, or organizations interested in off-campus services, or individuals wishing information about resident centers or other off-campus courses, should contact the Coordinator of Credit Programs in the Office of Continuing Education at (618) 692-3210.

NONCREDIT ACTIVITIES

OFFICE OF CONTINUING EDUCATION

The Office of Continuing Education sponsors a wide variety of noncredit and public service activities designed to extend the resources of the University to the people of southwestern Illinois.

EDUCARD is a special program which allows anyone not currently enrolled at SIUE to attend selected credit classes (listed in the *Announcements* class schedule) on a space-available basis at a modest fee. No credit is earned and no official University record is kept of EDUCARD participation, but EDUCARD learners do receive a student parking decal and a courtesy library card and may borrow undergraduate textbooks for the quarter they attend.

Career and professional development programs present up-to-date information to business people and professionals wishing to remain current in their career fields. Examples of recent programs include "Industrial Hygiene", "Computers in Construction", "Custodial Care", and "Role Models for Women on the Move".

A wide variety of noncredit classes are offered for the leisure enjoyment and personal development of residents of area communities. Noncredit classes include such topics as leisure and hobby activities; computers; real estate; music, dance and exercise; consumer issues; topics for women; and other special interest areas.

Through the Metro East Institute for Lifetime Learning, SIUE offers many short, noncredit classes at senior citizen centers and nutrition sites throughout the region. A nominal fee is sometimes charged.

For information on any of the above activities, contact the Office of Continuing Education at (618) 692-3210.

ENVIRONMENTAL RESOURCES TRAINING CENTER

Faculty and Staff

Anderson, D. M.; Benear, A. K.; Bengtson, H. H. (Director); Harris, N. A.; Kleminski, M. L.; Long, L.; Miller, R. J.; Whitworth, R. A; Wooters, C. T.

The Environmental Resources Training Center (ERTC) has been designated by the Illinois Environmental Protection Agency as the state center for training of personnel involved in operation, maintenance, and management of water quality control facilities for both public water supplies and wastewaters.

ERTC training programs are designed to assist both entry-level personnel who wish to prepare for a career in water quality control operations and persons already employed in treatment facility operations who desire additional education to upgrade job skills and to prepare for more responsible positions.

Students who complete ERTC training courses successfully are awarded continuing education units (CEU's) by SIUE and receive education and training credits applicable to certification as water supply or wastewater treatment facility operators under programs administered by the Illinois Environmental Protection Agency.

Career Opportunities

Because the demand for water is great and increasing, concern about maintaining clean rivers, streams, and lakes remains strong. As a result, the need for water quality control operators can be expected to remain high.

The people who operate, maintain, and manage water supply and wastewater treatment systems are responsible for protecting the health and welfare of the population. They have this responsibility through their need to ensure that the treatment system operates properly to produce safe water or satisfactory effluent for discharge to a river, lake, or stream. Because of the responsibility involved, Illinois and most other states require that water quality control operators be licensed before they can operate a plant.

Data from the Illinois Environmental Protection Agency suggests that Illinois water supplies and wastewater treatment facilities can be expected to need as many as 400 additional trained and certified operators each year.

Water Quality Control Operations Certificate Program

The SIUE Water Quality Control Operations program is a one-year, full-time program of study leading to a Certificate of Completion. Upon completing the program, a student is eligible to take the Illinois certification exams to become licensed as a beginning level public water supply operator or wastewater treatment operator.

Admission and Retention

ERTC considers individual potential when granting admission to the program. ERTC prefers to admit only those students who are high school graduates or who have earned a G.E.D. certificate. However, ERTC does make provision for admission of students, 18 or older, who are not high school graduates.

ERTC requires that the applicants submit a written self-evaluation and three personal references. A series of language and mathematics skills proficiency examinations are administered and evaluated for final applicant screening. Only those students whose basic skills suggest potential for success are admitted.

ERTC requires that students remain in good academic standing by maintaining a cumulative 3.00 (on a scale of 5.00) grade point average to be retained in the program.

Class Enrollment

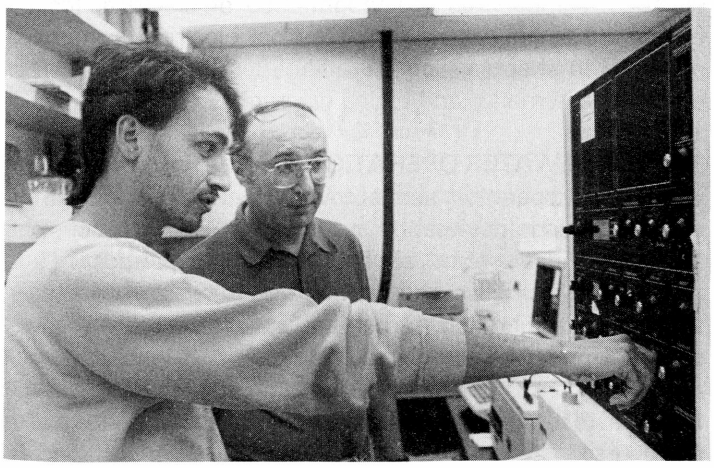
Enrollment is limited to 40 students per academic year. Entry into the program is in the fall quarter only.

Application for Admission

Applications for admission to the ERTC program should be made directly to the ERTC. Additional information and application forms may be obtained by writing to the Career Program Coordinator, Environmental Resources Training Center, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1075.

Curriculum

The program stresses practical training. The theoretical aspects of water quality control presented in lecture sessions are supplemented by actual experience in laboratories, shops, pilot plants, and treatment plants. A ten-week supervised work-study internship is an integral part of the program. All students enroll in classwork in water supply and/or wastewater treatment. The courses taken each quarter are as follows:



FALL QUARTER	Lecture	Laboratory	Total
ERTC 101 Wastewater Operations I	4	4	
ERTC 102 Water Supply Operations I	4	4	
ERTC 103 Basic Laboratory Skills	2	4	
ERTC 105 Mechanical Maintenance	3	4	
ERTC 106 Water Quality Computations	3		
ERTC 107 Water Quality Communications	3		
Total	19	16	
Total Contact Hours per Week			35

WINTER QUARTER			
ERTC 201 Wastewater Operations II	4	4	
ERTC 202 Water Supply Operations II	4	4	
ERTC 203 Wastewater Laboratory	2	4	
ERTC 204 Water Supply Laboratory	2	4	
ERTC 205 Electrical Maintenance	3	4	
Total	15	20	
Total Contact Hours per Week			35

SPRING QUARTER			
ERTC 301 Wastewater Operations III	4	6	
ERTC 302 Water Supply Operations III	4	6	
ERTC 305 Instrumentation Maintenance	3	4	
ERTC 308 System Maintenance	4	4	
Total	15	20	
Total Contact Hours per Week			35

SUMMER QUARTER	
ERTC 400 Supervised Work Study	40 hours per week for 10 weeks
Total Contact Hours per Week	40

Opportunities for Part-Time Students

In addition to the program in Water Quality Control Operations for full-time students, the ERTC also offers evening courses at the ERTC and one to five day workshops and seminars at various locations throughout Illinois. These courses are designed primarily to assist persons already employed in the water supply or wastewater treatment field to upgrade job skills and prepare to obtain certification as water supply or wastewater treatment facility operators at one of the several levels available under certification programs administered by the Illinois Environmental Protection Agency.

ERTC's annual twelve month schedule of off-campus workshops is published in July of each year. Persons interested in enrolling in the ERTC program as part-time students should contact the ERTC for more detailed information about the program and enrollment procedures.

Courses

101 WASTEWATER OPERATIONS I. First course in wastewater treatment operations. Water pollution problems and their causes are presented. Sources and characteristics of wastewater are taught. Federal and state laws, rules, and regulations applicable to wastewater treatment plant operation are discussed. Normal operation and preventive maintenance for collection systems, preliminary treatment devices, primary treatment devices, and disinfection are taught. Biological treatment principles and process control are introduced. Proper operation and maintenance of stabilization ponds and small activated sludge plants are learned. Course includes field trips to orient students to wastewater treatment processes and their operation.

102 WATER SUPPLY OPERATIONS I. The first course in water supply operation covers sources and characteristics of water, common water supply treatment processes, and the potable water distribution system. Federal and state laws, rules, and regulations applicable to water treatment plant operations are discussed. Water distribution, storage, corrosion control, fluoridation, disinfection, water quality, and water analyses are taught. Facility management, records, and reporting are addressed. The course includes field trips to orient students to water treatment processes and their operation.

103 BASIC LABORATORY SKILLS. This water and wastewater laboratory course develops skills to perform volumetric, colorimetric, and gravimetric techniques used in the water and wastewater analyses. Students learn laboratory procedures in training sessions. Laboratory safety, proper care and use of glassware, equipment and chemicals, and record keeping are stressed.

105 MECHANICAL MAINTENANCE. In shop sessions, students learn to maintain and repair centrifugal and positive displacement pumps and other mechanical equipment found in water and wastewater plants. Principles of pump operation and maintenance are taught. Preventive and corrective maintenance procedures, which include problem diagnosis and lubrication, are stressed. Piping, valves, and connections are discussed.

106 WATER QUALITY COMPUTATIONS. Reviews basic mathematics principles including addition, subtraction, multiplication, and division of whole numbers, fractions, decimals, and percents. Averaging numbers, ratios, proportions, and significant figures are also reviewed. Conversions, areas, volumes, and use of graphs are taught. Word problems, solving simple equations, velocity, and flow calculations are taught. Water and wastewater system process control calculations are introduced. Students learn to calculate detention time, efficiency, water overflow rate, surface settling rate, chemical dosage, hydraulic, and organic loading, solids inventory, F/M ratio, MCRT, and sludge age.

107 WATER QUALITY COMMUNICATIONS. Teaches the basic communication skills required by operators of water quality control facilities. Topics include improving basic reading skills, grammar, spelling, and written and oral communication skills. Technical writing skills are developed.

201 WASTEWATER OPERATIONS II. The second course in wastewater operations deals with the modes of operation, process control testing, operating strategies, and troubleshooting of the activated sludge process, fixed media systems, aerobic and anaerobic sludge digestion, and solids handling systems (drying beds, lagoons, and land application). Students operate the ERTC pilot facilities and learn to apply basic principles to actual operations. The SIUE wastewater treatment plant is also used to provide practical experience in operations.

202 WATER SUPPLY OPERATIONS II. The second course in water operations teaches solution mixing, preliminary treatment, ground water sources, iron and manganese control, filtration, ion exchange softening, process water disposal, laboratory and operating data interpretation, and system management as they relate to Class C and B water treatment facilities in the state of Illinois. Students operate the ERTC pilot facilities in laboratory sessions. Field trips to operating facilities are included.

203 WASTEWATER LABORATORY. Provides training in the following wastewater analyses: Biochemical Oxygen Demand, Chemical Oxygen Demand, Fecal Coliform, Phosphorus Determination and Total Kjeldahl, Ammonia, Nitrate and Nitrite Nitrogen. Laboratory management, quality control, and microscope techniques are also taught.

204 WATER SUPPLY LABORATORY. Provides training in the following water analyses: Iron, Manganese, Fluoride, Chlorides, Sulfate, Conductivity, Hardness, Magnesium, Free Carbon Dioxide, Threshold Odor, Color, Total Coliform, and Orthophosphate. Laboratory management, jar testing, and microscope techniques are taught.

205 ELECTRICAL MAINTENANCE. Teaches motors and their control panels. Proper operating conditions for relays, magnetic contactors, motor protective devices, and other electrical components are taught. Use of electrical testing equipment to analyze and troubleshoot electrical systems is practiced in shop sessions. Students learn to read and use electrical schematics and wiring diagrams.

301 WASTEWATER OPERATIONS III. The final course in the wastewater operation series covers operation and maintenance of sludge dewatering systems (vacuum filtration, belt filtration, and dissolved air flotation), sludge disposal (land application, landfills, and incineration), tertiary treatment systems (sand filtration, carbon adsorption, nitrogen removal, chemical precipitation, reverse osmosis, and ion exchange), records and reporting systems. The ERTC pilot facilities and SIUE waste treatment plant are used in the training sessions in this course.

302 WATER SUPPLY OPERATIONS III. The final course in water supply operations teaches operation and maintenance of Class A water facilities in the state of Illinois. Surface water treatment, chemical feeding, coagulation and sedimentation, taste and odor control, filtration, softening and process waste disposal are taught. Laboratory data interpretation in the operation of Class A facilities is stressed. In laboratory sessions students operate the ERTC pilot facilities. Field trips are included in the course.

305 INSTRUMENTATION MAINTENANCE. Teaches application, calibration, maintenance, and operation of instruments and control systems in the water and wastewater industries. Operation and maintenance of primary sensing and sampling devices, recording, indicating, transmission, and controlling equipment are taught. Training with each system is stressed.

308 SYSTEM MAINTENANCE. The wastewater collection and water supply distribution systems course teaches proper methods of constructing, inspecting, cleaning, and maintaining large pipe networks. Students learn to make service connections to lines found in distribution and collections systems. Legal requirements for systems are presented. Proper procedures to disinfect water lines are taught. Record keeping and reporting for collection and distribution systems are taught. Proper safety procedures in system maintenance are emphasized. Students observe and practice proper techniques during field trips.

400 SUPERVISED WORK STUDY. Students work in treatment facilities for a ten-week supervised work experience. This work experience is structured so that students spend a minimum of ten work days in each facet of system operation: collection or distribution system, plant operations, maintenance, and laboratory. The students prepare written and oral reports describing their experience which are presented and discussed at group meetings held at the conclusion of each two-week segment.

COMMUNITY OUTREACH ACTIVITIES

CENTER FOR MANAGEMENT STUDIES

The Center for Management Studies provides a broad array of training and consulting services to individuals and organizations within the community. These services include short seminars, CPA Review Courses, a Supervisory Management Development Program, tailored in-house training and development programs, and applied consulting activities.

Persons interested in obtaining information may contact James F. Miller, Jr., at the Center for Management Studies, (618) 692-2668.

SMALL BUSINESS INSTITUTE PROGRAM

The Small Business Institute Program provides both managerial counseling to small businesses and valuable experience to students. Working under the supervision of a faculty member, seniors and graduate students analyze a small business and develop recommendations for the firm's management.

Small businesses wishing to participate in this program may apply either to the Small Business Administration or to the Director of the Small Business Institute at SIUE, (618) 692-2929.

REGIONAL RESEARCH AND DEVELOPMENT SERVICES

Regional Research and Development Services (RRDS) provides assistance and data to area businesses, planning agencies, and government bodies. Formed through the consolidation of the Center for Urban and Environmental Research and Services (CUERS) and the Office of Area Development (OAD), RRDS also works closely with the Illinois Department of Commerce and Community Affairs, the St. Louis Regional Commerce and Growth Association, the Southwestern Illinois and Metropolitan Area Planning Commission, and the Leadership Council of Southwestern Illinois in efforts to encourage economic growth. For information and assistance, please call (618) 692-3500.

DENTAL CLINIC FACILITIES

The School of Dental Medicine maintains clinic facilities in Alton and in East St. Louis. The Satellite Dental Clinic (East St. Louis), now in its fourth year of operation, consists of nine dental operatories and supporting areas. The Alton Dental Clinic consists of the full range of facilities available at the School of Dental Medicine. Both clinic facilities provide patients with comprehensive dental care programs. Students in the

School of Dental Medicine rotate through the clinics during the last two years of the curriculum. Persons interested in care at the East St. Louis Satellite Dental Clinic may call (618) 271-0803 between the hours of 8:00 a.m. and 4:30 p.m. Monday through Friday. Patient treatment is available 9:00 a.m. to 4:30 p.m. daily except Wednesday. Persons interested in care at the Alton Clinic may call (618) 463-3928 between the hours of 8:00 a.m. and 4:30 p.m. Monday through Friday. Patient treatment is available 9:00 a.m. to 4:30 p.m. daily.

ELDERHOSTEL

ELDERHOSTEL is part of the popular international program designed to provide intellectually stimulating yet affordable educational experiences for persons 60 years of age or older. ELDERHOSTEL courses, which appeal to persons from all backgrounds, are offered on the SIUE campus twice each summer. For one week, participants attend up to three specially designed noncredit daily courses which challenge their interest but require little outside preparation. All three courses, related field trips, extracurricular activities, and room and board are included in the modest fee of approximately $205.00. A limited number of commuter Elderhostelers may travel to SIUE each day and participate in all meals, classes, and activities for a cost of approximately $155.00. For further information contact the Office of Continuing Education, Box 1084, SIUE, Edwardsville, Illinois 62026-1084, or phone (618) 692-3210.

GERONTOLOGY PROGRAM

Southern Illinois University at Edwardsville, through its Gerontology program and All-University Committee on Gerontology, provides gerontological instruction, research, and service designed to meet the service and policy needs of the rapidly expanding older population in the Metro-East region, the state, and the nation.

The Gerontology Program serves as a catalyst for many disciplines and professional programs at the University to develop collaborative efforts in the generation, dissemination, and utilization of gerontological knowledge. While Southern Illinois University at Edwardsville does not offer a major in gerontology, qualified students and community professionals may obtain a graduate certificate of completion in Gerontology by taking the Interdisciplinary Graduate Sequence in Gerontology. In addition, there are undergraduate and graduate level courses on aging in various departments and schools throughout the University. Courses in aging available to undergraduate students include: Psyc 304-4: Maturity and Old Age, Psyc 487-4: Psychology of Aging, SpC 465-4: Communication and Aging, Art 452-3: Art Education for Older Adults, and AdEd 490-4: Introduction to Adult and Continuing Education. In addition, many departments have independent study courses and courses on selected topics which address gerontological topics. Undergraduates interested in gerontology and working with older adults should arrange for an advisement appointment with the Gerontology program director.

Students may also receive gerontological education and training by participating in the Gerontology Program's vigorous Continuing Education activities, consisting of workshops, conferences, and public lectures and seminars.

Gerontology sponsors and co-sponsors for older adults a number of public service programs which include the active involvement of students. The Annual Senior Citizen's Fair, co-sponsored with the Student Activities Office, is a day-long event consisting of informational, recreational, social, and educational events for older adults and their friends. Between 2500-3000 older persons attend the Fair each year. Approximately 100 student volunteers contribute their time and energy toward making the Senior Fair the largest single event for older persons in the Metro-East area.

The Dialogue With Senior Citizens is a 24-week educational and cultural enrichment program for older adults in the area. The Dialogue meets on Wednesdays from 1:30-4:00 p.m. in the University Center. A wide range of interesting topics are covered, with faculty presenters coming from all schools throughout the University. The annual Dialogue program begins in October and ends in May, with breaks during Thanksgiving and Christmas and between quarters.

Research on aging is fostered through the Gerontology Research Colloquia Series. Faculty, students, and community practitioners are encouraged to share their research findings with each other and to seek ways to utilize gerontological research to improve delivery of services to the aging. National scholars in the field of aging and researchers from other universities and colleges in the regional area are also an integral part of the Gerontology Research Colloquia Series.

The Gerontology Program is a member of the Association for Gerontology in Higher Education, the Mid-American Congress on Aging, and the Illinois Gerontology Consortium. Faculty and staff also hold numerous individual memberships in local, state and national organizations concerned with research, training, and service programs in the field of aging.

Southern Illinois University at Edwardsville is a microfiche repository for SCAN—the National Clearinghouse on Aging's Service Center for Aging Information.

The Gerontology Program provides a monthly radio program on WSIE-FM (88.7) entitled "Successful Aging." Anthony Traxler serves as program moderator. The faculty of the Gerontology Program and the All-University Committee on Gerontology discuss the biological, psychological and socio-cultural aspects of aging and ways to enhance growth and development throughout the later years.

Students and professionals served by the Gerontology Program are encouraged to seek excellence in scholarship, in professional endeavors, in friendship, and in service to older persons by becoming members of the Iota Chapter of Sigma Phi Omega, the National Academic Honor and Professional Society in Gerontology. Sigma Phi Omega sponsors a series of scholary and social events throughout the year and seeks to promote scholarship and professionalism in the field of gerontology. Its motto is "Service to Older Persons." Membership is open to undergraduate and graduate students who are majoring or minoring in gerontology and related fields. To be eligible for membership, undergraduates must maintain a grade point average between 4.30 and 5.00 (5.00 grading system) during

their last two years of study; graduate students must maintain at least a 4.50 GPA.

The Annual Film Festival on Aging, which began in 1978, is designed to familiarize students and faculty, trainers, practitioners, and service providers in the field of aging with current gerontological media materials. The Film Festival emphasizes 16mm films on aging which can be used for educational and training purposes. Films are shown from 8:30 a.m. to 4:00 p.m.; a short discussion period follows each film. Information on rental and purchase of films shown at the Festival is provided along with a listing of general reference sources on films on aging. The Film Festival is sponsored as a public service and is free of charge.

For further information on the Gerontology Program and its activities, contact Anthony Traxler, Program Director, at (618) 692-3454, or visit the office which is located in Classroom Building III, Room 0138.

OFFICE OF CONTINUING EDUCATION

The Office of Continuing Education sponsors a wide variety of noncredit and public service activities designed to extend the resources of the University to the people of southwestern Illinois. Career and professional development programs present up-to-date information to business people and professionals wishing to remain current in their career fields. Examples of recent programs include "Industrial Hygiene," "Computers in Construction," "Custodial Care," and "Role Models for Women on the Move."

A wide variety of noncredit classes are offered for the leisure enjoyment and personal development of residents of area communities. Noncredit classes include such topics as leisure and hobby activities; computers; music, dance and exercise; consumer issues; topics for women; and other special interest areas.

The Community Service section of the Office of Continuing Education supports a variety of activities which serve people living in southwestern Illinois. Examples of these activities include the Regional Senior Olympics, classes offered through the Metro-East Institute of Lifetime Learning, Senior Fair, Elderhostel, Focus Series, Arts for Older Adults and Girl Scout Leadership Training.

EDUCARD is a special program which allows anyone not currently enrolled at SIUE to attend selected credit classes (listed in the *Announcements* class schedule) on a space-available basis at a modest fee. No credit is earned and no official University record is kept of EDUCARD participation, but EDUCARD learners do receive a student parking decal and a courtesy library card and may borrow undergraduate textbooks for the quarter they attend.

The Conferences and Institutes unit of the Office of Continuing Education provides specialized program planning services and meeting arrangements for private business, professional organizations, government agencies, and community groups. The attractive, convenient, well-equipped facilities of the University campus provide an excellent setting for all types of meetings and special events. On-campus housing for groups is available during the summer. Call Conferences and Institutes, (618) 692-2660, for additional information.

In addition to providing significant public service, the many community outreach activities of the Office of Continuing Education provide an opportunity for residents of southwestern Illinois to enjoy the excellent facilities and resources of the campus and to become familiar with additional education opportunities at SIUE. For more information about the Office of Continuing Education and its activities write to Office of Continuing Education, Campus Box 1084, Southern Illinois University at Edwardsville, Edwardsville, IL 62026-1084 or call (618) 692-3210.

RAPE AND SEXUAL ABUSE CARE CENTER

The Rape and Sexual Abuse Care Center is a non-profit community service organization within SIUE established in 1977 to provide services to child and adult victims of rape and sexual abuse. The Center is a multi-service sexual assault program that provides comprehensive and direct client care. Services include a 24-hour crisis intervention access to victims; medical and police advocacy; individual and group counseling; widely varied education and prevention initiatives; and information, referral and outreach services.

The Center's services to victims relate to an overall network of agencies with which the victim must interact. These include the local medical, mental health, and law enforcement agencies as well as the judicial system.

The Rape & Sexual Abuse Care Center is located at Tract 1163 Bluff Road on the campus of Southern Illinois University at Edwardsville. The mailing address is SIUE, Box 1154, Edwardsville, IL 62026-1154. The phone number for daily office hours and a 24-hour hotline is (618) 692-2197.

DEGREES AND PROGRAMS

DEGREES

B.A. - Bachelor of Arts
B.F.A. - Bachelor of Fine Arts
B.L.S. - Bachelor of Liberal Studies
B.M. - Bachelor of Music
B.S. - Bachelor of Science
B.S.A. - Bachelor of Science in Accounting
B.S.E. - Bachelor of Science in Engineering
Cert. - Certificate Degree
D.M.D. - Doctor of Dental Medicine
Ed. D. - Doctor of Education
M.A. - Master of Arts
M.B.A. - Master of Business Administration
M.F.A. - Master of Fine Arts
M.M. - Master of Music
M.M.R. - Master of Marketing Research
M.P.A. - Master of Public Administration
M.S. - Master of Science
M.S. in Ed. - Master of Science in Education
M.S.E. - Master of Science in Engineering
S.D. - Specialist in Education

MAJORS, DEGREES AWARDED

SCHOOL OF BUSINESS

Accountancy ..... B.S.A.
Business Administration ..... B.S., M.B.A.
Undergraduate specializations include
Administrative Services
Business Data Processing
Economics
Finance
General Business Administration
Management
Management Information Systems
Manpower and Industrial Relations
Marketing
Personnel Administration
Production and Operations Management
Business Economics ..... B.S.
Business Education ..... B.S., M.S. in Ed.
Economics ..... M.A., M.S.
Management Information Systems ..... M.S.
Marketing Research ..... M.M.R.

SCHOOL OF DENTAL MEDICINE

Dentistry ..... D.M.D.
Family Practice Residency in Dentistry ..... Cert.

SCHOOL OF EDUCATION

Counselor Education ..... M.S. in Ed., S.D.
Early Childhood Education ..... B.S.
Educational Administration and Supervision ..... M.S. in Ed., S.D.
Elementary Education ..... B.S., M.S. in Ed.
General Science and Mathematics ..... B.S.
Health Education ..... B.S.
Instructional Process ..... Ed. D.
Instructional Technology ..... M.S. in Ed.
Physical Education ..... B.S., M.S. in Ed.
Physical Science Education ..... B.S.
Psychology ..... B.A., B.S., M.A., M.S.
Recreation ..... B.S.
Secondary Education ..... M.S. in Ed., S.D.
Special Education ..... B.S., M.S. in Ed.

SCHOOL OF ENGINEERING

Civil Engineering ..... B.S.E., M.S.E.
Construction ..... B.S.
Electrical Engineering ..... B.S.E., M.S.E.
Environmental Studies ..... M.S.
Industrial Engineering ..... B.S.E.

SCHOOL OF FINE ARTS AND COMMUNICATIONS

Art ..... B.A., B.S., M.F.A.
Art and Design ..... B.F.A.
Mass Communications ..... B.A., B.S., M.S.
Music ..... B.A., B.M., M.M.
Speech (Speech Communication specialization) ..... M.A.
Speech (Speech Pathology specialization) ..... M.S.
Speech Communication ..... B.A., B.S.
Speech Pathology and Audiology ..... B.A., B.S.
Theater ..... B.A., B.S.

SCHOOL OF HUMANITIES

English ..... B.A., B.S., M.A.
Foreign Languages and Literature ..... B.A., B.S.
Philosophy ..... B.A., M.A.

SCHOOL OF NURSING

Nursing ..... B.S., M.S.

SCHOOL OF SCIENCES

Biological Sciences ..... B.A., B.S., M.A., M.S.
Chemistry ..... B.A., B.S., M.S.
Computer Science ..... B.A., B.S.
Mathematical Studies ..... B.A., B.S.
Mathematics ..... M.S.
Physics ..... B.A., B.S., M.S.

SCHOOL OF SOCIAL SCIENCES

Anthropology	B.A., B.S.
Earth Science	B.S.
Economics	B.A., B.S.
Geographical Studies	M.A., M.S.
Geography	B.A., B.S.
History	B.A., B.S., M.A.
Policy Analysis	M.S.
Political Science	B.A., B.S., M.A., M.S.
Public Administration	M.P.A.
Social Work	B.A., B.S.
Sociology	B.A., B.S., M.A.

UNIVERSITY COLLEGE

Liberal Studies	B.L.S.

OVERVIEW OF THE SCHOOL OF DENTAL MEDICINE

The SIU School of Dental Medicine, which is located on the Alton Campus, is comprised of dental clinical facilities, classrooms, offices and research laboratories. In addition to research laboratories, the dental school has a scanning and transmission electron microscopy suite and sophisticated equipment to conduct histological, biochemical, anatomical, microbiological, pharmaceutical and physiological research.

The School of Dental Medicine program is a four-year curriculum that has as its major goal the preparation of graduates to be competent general practitioners of dentistry. The School awards the professional degree of Doctor of Dental Medicine.

The curriculum is divided almost equally into four academic year units. The total clock hours are 6,080 with 1,071 devoted to basic science instruction, 4,328 to clinical sciences and 128 to behavioral and social sciences. The remaining hours are designated as elective, study and consultative time.

The year I curriculum presents normal human morphology and function and basic dental science information. The basic biomedical sciences include: Anatomy, Human Biochemistry, Microbiology and Human Physiology. The basic dental clinical science includes: Community and Preventive Dentistry, Pediatric Dentistry, Dental Materials, Dental Morphology and Occlusion, Operative Dentistry, Periodontology, Orthodontics, Fixed Prosthodontics and Occlusion.

The year II curriculum contains additional basic science information on the human organism and disease recognition, diagnosis and treatment. The preclinical dental lecture and laboratory courses prepare the student to begin patient care. The biomedical sciences of year two include: Microbiology, Pharmacology, Anatomy, General Pathology, Internal Medicine, Medical Emergencies and Oral Pathology. The dental clinical sciences include: Dental Behavioral Science, Community and Preventive Dentistry, Fixed Prosthodontics, Occlusion, Radiology, Pediatric Dentistry, Orthodontics, Oral Diagnosis and Physical Evaluation, Removable Partial Prosthodontics, Endodontics, Operative Dentistry, Management in Dentistry, Removable Complete Prosthodontics and Anxiety and Pain Control.

The year III curriculum focuses on basic comprehensive patient dental care and the relationship of all areas of prevention and treatment of dental disease. The dental clinical sciences include: Clinical Therapeutics, Nutrition, Endodontics, Occlusion, Fixed Prosthodontics, Operative Dentistry, Periodontology, Radiology, Orthodontics, Community and Preventive Dentistry, Oral and Maxillofacial Surgery, Removable Complete Prosthodontics, Behavioral Science, Oral Medicine and Physical Evaluation, Special Patient Care, Conscious Sedation and General Anesthesia and Comprehensive Patient Care.

The year IV curriculum focuses on advanced comprehensive patient dental care and includes the following: Advanced Dental Sciences, Pain Control, Practice Management, Internal Medicine, Advanced Procedures in Prosthodontics, Endodontics, Oral and Maxillofacial Surgery, Periodontology and Advanced Comprehensive Patient Care.

The dental curriculum is a structured program that requires all students in each year's class to participate in the above listed courses simultaneously. All students enter the program at the Year I level based on completion of minimum pre-dental academic requirements as established by the Council on Dental Education of the American Dental Association and successful review on a competitive basis of the student credentials by the Admissions Committee.

Students interested in the dental program should write to the Admissions Office, School of Dental Medicine, Southern Illinios University at Edwardsville, 2800 College Avenue, Alton, Illinois 62002.

UNIVERSITY FACILITIES

The buildings on the central campus of SIUE, arranged around the Delyte W. Morris Quadrangle, are convenient to one another. Designed as an integral unit, all have common architectural features—courts, terraces, balconies—but each is planned for specific instructional uses.

LOVEJOY LIBRARY

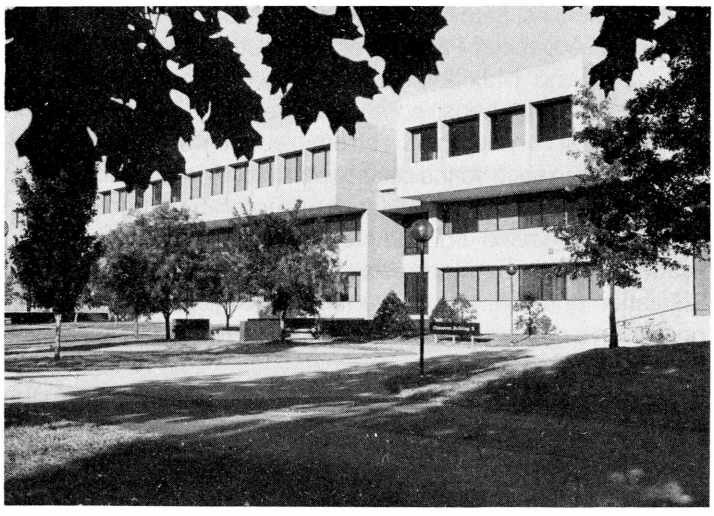
The University Library maintains a collection of 768,000 volumes, 6,400 periodical and serial subscriptions, 764,000 microform units, and an audiovisual collection of 41,400 titles. This collection is supplemented by an extensive U.S. Government Documents Depository and a Special and Research Collections department. In addition, the Library maintains a branch library at the East St. Louis Campus. Accessibility for students on that campus to Lovejoy's collection is provided through computer and telephone links.

COMMUNICATIONS BUILDING

The glass front of this building wraps around the two-story lobby of the University Theater, where television cameras have filmed student and faculty productions. The structure houses the School of Fine Arts and Communications and the broadcasting studios of WSIE-FM. The University's central computer installation is also located in this building.

SCIENCE LABORATORY BUILDING

The sciences laboratories for research and instruction in biology, chemistry, and physics; the engineering laboratories; and the mathematics and academic computer facilities are located in the Science Laboratory Building.



UNIVERSITY CENTER

The University Center serves as the home of many activities and services. The University Information Center, located in this building, assists persons who have questions about the campus. The Center provides food service for students, faculty, and guests; it also offers recreational facilities, including a sixteen-lane bowling alley, table tennis facilities, billiards room, and a card and game lounge. Other amenities include the bookstore, the Barber and Beauty Shop, television room, video room, conference rooms, and an art gallery. Dances, movies, various entertainment programs, and other functions are held in the grand ballroom.

JOHN S. RENDLEMAN BUILDING

The administration building, named for SIUE's first president, contains offices of the University administration. The Dean of Students, the Admissions and Records Office, the Bursar, Health Service, Student Work and Financial Assistance, Continuing Education, and Week End University are located in the Rendleman building. Fast Copy service, Vehicle Registration, and a branch of the U. S. Postal Service are located on the lower level of the building.

CLASSROOM BUILDINGS II AND III

Classroom Buildings II and III are located to the north of the Peck Building. The two buildings form a single complex connected by tunnel and skywalk. Faculty for the Schools of Business, Education, Nursing, and Social Sciences share the buildings, which contain lecture halls, instructional laboratories, and conference rooms.

SAM M. VADALABENE CENTER FOR HEALTH, RECREATION AND PHYSICAL EDUCATION

The University's multi-purpose facility for campus-wide recreation and sports, both intramural and intercollegiate, is located on the north edge of the central academic core. The building includes a swimming pool, racquetball courts, a 33,000 sq. ft. multipurpose room, locker and shower facilities, and rooms for gymnastics, dance, combative and weight lifting sports. Several laboratories and classrooms are included, as well as offices for the Athletics staff and for the Department of Health, Recreation and Physical Education.

JAMES F. METCALF STUDENT EXPERIMENTAL THEATER

This facility, named for a former Budget Director at the University, is located just northwest of the main core. The building includes dressing rooms, storage, and a main stage area with a seating capacity of up to 200 people.

PECK CLASSROOM BUILDING

The first building opened on campus is named for John Mason Peck, an early pioneer and educator in this region. Peck founded Shurtleff College in Alton, Illinois, now the site of the School of Dental Medicine. The Peck Building is home for the Schools of Humanities, Social Sciences, the Anthropology Teaching Museum, the Communications Laboratory, a microcomputer laboratory, and laboratories for foreign language instruction. The Office of Academic Services, which includes Advisement, Placement, Counseling and Testing, Academic Resource Center, and Office of International Education is also located in this building. Two of the wings, opening from a center court, are used for classrooms; the remaining one is used for faculty offices.

RELIGIOUS CENTER

Just southwest of the academic core, a visually arresting geodesic dome structure designed by R. Buckminster Fuller houses the interdenominational Religious Center. The Center was constructed through private donations.

OTHER FACILITIES

Additional facilities such as the Supporting Services Building, the Wagner Complex of Art and Design studios, the Clifford H. Fore Environmental Resources Training Center, the School of Dental Medicine at Alton, and the East St. Louis Campus are located away from the academic core.

GRADUATE SCHOOL

The Graduate School, which offers programs in 38 disciplines leading to eleven degrees, enrolls twenty percent of all the students at SIUE. Degrees , majors, and specializations are listed below. For information on admission to the Graduate School, students should contact the Graduate Admissions and Records Office, Rendleman Building 2215, where they may pick up a Graduate School catalog.

MASTER OF ARTS

Biological Sciences
Economics
English/American and English Literature
English/Junior College Teaching
English/Linquistics
English/Teaching of Writing
Geographical Studies
Government
History
Philosophy
Philosophy/Women's Studies
Psychology/Clinical-Adult
Psychology/General-Academic
Psychology/Industrial-Organizational
Sociology
Speech/Speech Communication

MASTER OF BUSINESS ADMINISTRATION

MASTER OF FINE ARTS

Art/Art Education
Art/Studio
Art/Therapy

MASTER OF MARKETING RESEARCH

MASTER OF MUSIC

Music/Music Education
Music/Music Performance

MASTER OF PUBLIC ADMINISTRATION

MASTER OF SCIENCE

Biological Sciences
Chemistry
Economics
Environmental Studies/General
Environmental Studies/Science
Geographical Studies
Government
Management Information Systems
Mass Communications
Mathematics
Nursing/Community Health

Nursing/Medical-Surgical
Nursing/Psychiatric-Mental Health
Physics
Psychology/Community-School
Speech/Speech Pathology
Urban Affairs and Policy Analysis

MASTER OF SCIENCE IN EDUCATION

Business Education
Counselor Education/Community Counseling
Counselor Education/School Counseling
Educational Administration and Supervision
Elementary Education
Instructional Technology
Physical Education
Special Education
Secondary Education with teaching fields in:
- Art Education
- Biology
- Chemistry
- English
- Foreign Languages
- Geography
- Government
- History
- Mathematics
- Physics
- Reading
- Speech

MASTER OF SCIENCE IN ENGINEERING

Civil Engineering
Electrical Engineering

EDUCATIONAL SPECIALIST

Counselor Education
Educational Administration and Supervision
Secondary Education

DOCTOR OF EDUCATION

Instructional Process

OFFICERS AND FACULTY OF THE UNIVERSITY

SOUTHERN ILLINOIS UNIVERSITY

BOARD OF TRUSTEES

	Home Town	Term Expiration
Harris Rowe, Chairman	Jacksonville	1989
A.D. Van Meter, Jr., Vice Chairman	Springfield	1987
Carol Kimmel, Secretary	Moline	1989
Barnard Birger, Sr.	Collinsville	1987
Ivan A. Elliott, Jr.	Carmi	1991
William R. Norwood	Rolling Meadows	1989
George T. Wilkins, Jr.	Edwardsville	1991
* Debbie Schlautman	Edwardsville	1987
**Ed Lance	Carbondale	1987

* Student Trustee, SIUE
**Student Trustee, SIUC

OFFICERS OF ADMINISTRATION

THE SOUTHERN ILLINOIS UNIVERSITY SYSTEM

Lawrence K. Pettit, Chancellor
James M. Brown, Vice Chancellor

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE

Earl E. Lazerson, President
Earl Beard, Vice President for Administration
James R. Buck, Vice President for Development and Public Affairs
Constance Rockingham, Dean of Students
Barbara Teters, Vice President and Provost

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE FACULTY

EMERITUS FACULTY LISTING

ANDREE, Robert G., Emeritus Professor, Ed.D., 1942, Harvard University

ARNOLD, George, Emeritus Associate Professor, Sc.D., 1964, Washington University

AUSTIN, James C., Emeritus Professor, Ph.D., 1952, Case Western Reserve University

BALTZELL, James H., Emeritus Professor, Ph.D., 1952, Indiana University

BARDOLPH, Marinus P., Emeritus Professor, Ph.D., 1947, State University of Iowa

BEAR, David E., Emeritus Professor, Ed.D., 1958, Washington University

BEARD, Earl S., Emeritus Professor, Ph.D., 1953, University of Iowa

BISHOP, Myron C., Emeritus Professor, M.A., 1938, Ohio State University

BOSS, Henry T., Emeritus Associate Professor, Ed.D., 1955, Colorado State University

BRANZ, Nedra C., Emerita Associate Professor, M.A., 1957, Southern Illinois University at Carbondale

BRIDWELL, James G., Emeritus Associate Professor, M.A., 1967, Southern Illinois University at Edwardsville

BROADBOOKS, Harold E., Emeritus Professor, Ph.D., 1950, University of Michigan

BRUBAKER, H. Bruce, Emeritus Professor, Ed.D., 1952, Indiana University

CAMPISI, Paul J., Emeritus Professor, Ph.D., 1947, University of Chicago

CARPENTER, Sara, Emerita Lecturer, B.A., 1950, Texas A&I

CARR, Morris, Emeritus Assistant Professor, M.S., 1942, University of Illinois

CASSTEVENS, E. Reber, Emeritus Associate Professor, M.S., 1970, Southern Illinois University at Edwardsville

COLLIER, James E., Emeritus Professor, Ph.D., 1951, University of Nebraska

COLLINS, Janet D., Emerita Associate Professor, Ph.D., 1972, St. Louis University

COX, Homer L., Emeritus Professor, Ed.D., 1955, Northwestern University

CURRY, A. Dudley, Emeritus Associate Professor, Ph.D., 1967, University of Illinois

DALE, Edwin E., Emeritus Professor, D.D.S., 1943, University of Illinois

DANIELS, Gladys R., Emerita Assistant Professor, M.A., 1940, University of Illinois

DAVIS, Howard V., Emeritus Professor, Ed.D., 1955, Washington University

DRAKE, Gertrude G., Emerita Professor, Ph.D., 1939, Cornell University

DREIFKE, Herman A., Emeritus Associate Professor, M.A.Ed., 1959, Washington University

DUNHAM, Katherine, Emerita University Professor, Ph.B., 1937, University of Chicago

DUSTIN, John E., Emeritus Professor, Ph.D., 1958, University of Illinois

EDERLE, Helen, Emerita Professor, M.A., 1929, University of Illinois

EVANS, Thomas D., Emeritus Associate Professor, Ph.D., 1968, St. Louis University

FREEMAN, Ruges R., Emeritus Professor, Ph.D. 1972, Washington University

FRUEND, William F., Emeritus Professor, M.S., 1950, University of Wisconsin

GLASER, Kurt, Emeritus Professor, Ph.D., 1941, Harvard University

GOING, William T., Emeritus Professor, Ed.D., 1954, University of Michigan

GOODE, Helen D., Emerita Professor, Ph.D., 1962, University of Kansas

GOODMAN, William, Emeritus Professor, Ph.D., 1950, Ohio State University

GOODWIN, George H., Emeritus Professor, Ed.D., 1955, University of Florida

GUENTHER, Paul F., Emeritus Professor, Ph.D., 1954, University of North Carolina

GWIN, James M., Emeritus Professor, Ph.D., 1949, Cornell University

HAINES, Harold, Emeritus Professor, M.A., 1962, University of New Mexico

HILBERRY, Harry H., Emeritus Professor, Ph.D., 1949, Harvard University

HILEMAN, Olin, Emeritus Professor, Ed.D., 1962, George Peabody Teachers College

HOOVER, Arthur E., Emeritus Professor, Ph.D., 1954, Illinois Institute of Technology

HUDGINS, Billy D., Emeritus Assistant Professor, LL.B., 1951, Washington University

INGWERSON, Ina J., Emerita Associate Professor, M.S.N., 1962, Washington University

INGWERSON, John, Emeritus Associate Professor, M.B.A., 1955, New York University

KASISKE, Florence, Emerita Professor, M.S., 1966, University of Illinois

KAZECK, Melvin E., Emeritus Professor, D.Ed., 1953, Columbia University

KING, Donald, Emeritus Professor, Ed.D., 1962, University of Arkansas

KIRCHER, Harry B., Emeritus Professor, Ph.D., 1961, Clark University

KLEIN, Walter C., Emeritus Associate Professor, H.S.D., 1958, Indiana University

KNOERNSCHILD, Erna A., Emerita Associate Professor, Ph.D., 1971, Saint Louis University

KOCHMAN, Andrew J., Emeritus Professor, Ph.D., 1956, University of Wisconsin

KUMLER, Marion, Emeritus Professor, Ph.D., 1963, Oregon State University

KURTH, Rudolf O. E. W., Emeritus Professor, Ph.D., 1948, University of Berne

LEE, Charles A., Emeritus Professor, D.Ed., 1936, Columbia University

LINDSTRUM, Andrew O., Emeritus Professor, Ph.D., 1939, University of Illinois

LIVINGSTON, Don A., Emeritus Professor, Ph.D., 1948, Saint Louis University

LONG, Ruby D., Emerita Professor, Ed.D., 1967, University of Missouri

LOVELL, S. D., Emeritus Professor, Ph.D., 1954, Ohio State University

LUCK, David J., Emeritus Professor, Ph.D., 1947, University of Texas

MADISON, Eldon H., Emeritus Associate Professor, Ph.D., 1962, University of Minnesota

MADSON, Donald C., Emeritus Associate Professor, Ed.D., 1960, University of South Dakota

MARTI, Fritz, Emeritus Professor, Ph.D., 1922, University of Berne

MARTI, Gertrude, Emerita Associate Professor, M.S., 1965, Western Reserve University

MASON, Robert E., Emeritus Professor, Ph.D., 1949, Columbia University

MCAFEE, Wilbur, Associate Professor Emeritus, M.A., 1948, University of Illinois

MCCLELLAND, Lucille, Emerita Professor, Ph.D., 1967, Saint Louis University

MCCURRY, Allan J., Emeritus Professor, Ph.D., 1952, Cornell University

MCHARGUE, Daniel S., Emeritus Professor, Ph.D., 1949, University of California at Los Angeles

MEREDITH, Cameron W., Emeritus Professor, Ph.D., 1951, University of Michigan

MILOVICH, Catherine E., Emerita Professor, M.A., 1939, Columbia University

MOORE, Virginia, Emerita Professor, Ed.D., 1963, University of Illinois

MURPHY, Mabel A., Emerita Professor, M.A., 1940, University of Southern California

OHERN, Mary M. Brady, Emerita Professor, Ed.D., 1957, New York University

OURSLER, Clellie C., Emeritus Professor, Ph.D., 1958, Illinois Institute of Technology

PARRILL, Irwin H., Emeritus Professor, Ph.D., 1939, State University of Iowa

PELLEGRINO, Alfred G., Emeritus Professor, Ph.D., 1952, Universite de Montreal

PRELL, Arthur E., Emeritus Professor, Ph.D., 1956, University of Minnesota

RIDDLEBERGER, Patrick, Emeritus Professor, Ph.D., 1953, University of California

ROBINSON, James L., Emeritus Associate Professor, M.A., 1950, Northwestern University

ROCHESTER, Dean E., Emeritus Professor, Ed.D., 1965, Florida State University

ROSENTHAL, Herbert H., Emeritus Professor, Ph.D., 1955, Harvard University

RUFFNER, Ralph W., Emeritus Vice President, Ed.D., 1948, George Washington University

RUSSELL, Ivan L., Emeritus Professor, Ph.D., 1955, University of Michigan

SCHNABEL, John H., Emeritus Professor, Ed.D., 1955, Indiana University

SCOTT, Ralston D., Emeritus Professor, Ph.D., 1951, New York University

SHAFFER, V. Faye, Emerita Professor, Ed.D., 1966, University of Illinois

SHOWERS, Norman E., Emeritus Professor, Ed.D., 1966, University of Southern California

SMITH, Mary Belle, Emerita Professor, M.A., 1935, State University of Tennessee

SMITH, R. Dale, Emeritus Professor, Ph.D., 1939, University of Pittsburgh

SPAHN, Raymond J., Emeritus Professor, Ph.D., 1938, Northwestern University

STARR, Dartha F., Emerita Professor, Ph.D., 1971, St. Louis University

STARR, Fay H., Emeritus Professor, Ph.D., 1964, University of Texas

STURLEY, Eric A., Emeritus Professor, Ed.D., 1953, Columbia University

TUDOR, William J., Emeritus Professor, Ph.D., 1946, Iowa State University

TULLOSS, Dorothy E., Emerita Professor, D.Mus.A., 1964, Boston University

VANSYOC, Wayland B., Emeritus Professor, Ph.D., 1959, University of Michigan

VASILEFF, Vasil, Emeritus Professor, D.D.S., 1950, Saint Louis University

VINCENT, Vern H., Emeritus Professor, Ph.D., 1957, University of Michigan

VOGET, Fred W., Emeritus Professor, Ph.D., 1948, Yale University

WARREN, Edwin, Emeritus Professor, Ph.D., 1952, University of Michigan

WHEAT, Leonard B., Emeritus Professor, Ph.D., 1931, Columbia University

WHITE, Hollis L., Emeritus Professor, Ph.D., 1951, University of Missouri

WILLIAMS, Ollie Mae, Emerita Professor, B.L.S., 1942, Emory University

WOOD, Gordon R., Emeritus Professor, Ph.D., 1941, Princeton University

FACULTY LISTING

ABBOTT, John Cushman, Lovejoy Library, Ph.D., 1957, University of Michigan

ADES, John I., English Language and Literature, Ph.D., 1963, University of Cincinnati

AHADIAT, Seived N., Accounting, Ph.D., 1983, University of Arkansas

AHLBRAND, William P., Curriculum and Instruction, Ph.D., 1968, Washington University

ALKIN, Oktay, School of Engineering, Ph.D., 1986, University of Alabama

ALLSUP, Gene D., Department of Educational Leadership, Ph.D., 1966, Southern Illinois University at Carbondale

ANDERSON, Daniel J., Art & Design, M.F.A., 1970, Cranbrook Academy of Art

ANDERSON, Robert O., Speech Communication, Ph.D., 1971, University of Missouri-Columbia

ANDERSON, Thomas P., School of Engineering, Ph.D., 1961, Northwestern University

ANDRIS, James F., Department of Educational Leadership, Ph.D., 1974, Indiana University

ARCHANGEL, Rosemarie, Health, Recreation and Physical Education, Ph.D., 1968, University of Iowa

ASCHENBRENNER, Joyce, Anthropology, Ph.D., 1967, University of Minnesota

ASTOUR, Michael C., Historical Studies, Ph.D., 1962, Brandeis University

AUBUCHON, Betty L., School of Nursing, M.S.N., 1975, Saint Louis University

AUCAMP, Donald C., Finance and Operations Management, Sc.D., 1971, Washington University

AULT, David E., Economics, Ph.D., 1969, University of Illinois

AXTELL, Ralph William, Biological Sciences, Ph.D., 1958, University of Texas

BADEN, Donald James, Elementary Education, Ed.D., 1973, University of Houston

BAGCHI, Deipica, Geography and Earth Science, Ph.D., 1977, Agra University, India

BAICH, Annette, Biological Sciences, Ph.D., 1960, University of Oregon

BAILEY, Dale S., English Language and Literature, Ph.D., 1961, Indiana University

BAKER, Cecily, Mass Communications, B.A., 1975, Southern Illinois University at Edwardsville

BAKER, William Bryan, Geography and Earth Science, Ph.D., 1958, University of Nebraska

BARKER, John A., Philosophical Studies, Ph.D., 1967, Tulane University

BARLOW, Hugh D., Sociology and Social Work, Ph.D., 1973, University of Texas

BARNES, Linda L., English Language and Literature, Ph.D., 1984, University of South Carolina

BARRINGER, Robert L., Finance and Operations Management, Ph.D., 1956, Massachusetts Institute of Technology

BELL, Doris E., School of Nursing, Ph.D., 1979, Saint Louis University

BENGTSON, Harlan H., School of Engineering, Ph.D., 1971, University of Colorado

BENJAMIN, James E., Management Information Systems, Ph.D., 1960, University of Illinois

BENNEWITZ, William C., Department of Computer Science, Ph.D., 1957, University of Illinois

BENNINGTON, April A., Lovejoy Library, M.S., 1985, University of Illinois

BIGHAM, Eldon M., Health, Recreation and Physical Education, M.S., 1969, Southern Illinois University at Edwardsville

BLACKLEDGE, Walter L., Management, Ph.D., 1951, University of Iowa

BLAIN, Robert R., Sociology and Social Work, Ph.D., 1967, University of Massachusetts

BLOUNT, Dale F., Management, M.S., 1967, Southern Illinois University at Edwardsville

BOBKA, Louis A., Health, Recreation and Physical Education, M.S., 1959, Southern Illinois University at Carbondale

BOEDEKER, Richard R., Physics, Ph.D., 1959, Saint Louis University

BOLLINI, Raghupathy, School of Engineering, Ph.D., 1971, Purdue University

BOSSE, Daniel B., Marketing, Ph.D., 1971, Saint Louis University

BOSSE, Roberta B., English Language and Literature, Ph.D., 1971, Saint Louis University

BOUMAN, Thomas D., Chemistry, Ph.D., 1967, University of Minnesota

BOWEN, Louisa, Lovejoy Library, M.L.S., 1974, Wayne State University

BOYD, Mary Ann, School of Nursing, Ph.D., 1977, Saint Louis University

BRANZ, Nedra, Historical Studies, M.A., 1957, Southern Illinois University at Carbondale

BRAUNDMEIER, Arthur J., Physics, Ph.D., 1970, University of Tennessee

BRIMER, Richard W., Special Education, Ph.D., 1978, University of Missouri

BRINKMANN, Erwin H., Psychology, Ph.D., 1963, University of Michigan

BRITAN, Gerald M., Anthropology, Ph.D., 1974, Columbia University

BROWN, Julius, School of Engineering, Sc.D., 1963, Washington University

BROWN, Stephen, M., Music, M.Mus., 1970, Southern Illinois University at Edwardsville

BROWN, Warren L., Secondary Education, Ed.D., 1963, University of Missouri

BROYER, John A., Philosophical Studies, Ph.D., 1967, Southern Illinois University at Carbondale

BRUGAM, Richard B., Biological Sciences, Ph.D., 1975, Yale University

BRUKER, Robert M., Secondary Education, Ph.D., 1972, Southern Illinois University at Carbondale

BUCHERT, Kenneth P., School of Engineering, Ph.D., 1964, University of Missouri-Columbia

BUDDELL, Wilfred, Health, Recreation and Physical Education, Ph.D., 1981, Southern Illinois University at Carbondale

BUKALSKI, Peter J., Mass Communications, Ph.D., 1975, Ohio State University

BURCKY, William D., Counselor Education, Ph.D., 1971, Saint Louis University

BUTLER, David L., English Language and Literature, Ph.D., 1972, Saint Louis University

CALCAGNO, Philip M., Lovejoy Library, M.L.S., 1969, University of Illinois

CAMPBELL, Robert B., Sociology and Social Work, Ph.D., 1956, University of Wisconsin

CAMPBELL, Wilbur L. Jr., Management Information Systems, Ed.D., 1976, Northern Illinois University

CAREY, Ann L., Speech Pathology and Audiology, Ph.D., 1969, Southern Illinois University at Carbondale
CARLSON, Shirley J., Historical Studies, Ph.D., 1982, Washington University
CARPENTER, Regan, Elementary and Early Childhood Education, Ed.D., 1958, University of Colorado
CARVER, M. Robert Jr., Accounting and Finance, Ph.D., 1980, University of Missouri-Columbia
CASSANELLI, Rino, Foreign Languages and Literature, Ph.D., 1982, Saint Louis University
CHEN, Ching-Chih, Historical Studies, Ph.D., 1973, Harvard University
CHEN, Jen Shiun, School of Engineering, Ph.D., 1983, Ohio State University
CHENAULT, Joann, Counselor Education, Ed.D., 1958, University of Kentucky
CHENG, Shirley N., School of Engineering, D.Sc., 1982, Washington University
CHOW, Hau Cheung, Physics, Ph.D., 1977, University of British Columbia
CINGOLANI, Judith, Sociology and Social Work, M.S.W., 1971, Washington University
CLAUDSON, William D., Music, Ph.D., 1965, Northwestern University
CLEMANS, Kermit G., Department of Mathematics and Statistics, Ph.D., 1953, University of Oregon
CLEMENT, Jacquelyn M., School of Nursing, Ph.D., 1984, University of Texas-Austin
CLEMENTS, Donald W., Geography and Earth Science, Ph.D., 1975, Southern Illinois University at Carbondale
COMBS, Charles F., Counselor Education, Ed.D., 1963, Syracuse University
COMER, James M., Elementary and Early Childhood Education, Ed.D., 1965, Oklahoma State University
COOPER, Mary W., Department of Mathematics and Statistics, D.Sc., 1970, Washington University
CORR, Charles Anthony, Philosophical Studies, Ph.D., 1966, Saint Louis University
COTE, Daniel N., School of Engineering, M.S.C.E., 1958, North Carolina State University
CUSTER, Marcia S., School of Nursing, M.S., 1976, Southern Illinois University at Edwardsville
DANLEY, John R., Philosophical Studies, Ph.D., 1977, University of Rochester
DARNELL, Donald, Elementary and Early Childhood Education, Ed.D., 1962, George Peabody Teachers College
DAUGHERTY, Robert, Psychology, Ph.D., 1963, Wayne State University
DAVIS, Don F., Art and Design, M.A., 1955, Ohio University
DAW, Leila M., Art and Design, M.F.A., 1974, Washington University
DECOTEAU, Pamela, Art and Design, Ph.D., 1975, University of Wisconsin
DELONG, Barbara J., Health, Recreation and Physical Education, Ph.D., 1967, University of Iowa
de MENESES, Mary L., School of Nursing, Ed.D., 1982, Northern Illinois University
DENNY, Sidney G., Anthropology, Ph.D., 1972, Southern Illinois University at Carbondale
DENUE, Gary N., Lovejoy Library, M.S.L.S., 1968, Suny College at Geneseo
DONNELLY, Brian, Public Administration and Policy Analysis, Ph.D., 1978, University of Georgia
DRESANG, Paul A., Art and Design, M.F.A., 1975, University of Minnesota
DRUCKER, Mark L., Public Administration and Policy Analysis, M.B.A., 1971, Harvard University
DUFFEY, Harry J. School of Engineering, Sc.D., 1965, Washington University
EDER, Douglas J., Biological Sciences, Ph.D., 1973, Florida State University
EDMONDS, Radcliffe G. Jr., Economics, Ph.D., 1979, University of Michigan
EHRLICH, Martha J., Art and Design, Ph.D., 1981, Indiana University
ELLIOTT, Donald S. Jr., Economics, Ph.D., 1976, University of Minnesota
EMBLOM, William J., Philosophical Studies, Ph.D., 1962, University of Illinois
ENGBRETSON, Robert O., Psychology, Ph.D., 1964, Michigan State University
ENGLEMAN, Dixie A., Speech Pathology and Audiology, M.A., 1973, Southern Illinois University at Edwardsville
ERICKSON, Robert F., Historical Studies, Ph.D., 1955, University of Illinois
EVANS, Robert C., Finance and Operations Management, Ph.D., 1977, Washington University
FARLEY, John E., Sociology and Social Work, Ph.D., 1977, University of Michigan
FARRELL, John V., Department of Political Science, Ph.D., 1975, University of Iowa
FEENEY, Martha J., Lovejoy Library, M.L.S., 1967, Pratt Institute
FEENEY, William R., Department of Political Science, Ph.D., 1970, Johns Hopkins University
FERGUSON, Eva D., Psychology, Ph.D., 1956, Northwestern University
FERNANDO, Rex W., University Services to East Saint Louis, Ph.D., 1976, Saint Louis University
FIRSCHING, F. Henry, Chemistry, Ph.D., 1955, Syracuse University
FOGARTY, Donald W., Management Information Systems, Ph.D., 1971, Saint Louis University
FORHETZ, John E., Counselor Education, Ph.D., 1970, Southern Illinois University at Carbondale
FORNI, Patricia R., School of Nursing, Ph.D., 1965, Saint Louis University
FORTADO, Robert J., Lovejoy Library, M.S.L.S., 1967, University of Illinois
FRANCIS, Claude, Foreign Languages and Literature, Ph.D., 1965, University of California at Los Angeles
FRANKE, Arnold G., Management, M.S., 1960, Purdue University
FRANKEL, Stanley, Management Department, Ph.D., 1985, Saint Louis University
FREED, Patricia, School of Nursing, M.S., 1982, Southern Illinois University at Edwardsville
FRISBIE, Charlotte J., Anthropology, Ph.D., 1970, University of New Mexico

FRISBIE, Theodore R., Anthropology, Ph.D., 1971, Southern Illinois University at Carbondale

FUNKHOUSER, Linda, English Language and Literature, Ph.D., 1978, Saint Louis University

GAERTNER, Rosemary, School of Nursing, M.S.N., 1983, Saint Louis University

GALLAHER, John G., Historical Studies, Ph.D., 1960, Saint Louis University

GALLATIN, Harry J., Health, Recreation and Physical Education, M.A., 1954, University of Iowa

GARDER, Arthur O., Department of Mathematics and Statistics, Ph.D., 1954, Washington University

GASTON, Paul L., English Language and Literature, Ph.D., 1970, University of Virginia

GIPE, Thomas D., Art and Design, M.F.A., 1972, Southern Illinois University at Edwardsville

GLOSSOP, Ronald J., Philosophical Studies, Ph.D., 1960, Washington University

GODHWANI, Arjun, School of Engineering, Ph.D., 1972, University of Arkansas

GOEHE, Patricia A., Speech Communication, M.S., 1958, Southern Illinois University at Carbondale

GOLDSMITH, Malcolm D., Health, Recreation and Physical Education, Ph.D., 1978, Southern Illinois University at Carbondale

GORE, Joseph, Secondary Education, Ph.D., 1962, Washington University

GRAEBE, Annette Mulvany, Speech Communication, M.A., 1964, Southern Illinois University at Carbondale

GRANT, Samuel B. Jr., Historical Studies, Ph.D., 1968, University of Michigan

GRESLEY, Ruth S., School of Nursing, Ph.D., 1978, Saint Louis University

GRIFFEN, Toby D., Foreign Languages and Literature, Ph.D., 1975, University of Florida

GRIST, Arthur Leonard, Health, Recreation and Physical Education, M.P.H.Ed., 1960, University of Michigan

GRIVNA, William J., Theater and Dance, M.A., 1968, University of Minnesota

GUENSBURG, Thomas E., Geography and Earth Science, Ph.D., 1981, University of Illinois

GUNSTEN, Pamela C., Health, Recreation and Physical Education, Ed.D., 1978, University of Cincinnati

HAAS, James Martin, Historical Studies, Ph.D., 1960, University of Illinois

HAKEEM, M. A., Physics, Ph.D., 1960, Louisiana State University

HALEY, Johnetta A., Music, M.Mus., 1972, Southern Illinois University at Edwardsville

HALL, Stephen K. Chemistry, Ph.D., 1967, University of Pittsburgh

HAMPTON, Phillip J., Art and Design, M.F.A., 1952, Kansas City Art Institute

HAMRICK, William S., Philosophical Studies, Ph.D., 1971, Vanderbilt University

HANDEL, Warren H., Sociology and Social Work, Ph.D., 1972, University of California

HANNA, Steven J., School of Engineering, Ph.D., 1968, Purdue University

HANSEL, Walter Max Jr., Management Information Systems, Ph.D., 1983, Southern Illinois University at Carbondale

HANSON, Melvin A., Finance and Operations Management, Ph.D., 1971, University of Minnesota

HARMIN, Merrill, Secondary Education, Ph.D., 1960, New York University

HARRICK, Edward J., Management, Ph.D., 1974, Saint Louis University

HARRISON, Jean H., Speech Pathology and Audiology, M.S., 1974, Illinois State University

HASHIMI, Rasool M. H., Economics, Ph.D., 1958, University of Wisconsin

HATFIELD, Jimmy L., Psychology, Ph.D., 1966, Vanderbilt University

HATTEMER, Jimmie R., Department of Computer Science, Ph.D., 1964, Washington University

HAVENS, Daniel F., English Language and Literature, Ph.D., 1965, University of Michigan

HAVIS, Barbara J., Elementary and Early Childhood Education, M.Ed., 1966, University of Missouri

HAWKINS, Robert B., Speech Communication, Ph.D., 1961, Northwestern University

HAYCRAFT, Linda L., School of Nursing, M.S.N., 1983, Saint Louis University

HELSEL, Austin Ray, Department of Educational Leadership, D.Ed., 1968, Pennsylvania State University

HENDERSON, George A., Physics, Ph.D., 1970, Georgetown University

HENSLIN, James M., Sociology and Social Work, Ph.D., 1967, Washington University

HERROLD, Zadia C., Health, Recreation and Physical Education, D.P.Ed., 1956, Indiana University

HERSCHER, Eugene, Lovejoy Library, M.L.S., 1951, Columbia University

HESS, Charles F., Geography and Earth Science, Ph.D., 1964, Michigan State University

HILDEBRAND, Robert F., Department of Educational Leadership, Ph.D., 1970, University of Pittsburgh

HILL, Roger C., Physics, Ph.D., 1969, California Institute of Technology

HIRSCH, Maurice L. Jr., Accounting and Finance, Ph.D., 1977, Washington University

HO, Allan B., Music, Ph.D., 1984, University of Kentucky

HO, Chung-Wu, Department of Mathematics and Statistics, Ph.D., 1970, Massachusetts Institute of Technology

HOEKE, Robert Stanley, Finance and Operations Management, Ph.D., 1966, University of Wisconsin

HOFMANN, David Carl, Department of Educational Leadership, Ed.D., 1969, University of Toledo

HOGE, Debra Reichert, Speech Pathology and Audiology, M.S., 1976, Southern Illinois University at Edwardsville

HOLDEN, Lyman S., Department of Mathematics and Statistics, Ph.D., 1966, Ohio State University

HOLLENHORST, Jerome J., Economics, Ph.D., 1965, Iowa State University

HORNER, Charlotte M., Special Education, Ed.D., 1984, Texas Tech University

HOSTETLER, Dennis W., Public Administration and Policy Analysis, Ph.D., 1974, University of Iowa

HSIAO, Gene T., Department of Political Science, LL.M., 1962, University of California

HUDLIN, Edward, Philosophical Studies, Ph.D., 1973, Columbia University

HULL, Gary L., Department of Educational Leadership, Ph.D., 1972, Michigan State University

HUNTLEY, David C., Art and Design, M.A.C.A., 1955, University of North Carolina

ISAACSON, Joel D., Department of Computer Science, Ph.D., 1963, Michigan State University

JACOBITTI, Edmund E., Historical Studies, Ph.D., 1972, University of Wisconsin

JACOBITTI, Suzanne, Department of Political Science, Ph.D., 1967, University of Wisconsin

JAIN, S. Kumar, Management, Ph.D., 1957, New York University

JARRELL, J. Calvin, Theater and Dance, M.F.A., 1980, University of Oklahoma

JASON, Emil Fred, Chemistry, Ph.D., 1957, Washington University

JOHNSEN, Norman C., Geography and Earth Science, M.A., 1962, Syracuse University

JOHNSON, Charlotte, Lovejoy Library, M.A., 1975, University of Wisconsin

JONES, Leonard Clive, School of Engineering, Ph.D., 1952, Saint Louis University

JOSEPH, Warren A., Music, Ph.D., 1959, Boston University

JOYNER, Orville D., Department of Educational Leadership, Ph.D., 1969, University of Pittsburgh

KAHN, Alfred, Geography and Earth Science, M.S., 1954, University of Denver

KAIKATI, Jack G., Marketing, Ph.D., 1976, Florida State University

KANG, Ik-Ju, Physics, Ph.D., 1962, Northwestern University

KEATING, Richard C., Biological Sciences, Ph.D., 1965, University of Cincinnati

KEEFE, Donald, Secondary Education, Ph.D., 1975, University of Illinois

KEENE, Carol A., Philosophical Studies, Ph.D., 1969, Saint Louis University

KENDALL, John Dryden, Music, M.A., 1945, Columbia Teachers College

KERR, James R., Department of Political Science, Ph.D., 1963, Stanford University

KERR, Ruth (Slenczynska), Music

KILLENBERG, George M., Mass Communications, Ph.D., 1975, Southern Illinois University at Carbondale

KIM, Sang-Ki, Philosophical Studies, Ph.D., 1973, State University of New York

KIMBALL, Stanley B., Historical Studies, Ph.D., 1960, Columbia University

KING, Thomas E., Accounting and Finance, Ph.D., 1973, University of California at Los Angeles

KINSELLA, Maureen, Art and Design, M.F.A., 1979, School of the Art Institute

KITTRELL, Ethel Jean, English Language and Literature, Ph.D., 1973, Southern Illinois University at Carbondale

KITZ, Dennis J., Biological Sciences, Ph.D., 1980, University of Iowa

KLEINMAN, Kenneth M., Psychology, Ph.D., 1967, Washington University

KLEPPER, Robert, Management Information Systems, Ph.D., 1973, University of Chicago

KLUTH, Lynn, Theater and Dance, Ph.D., 1964, Louisiana State University

KOEPKE, Robert L., Geography and Earth Science, Ph.D., 1966, University of Illinois

KOHFELD, David L., Psychology, Ph.D., 1966, University of Illinois

KOHN, Robert E., Economics, Ph.D., 1969, Washington University

KORN, Alfred, School of Engineering, Sc.D., 1967, Washington University

KRCHNIAK, Stefan P., Department of Educational Leadership, Ph.D., 1968, New York University

KRISHNAN, Kuppana, University Services to East St. Louis, Ph.D., 1978, Saint Louis University

KRISTOFF, Larry D., Health, Recreation and Physical Education, M.A., 1969, Southern Illinois University at Carbondale

KROHN, Emily J., Psychology, Ph.D., 1980, St. Louis University

KRONE, Lester H. Jr., Management Information Systems, Sc.D., 1955, Washington University

KROPP, Lloyd E., English Language and Literature, M.A., 1961, Ohio State University

KULFINSKI, Frank B., Biological Sciences, Ph.D., 1957, Iowa State University

KURTZROCK, George, Speech Pathology and Audiology, Ph.D., 1956, University of Illinois

LAGARCE, Raymond F., Marketing, Ph.D., 1971, University of Missouri-Columbia

LAMP, Robert E., Psychology, Ph.D., 1966, Washington University

LAMPE, Fred A., Geography and Earth Science, Ph.D., 1972, University of Kansas

LAWRENCE, Barbara J., English Language and Literature, Ph.D., 1973, Saint Louis University

LAWRENCE, Edwin G., Philosophical Studies, Ph.D., 1972, University of Wisconsin

LAZERSON, Earl E., Department of Mathematics and Statistics, Ph.D., 1982, University of Michigan

LEVIN, Stanford L., Economics, Ph.D., 1974, University of Michigan

LEVY, Michael R., Biological Sciences, Ph.D., 1963, University of California at Los Angeles

LIEBLICH, Malcolm, Speech Pathology and Audiology, Ph.D., 1963, New York University

LIN, An-Yhi, Economics, Ph.D., 1967, Iowa State University

LIN, Chiang, School of Engineering, Ph.D., 1984, University of Kentucky

LINDEN, George W., Philosophical Studies, Ph.D., 1956, University of Illinois

LINDSAY, Vaughnie J., Management Information Systems, Ed.D., 1966, Indiana University

LIVINGSTON, Marilynn, Department of Computer Science, Ph.D., 1966, University of Alberta

LOGENFRAN, Rasaratnam, School of Engineering, Ph.D., 1984, Oklahoma State University

LOSSAU, Carl, Geography and Earth Science, Ph.D., 1962, Northwestern University
LOUCKS, Donald G., Music, Ph.D., 1974, Ohio State University
LOVE, Theresa R., English Language and Literature, Ph.D., 1953, University of Wisconsin
LUAN, David C., Economics, Ph.D., 1959, University of Texas
LUEDKE, George C. Jr., Health, Recreation and Physical Education, D.P.Ed., 1982, Indiana University
LYNCH, James M., Marketing Department, Ph.D., 1984, University of Texas
MAAG, O. Eugene, Speech Pathology and Audiology, Ph.D., 1966, Southern Illinois University at Carbondale
MACKIE, Wade C., Theater and Dance, Ph.D., 1972, Indiana University
MALONE, Robert R., Art and Design, M.F.A., 1958, University of Chicago
MALONEY, Thomas J., Anthropology, Ph.D., 1966, Washington University
MARLOW, Loran Dean, Geography and Earth Science, Ph.D., 1973, Southern Illinois University at Carbondale
MARSHALL, Floreine G., School of Nursing, M.S.N., 1980, Southern Illinois University at Edwardsville
MATTA, Michael S., Chemistry, Ph.D., 1966, Indiana University
MAYNARD, Riley, Mass Communications, M.S., 1974, West Virginia University
MCANENY, Laurence R., Physics, Ph.D., 1957, University of Kansas
MCCABE, Don F., Department of Political Science, Ph.D., 1964, University of Idaho
MCCALL, John N., Psychology, Ph.D., 1959, University of Minnesota
MCCLEAREY, Kevin E., Speech Communication, Ph.D., 1979, University of Kansas
MCCLURE, James R., Chemistry, Ph.D., 1978, University of Missouri
MCDONNELL, Barbara C., School of Nursing, M.S., 1971, Saint Louis University
MCKINNEY, Richard N., Management, Ph.D., 1969, Saint Louis University
MCLAUGHLIN, Robert J., Psychology, Ph.D., 1967, Saint Louis University
MCMAHON, Frank B. Jr., Psychology, Ph.D., 1965, Washington University
MEISEL, John B., Economics, Ph.D., 1978, Boston College
MELLOTT, George K., Music, Ph.D., 1964, University of Iowa
MENDELSON, Robert E., Geography and Earth Science, M.U.P., 1966, University of Illinois
MERRITT, Sharon L., School of Nursing, M.S.N., 1964, University of California
MEYER, Valerie E., Secondary Education, Ph.D., 1980, Southern Illinois University at Carbondale
MEYER, William C., English Language and Literature, Ph.D., 1972, Ball State University
MICHLITSCH, Joseph F., Management Department, Ph.D., 1980, University of Minnesota
MILLER, Boulton B., Management Information Systems, Ph.D., 1961, George Washington University
MILLER, C. Robert, Lovejoy Library, Mus.Ed.M., 1972, Southern Illinois University at Edwardsville
MILLER, Halsey W., Geography and Earth Science, Ph.D., 1958, Kansas University
MILLER, James F. Jr., Management, M.S., 1963, Southern Illinois University at Edwardsville
MILLETT, Richard L., Historical Studies, Ph.D., 1966, University of New Mexico
MITCHELL, A. Boyd, Department of Educational Leadership, Ed.D., 1963, Texas Tech
MITCHELL, Sylvia I., School of Nursing, M.S.N., 1972, Saint Louis University
MOEHN, Larry Niel, Health, Recreation and Physical Education, M.S., 1962, Indiana University
MOORE, Milton Cyril, Lovejoy Library, M.A., 1969, Southern Illinois University at Edwardsville
MORLEY, Elaine J., Public Administration and Policy Analysis, Ph.D., 1976, Syracuse University
MORRIS, Richard L., Foreign Language and Literature, Ph.D., 1983, University of Illinois
MORRISON, Fredrick M., Foreign Language and Literature, Ph.D., 1984, University of Michigan
MORTON, Jo Ann, School of Nursing, M.N., 1982, Louisiana State University Medical Center
MUNDT, Frederick J. C., Department of Educational Leadership, Ph.D., 1961, University of Wisconsin
MUNSHAW, Joe A., Speech Communication, Ph.D., 1972, University of Missouri
MYER, Donal Gene, Biological Sciences, Ph.D., 1958, Ohio State University
MYERS, Paulette K., Art and Design, M.F.A., 1973, Washington University
NABE, Clyde M., Philosophical Studies, Ph.D., 1975, Purdue University
NAIR, Shankar, Biological Sciences, Ph.D., 1966, Washington University
NALL, Susan M. W., Elementary and Early Childhood Education, Ph.D., 1975, Saint Louis University
NELSON, Charles E., Department of Educational Leadership, Ph.D., 1970, Southern Illinois University at Carbondale
NOEL, Fred J. III, Lovejoy Library, M.S., 1975, Southern Illinois University at Edwardsville
NORDHAUSER, Norman E., Historical Studies, Ph.D., 1970, Stanford University
NYERGES, Richard T., Finance and Operations Management, Ph.D., 1973, Michigan State University
O'GORMAN, Gerald, English Language and Literature, Ph.D., 1973, Saint Louis University
OBRIEN, Thomas C., Elementary and Early Childhood Education, Ph.D., 1967, New York University
ORTEGREN, Alan K., Accounting and Finance, Ph.D., 1982, University of Arkansas-Fayetteville
OSIEK, Betty T., Foreign Languages and Literature, Ph.D., 1966, Washington University
OWENS, James L., Elementary and Early Childhood Education, Ph.D., 1972, University of Illinois
PAL, Alexander, Department of Mathematics and Statistics, Ph.D., 1968, Courant Institute of Mathematical Sciences
PANKAKE, Anita M., Department of Educational Leadership, Ed.D., 1985, Loyola University

PARKER, Nancy R., Biological Sciences, Ph.D., 1965, University of Texas

PATRICK, Timothy B., Chemistry, Ph.D., 1967, West Virginia University

PATSLOFF, Patricia K., Management Information Systems, Ed.D., 1967, University of Michigan

PATTY, Delbert L., Elementary and Early Childhood Education, Ed.D., 1965, Ball State University

PAXSON, Thomas D. Jr., Philosophical Studies, Ph.D., 1970, University of Rochester

PEARSON, Samuel C., Historical Studies, Ph.D., 1964, University of Chicago

PENDERGRASS, Robert N., Department of Mathematics and Statistics, Ph.D., 1957, Virginia Polytechnic Institute

PENNELL, Jane C., English Language and Literature, Ph.D., 1973, Saint Louis University

PERRY, Gloria, School of Nursing, Ph.D., 1974, Saint Louis University

PERRY, Linda W., Music, M.Mus., 1964, Northwestern University

PERRY, Richard Kent, Music, D.M.A., 1970, University of Illinois

PETERSON, Gerald E., Department of Mathematics and Statistics, Ph.D., 1965, University of Utah

PHILLIPS, Paul H., Department of Mathematics and Statistics, Ph.D., 1968, Ohio State University

PIERCE, Rex G., School of Engineering, B.S., 1965, Southwest Missouri State

PINNELL, Norma L., School of Nursing, M.S. in N., 1974, Saint Louis University

PIVAL, Joseph E., Music, M.Mus., 1965, University of Illinois

PLETCHER, Galen K., Philosophical Studies, Ph.D., 1971, University of Michigan

POCREVA, Robert S., School of Engineering, M.S.C.E., 1966, Auburn University

POPP, Jerome A., Department of Educational Leadership, Ph.D., 1970, Indiana University

PRUITT, Linda V., Lovejoy Library, M.S., 1985, University of Illinois

PURO, Marsha B., Accounting, Ph.D., 1973, University of Pittsburg

PYKE, Willie O., Management Information Systems, Ed.D., 1971, Northern Illinois University

RANDS, David George, Chemistry, Ph.D., 1957, University of Iowa

RATZLAFF, Kermit O., Biological Sciences, Ph.D., 1962, University of California at Los Angeles

REGNELL, Barbara, Mass Communications, M.S., 1966, Syracuse University

REGNELL, John A., Mass Communications, Ph.D., 1966, University of Illinois

REILLY, Richard G., Lovejoy Library, M.A., 1965, Western Michigan University

REINER, John R., Counselor Education, Ph.D., 1969, Southern Illinois University at Carbondale

REPOVICH, Lieber Don, Counselor Education, Ed.D., 1968, University of Mississippi

REUTERMAN, Nicholas, Psychology, Ph.D., 1968, University of Colorado

REVARD, Stella Purce, English Language and Literature, Ph.D., 1961, Yale University

RICHARDS-ELLSWORTH, Rosanda, Department of Educational Leadership, Ph.D., 1966, University of Wisconsin

RICHARDSON, Betty H., English Language and Literature, Ph.D., 1968, University of Nebraska

RICHARDSON, J. Adkins, Art and Design, Ed.D., 1958, Teachers College, Columbia University

RIDER, John R., Mass Communications, Ph.D., 1963, Michigan State University

RILEY, Lawrence E., Sociology and Social Work, Ph.D., 1971, Ohio State University

RINGERING, Dennis L., Art and Design, M.F.A., 1970, University of Colorado

ROBBINS, Fred W., English Language and Literature, Ph.D., 1970, University of Texas

ROCKWELL, Robert E., Elementary and Early Childhood Education, Ph.D., 1972, Saint Louis University

ROGERS, Billy John, Psychology, Ph.D., 1972, Saint Louis University

ROGERS, Karen, Music, M.F.A., 1974, University of Iowa

ROMANI, L. Dan, Foreign Languages and Literature, M.A., 1953, University of Illinois

ROSSOW, Mark P., School of Engineering, Ph.D., 1973, University of Michigan

RUDDY-WALLACE, Mona, School of Nursing, Ed.D., 1983, University of Missouri

RUMFELT, Janice J., School of Nursing, M.S.N., 1975, Saint Louis University

RUNKLE, Gerald J. T., Philosophical Studies, Ph.D., 1951, Yale University

RUSSO, Joseph R., Psychology, Ed.D., 1963, Pennsylvania State University

RUTH, Sheila, Philosophical Studies, Ph.D., 1969, State University of New York

RUTLEDGE, Robert B., School of Engineering, Ph.D., 1962, Saint Louis University

RUTMAN, Gilbert, Economics, Ph.D., 1965, Duke University

SALDEN, Dan R., Speech Communication, Ph.D., 1971, Southern Illinois University at Carbondale

SANTONI, Wayne David, Historical Studies, Ph.D., 1968, Kansas University

SAPPINGTON, V. Ellen, Health, Recreation and Physical Education, Ph.D., 1976, University of Iowa

SCHIEBER, Robert W., Music, M.Ed., 1956, Indiana University

SCHILD, Myrna Martin, Health, Recreation and Physical Education, M.S., 1972, Southern Illinois University at Carbondale

SCHMIDT, Barbara Q., English Language and Literature, Ph.D., 1980, Saint Louis University

SCHRAGE, John F., Management Information Systems, Ph.D., 1978, Michigan State University

SCHULTHEIS, Robert A., Management Information Systems, Ph.D., 1966, Indiana University

SCHUSKY, Ernest L., Anthropology, Ph.D., 1960, University of Chicago

SCHUSKY, Mary Sue, Department of Educational Leadership, M.A., 1962, University of Illinois

SCHWARTZ, David F., Department of Political Science, Ph.D., 1975, Pennsylvania State University

SCHWIER, Ann S., Economics, Ph.D., 1952, Saint Louis University
SCOTT, Janet A., Music, M.M., 1958, Washington University
SEGAL, Madhav N., Marketing, Ph.D., 1979, University of Texas
SHAHEEN, Jack G., Jr., Mass Communications, Ph.D., 1969, University of Missouri
SHARP, John A., Management Information Systems, Ph.D., 1972, Saint Louis University
SHAUL, Kerry, Theater and Dance, M.F.A., 1973, Southern Methodist University
SHEA, Thomas M., Special Education, Ed.D., 1967, Boston University
SHERWIN, M. Margaret, Lovejoy Library, M.S., 1968, University of Illinois
SHIUE, Wei K., Department of Mathematics and Statistics, Ph.D., 1982, University of Missouri
SILL, David J., Theater and Dance, M.F.A., 1979, Michigan State University
SIMONS, Margaret A., Philosophical Studies, Ph.D., 1977, Purdue University
SIMS, Patricia J., Special Education, M.S.Ed., 1970, Southern Illinois University at Edwardsville
SKINNER, Kathryn K., Psychology, Ph.D., 1959, University of Texas
SLATTERY, William C., English Language and Literature, Ph.D., 1962, University of Arkansas
SLEDGE, Ina P., Lovejoy Library, M.S.L.S., 1971, Atlanta University
SMITH, Joseph E., Art and Design, M.S., 1956, Indiana State University
SMITH, Marley C., Sociology and Social Work, M.S.W., 1976, Washington University
SMITH, Michael Joseph, Art and Design, M.F.A., 1961, Indiana University
SMITH, Philip A., Geography and Earth Science, Ph.D., 1985, McGill University
SMITHSON, Isaiah, English Language and Literature, Ph.D., 1977, University of California
SNELL, Luke M., School of Engineering, M.S., 1970, University of Oklahoma
SO, Yuk-Chow, Finance and Operations Management, Ph.D., 1983, Ohio State University
SOLOMAN, Marvin A., Lovejoy Library, M.A., 1969, Southern Illinois University at Edwardsville
SPENCER, Donna M., Sociology and Social Work, Ph.D., 1983, Saint Louis University
SPENCER, John A., Chemistry, Ph.D., 1969, University of Illinois
SPURGEON, Dickie A., English Language and Literature, Ph.D., 1967, University of Illinois
ST. ONGE, Keith, Speech Pathology and Audiology, Ph.D., 1952, University of Wisconsin
STAHNKE, Athur A., Department of Political Science, Ph.D., 1966, University of Iowa
STAMPS, David B., Music, M.M., 1975, University of Miami
STANLEY, Robert G. English Language and Literature, M.S., 1967, University of Illinois
STATLER, Luther D., Management, Ph.D., 1977, Saint Louis University
STECKLING, Ronald A., Historical Studies, Ph.D., 1964, University of Wisconsin
STEELE, Ruby L., School of Nursing, M.S., 1979, Southern Illinois University at Edwarsdville
STEFFEN, Hans H., Management, Ph.D., 1960, University of Nebraska
STEIN, James R., Ph.D., 1973, Saint Louis University
STEINBERG, David, Department of Mathematics and Statistics, Sc.D., 1968, Washington University
STEPHEN, G. Gregory, Department of Computer Science, Ph.D., 1969, University of New Mexico
STOPPE, Richard L., Speech Communication, Ph.D., 1966, Wayne State University
STRADER, Marlene K., School of Nursing, M.S.N., 1981, Saint Louis University
STRICKLAND, Donald E., Management Department, Ph.D., 1977, Tulane University
STROHMEYER, Donald K., Geography and Earth Science, M.S., 1960, Kansas State University
STUEBER, Alan M., Geography and Earth Science, Ph.D., 1965, University of California-San Diego
SULLIVAN, Alvin D., English Language and Literature, Ph.D., 1972, Saint Louis University
SULTAN, Paul E., Management, Ph.D., 1950, Cornell University
SUMNER, Mary R., Management Information Systems, Ed.D., 1977, Rutgers University
SWAINE, Richard L., Sociology and Social Work, Ph.D., 1971, Washington University
SWAMY, Padmanabha N., Physics, Ph.D., 1963, Delhi University
SWEEZEY, Charles, Theater and Dance, M.F.A., 1974, Brandeis University
SYKES, Roslyn Kelley, School of Nursing, Ph.D., 1984, Saint Louis University
TALIANA, Lawrence E., Psychology, Ph.D., 1958, Purdue University
TALLANT, Audrey, M., Theater and Dance, M.F.A., 1977, California Institute of the Arts
TARPEY, Paul R., Management Information Systems, Ph.D., 1979, Saint Louis University
TARWATER, William H., Music, Ph.D., 1958, Peabody College
TAYLOR, John A., Historical Studies, Ph.D., 1972, University of Chicago
TAYLOR, Joyce S., Speech Pathology and Audiology, Ph.D., 1969, University of Missouri
TAYLOR, M. Harvey, Department of Educational Leadership, M.A., 1967, Brigham Young University
TETERS, Barbara J., Department of Political Science, Ph.D., 1955, University of Washington
THOMANN, Daniel A., Management Department, Ph.D., 1985, Saint Louis University
THOMERSON, Jamie E., Biological Sciences, Ph.D., 1965, Tulane University
THOMPSON, Donald, Lovejoy Library, M.A.L.S., 1967, University of Michigan
THOMPSON, Noble R., Geography and Earth Science, Ph.D., 1973, University of Tennessee

THORNTON, Charles A., Geography and Earth Science, Ph.D., 1970, University of Tennessee
TRAXLER, Anthony J., Psychology, Ph.D., 1969, Pennsylvania State University
TUCKER, Sharon A., Management Department, Ph.D., 1980, University of Chicago
TURNER, Charles, J., Elementary and Early Childhood Education, Ed.D., 1954, Columbia University
TURNER, Sarah T., Music, M.A., 1958, Columbia University
VALLEY, David B., Speech Communication, Ph.D., 1972, University of Illinois
VAN CAMP, Leonard W., Music, D.M.A., 1964, University of Missouri
VAN ROEKEL, Jacob H., School of Engineering, M.S.I.E., 1968, Purdue University
VERDERBER, Nadine L., Department of Mathematics and Statistics, and Department of Computer Science, Ph.D., 1974, Ohio State University
VILHAUER, William W., Theater and Dance, Ph.D., 1965, University of Iowa
VIOLETTE, Philip E., English Language and Literature, A.B., 1959, Saint Michaels College
VIRGO, John M., Management, Ph.D., 1972, Claremont Graduate School
WAGNER, Robert M., Special Education, Ph.D., 1971, Saint Louis University
WAIT, William B., Management, Ph.D., 1952, Cornell University
WALKER, Betty B., School of Nursing, M.S.N., 1971, Saint Louis University
WALLACE, Norval D., School of Engineering, Ph.D., 1967, Saint Louis University
WANDA, Paul E., Biological Sciences, Ph.D., 1978, Pennsylvania State University
WARD, William G., Mass Communications, M.S., 1958, Mankato State College
WEAVER, Robert C., Art and Design, M.F.A., 1977, University of Iowa
WEBER, Joseph A., Art and Design, M.S., 1967, Indiana University
WEINGARTNER, James J., Historical Studies, Ph.D., 1967, University of Wisconsin
WEISS, Stuart L., Historical Studies, Ph.D., 1961, University of Chicago
WELCH, Martha J., School of Nursing, Ph.D., 1973, Case Western Reserve University
WERNER, David J., Management Information Systems and Operations Management, Ph.D., 1969, Northwestern University
WESTEFIELD, Louis P., Department of Political Science, Ph.D., 1973, Washington University
WHITE, J. Edmund, Chemistry, Ph.D., 1958, Indiana University
WHITESIDE, William R., Special Education, Ph.D., 1969, Southern Illinois University at Carbondale
WHITTED, Jack J., Health, Recreation and Physical Education, M.S., 1961, Washington University
WILBRAHAM, Antony C., Chemistry, Ph.D., 1965, Royal Institute of Chemistry
WILEY, W. Deane, Department of Educational Leadership, Ph.D., 1966, Claremont Graduate School
WILLIAMS, Richard E., Finance and Operations Management, Ph.D., 1972, Michigan State University
WILLIAMS, Robert A., Elementary and Early Childhood Education, Ph.D., 1975, Georgia State University
WILLIAMSON, Ramon N., Music, Ed.D., 1963, Columbia University
WILSON, Glenn T., Finance and Operations Management, Ph.D., 1969, Carnegie-Mellon University
WILSON, Howell K., Department of Mathematics and Statistics, Ph.D., 1964, University of Minnesota
WILSON, Rudolph G., Secondary Education, B.A., 1964, Stanford University
WINTER, Kamil, Mass Communications, Ph.D., 1963, University - Czechoslvakia
WITTIG, Gertraude C., Biological Sciences, Ph.D., 1955, University - Germany West
WOLF, Robert G., Philosophical Studies, Ph.D., 1970, Saint Louis University
WOODARD, James P., Music, D.Mus., 1966, Florida State University
YARBROUGH, Ronald E., Geography and Earth Science, Ph.D., 1972, University of Tennessee
YOUN, Luis T., School of Engineering, Ph.D., 1985, University of Houston
ZAHALSKY, Arthur C., Biological Sciences, Ph.D., 1963, New York University
ZANGER, Jules, English Language and Literature, Ph.D., 1954, Washington University
ZAYTZEFF, Veronique, Foreign Languages and Literature, B.A., 1967, University of Paris
ZIEGLER, Robert J., English Language and Literature, Ph.D., 1972, University of Rochester
ZOSKI, Therese M., Lovejoy Library, A.M.L.S., 1984, University of Michigan
ZURHEIDE, Frederick W., Physics, M.S., 1959, Southern Illinois University at Carbondale

DIRECTORY

ACADEMIC SERVICES, OFFICE OF	PB Rm. 1308	692-3701
Academic Counseling and Advising	PB Rm. 1315	692-3701
Admissions Counselors	PB Rm. 1307	692-3705
	toll-free in Illinois	800-642-7860
	toll-free from St. Louis	314-231-1013
Career Planning and Placement	PB Rm. 1312	692-3708
Communications Laboratory	PB Rm. 1404	692-3717
Counseling Center	PB Rm. 1306	692-3715
Evening and Weekend Services	PB Rm. 1315	692-3701
Foreign Student Advisement	PB Rm. 1309	692-3701
Microcomputer Laboratory	PB Rm. 1410	692-3717
Reading Laboratory	PB Rm. 1412	692-3717
Tutoring Laboratory	PB Rm. 1414	692-3717
ACCOUNTING, DEPARTMENT OF	Bldg 2 Rm. 2113	692-2633
ADMISSIONS AND RECORDS, OFFICE OF	Rendl Rm. 1207	692-2010
Admissions, Undergraduate	Rendl Rm. 1215	692-2720
Enrollment	Rendl Rm. 1309	692-3866
Records	Rendl Rm. 1202	692-2260
AEROSPACE STUDIES (AFROTC)	Bldg 3 Rm. 3340	692-3180
AFFIRMATIVE ACTION, OFFICE OF	Rendl Rm. 3229	692-2333
ALUMNI SERVICES	Tosovsky Center	692-2760
ANTHROPOLOGY, DEPARTMENT OF	PB Rm. 0230	692-2744
ART AND DESIGN, DEPARTMENT OF	Wagner 197	692-3071
ATHLETICS, INTERCOLLEGIATE	Vadalabene Center Rm. 1040	692-2871
AUDIO VISUAL SERVICES	LB Rm. 0041	692-3050
BIOLOGICAL SCIENCES, DEPARTMENT OF	SL Rm. 3331	692-3927
BOOKSTORE	UC	692-2132
BURSAR	Rendl Rm. 1101	692-3122

BUSINESS, SCHOOL OF	Bldg 2 Rm. 3314	692-3822
CENTER FOR ECONOMIC EDUCATION	Bldg 3 Rm. 3134	692-2522
CENTER FOR MANAGEMENT STUDIES	Bldg 2 Rm. 3307	692-2668
CENTER FOR ADVANCED MANAGEMENT AND PRODUCTION	Bldg 2 Rm. 3116	692-2166
CHEMISTRY, DEPARTMENT OF	SL Rm. 2325	692-2042
COMPUTER SCIENCE, DEPARTMENT OF	SL Rm. 1339	692-2386
CONTINUING EDUCATION, OFFICE OF	Rendl Rm. 1330	692-3210
Scott Air Force Base Resident Center	(Belleville & elsewhere)	256-4169
	On-campus	2630
COUNSELOR EDUCATION, DEPARTMENT OF	Bldg 3 Rm. 1138	692-3946
DEAN OF STUDENTS, OFFICE OF	Rendl Rm 2306	692-2020
DEAN'S COLLEGE	Rendl Rm. 2330	692-3770
DENTAL MEDICINE, SCHOOL OF (Admissions)	Alton, Bldg 273 Rm. 1103	463-3864
EARLY CHILDHOOD CENTER	Bldg 7034	692-2556
EARLY CHILDHOOD EDUCATION	Bldg 2 Rm. 1133	692-3082
EAST ST. LOUIS CAMPUS	411 E. Broadway	271-3000
ECONOMICS, DEPARTMENT OF	Bldg 3 Rm. 3134	692-2542
EDUCATION, SCHOOL OF	Bldg 3 Rm. 1125	692-3350
EDUCATIONAL LEADERSHIP, DEPARTMENT OF	Bldg 3 Rm. 1117	692-3277
CURRICULUM AND INSTRUCTION (ELEMENTARY AND EARLY CHILDHOOD EDUCATION)	Bldg 2 Rm. 1133	692-3082
ENGINEERING, SCHOOL OF	SL Rm. 0336	692-2500
ENGLISH LANGUAGE AND LITERATURE, DEPARTMENT OF	PB Rm. 3206	692-2060
ENROLLMENT CENTER	Rendl Rm. 1309	692-3866
ENVIRONMENTAL RESOURCES TRAINING CENTER	Bldg 7009 Rm. 1101	692-2030
ENVIRONMENTAL STUDIES	SL Rm. 1332	692-3311
EVENING AND WEEKEND STUDENT SERVICES	PB Rm. 1315	692-3701
FINANCE AND OPERATIONS MANAGEMENT, DEPARTMENT OF	Bldg 2 Rm. 3114	692-2638

FINANCIAL ASSISTANCE (see Student Work and Financial Assistance)		692-3880
FINE ARTS AND COMMUNICATIONS, SCHOOL OF	CB Rm. 1042	692-2771
FOREIGN LANGUAGES AND LITERATURE	PB Rm. 2328	692-3510
FOREIGN STUDENT ADVISEMENT	PB Rm. 1309	692-3701
FOUNDATIONS OF EDUCATION, DEPARTMENT OF (see Educational Leadership, Department of)		692-3277
GEOGRAPHY AND EARTH SCIENCE, DEPARTMENT OF	PB Rm. 1235	692-3620
GERONTOLOGY PROGRAM	Bldg 3 Rm. 0138	692-3454
GRADUATE STUDIES AND RESEARCH	Rendl Rm. 2215	692-3160
HEALTH, RECREATION AND PHYSICAL EDUCATION	Vadalabene Center Rm. 1040	692-3252
HEALTH SERVICE	Rendl Rm. 0202	692-2842
HISTORICAL STUDIES, DEPARTMENT OF	PB Rm. 3225	692-2414
HOUSING	Rendl Rm. 1113	692-3931
HUMANITIES, SCHOOL OF	PB Rm. 3421	692-3014
INFORMATION CENTER	UC	692-2739
INSTITUTIONAL RESEARCH AND STUDIES	Rendl Rm. 3202	692-3415
LOVEJOY LIBRARY		
Hours of Service (Recorded Message)		692-2602
Library Information Services		692-2603
MANAGEMENT, DEPARTMENT OF	Bldg 2 Rm. 2120	692-2750
MANAGEMENT INFORMATION SYSTEMS, DEPARTMENT OF	Bldg 2 Rm. 2310	692-2504
MARKETING, DEPARTMENT OF	Bldg 3 Rm. 2126	692-3221
MASS COMMUNICATIONS, DEPARTMENT OF	CB Rm. 1041	692-2230
MATHEMATICS AND STATISTICS, DEPARTMENT OF	SL Rm. 1333	692-2382
MUSIC, DEPARTMENT OF	CB Rm. 0160	692-3900
NURSING, SCHOOL OF	Bldg 3 Rm. 2331	692-3956
PHILOSOPHICAL STUDIES, DEPARTMENT OF	PB Rm. 3212	692-2250
PHYSICS, DEPARTMENT OF	SL Rm. 2331	692-2472
PLACEMENT SERVICE	PB Rm. 1312	692-3708
POLITICAL SCIENCE, DEPARTMENT OF	PB Rm. 3219	692-3572

PROFESSIONAL EXPERIENCE PROGRAM (PEP)	Bldg 2 Rm. 3127	692-3840
PSYCHOLOGY, DEPARTMENT OF	Bldg 3 Rm. 0118	692-2202
PUBLIC ADMINISTRATION AND POLICY ANALYSIS, DEPARTMENT OF	Bldg 3 Rm. 3128	692-3762
READING CENTER	Bldg 2 Rm. 1317	692-3596
REGIONAL RESEARCH AND DEVELOPMENT SERVICES	Bldg 3 Rm. 3304	692-3500
RELIGIOUS CENTER		692-3246
SCIENCES, SCHOOL OF	SL Rm. 3300	692-3170
SECONDARY EDUCATION, DEPARTMENT OF	Bldg 2 Rm. 1122	692-2652
SECURITY	Bldg 0115	692-3324
	East St. Louis Campus	271-5908
SEPTEMBER OPTION	Rendl Rm. 3102	692-3772
SOCIAL SCIENCES, SCHOOL OF	PB Rm. 3117	692-2372
SOCIOLOGY AND SOCIAL WORK, DEPARTMENT OF	PB Rm. 1230	692-3712
SPECIAL EDUCATION, DEPARTMENT OF	Bldg 2 Rm. 1103	692-3896
SPEECH COMMUNICATION, DEPARTMENT OF	Bldg 3 Rm. 3108	692-3090
SPEECH PATHOLOGY AND AUDIOLOGY, DEPARTMENT OF	Bldg 2 Rm. 1300	692-3662
STUDENT ACTIVITIES	UC	692-2686
STUDENT GOVERNMENT	UC	692-3818
STUDENT LEGAL SERVICES	UC	692-3355
STUDENT PROGRAM BOARD	UC	692-2617
STUDENT WORK AND FINANCIAL ASSISTANCE	Rendl Rm. 2308	692-3880
SUMMER UNIVERSITY	Rendl Rm. 3102	692-3772
TEACHERS' CENTERS IN MATHEMATICS EDUCATION	Bldg 2 Rm. 1120	692-2118
TEXTBOOK SERVICE	LB Rm. 0005	692-3020
THEATER AND DANCE, DEPARTMENT OF	CB Rm. 1031	692-2773
UNIVERSITY CENTER		692-2300
UNIVERSITY COLLEGE	Rendl Rm. 3102	692-3772
SAM M. VADALABENE CENTER FOR HEALTH, RECREATION, AND PHYSICAL EDUCATION		692-2871
VEHICLE REGISTRATION AND FEES	Rendl Rm. 0248	692-3680

VETERANS' SERVICES	Rendl Rm. 1207	692-3330
VICE PRESIDENT AND PROVOST	Rendl Rm. 3102	692-3772
WEEK END UNIVERSITY	Rendl Rm. 1330	692-3775

BUILDING ABBREVIATIONS

Bldg 0168 - Cultural Arts and University Museums (Tract House No. 68)

Bldg 7009 - Environmental Resources Training Center

Bldg 2 - Classroom Building 2

Bldg 3 - Classroom Building 3

CB - Communications Building

LB - Lovejoy Library Building

PB - Peck Building

Rendl - Rendleman Building

SL - Science Laboratory Building

UC - University Center

VC - Vadalabene Center

COURSES

ACADEMIC DEVELOPMENT

060—3 ELEMENTARY MATHEMATICS. Basic arithmetical skills. Operations with whole numbers, fractions, decimals, percent, simple equations, measurements, integers. Five contact hours per week. Credit not counted toward graduation.

080—8(4,4) COLLEGE READING SKILLS. Development of effective and efficient college reading skills and techniques. Emphasis on vocabulary, comprehension skills, textbook reading strategies. Credit not counted toward graduation.

090—8(4,4) BASIC WRITING. Composition skills development. Sentence structure, paragraph organization, essay form. Credit not counted toward graduation.

115—1 STUDY SKILLS. Academic survival skills including note taking techniques, test taking strategies, study systems and time management, goal setting, communication, problem solving skills.

116—1 READING SPEED AND EFFICIENCY. Improvement of reading rates and flexibility; emphasis on comprehension skills, vocabulary, and textbook reading strategies as related to reading efficiency. Prerequisite: college level reading skills.

117—2 CAREER PLANNING AND DEVELOPMENT. Career decision-making process investigates self awareness, career exploration, and implementation; explores interests, resume development, life styles, interviewing techniques, career information resources, and values clarification.

ACCOUNTING

201—4 INTRODUCTION TO FINANCIAL ACCOUNTING I. Financial accounting and reporting; nature, measurement of assets, equities, revenues, expenses; examination of transactions; preparation of financial statements. Prerequisite: sophomore standing.

202—4 INTRODUCTION TO FINANCIAL ACCOUNTING II. Continuation of 201. Prerequisite: 201.

210—4 MANAGERIAL ACCOUNTING. Acquisition, utilization, input-output measurement of asset resources; cost behavior and structure; planning and controlling cost resources; budgeting. Open only to non-accounting majors. Credit not acceptable in the Bachelor of Science Degree in Accountancy. Prerequisite: 202.

301—4 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE I. Financial accounting concepts and procedures; measurement and reporting methods with respect to assets, liabilities, owners' equity, revenues and expenses; authoritative pronouncements. Prerequisites: 202, junior standing.

302—4 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE II. Continuation of 301. Prerequisites: 301 with grade of C or better.

303—4 INTERMEDIATE ACCOUNTING THEORY AND PRACTICE III. Selected complex accounting issues from a theoretical and practical viewpoint; pensions, leases, tax allocation, changing prices, other reporting and disclosure issues. Prerequisites: 302 with grade of C or better.

311—4 MANAGERIAL AND COST ACCOUNTING I. Cost-volume-profit relationships; forecasting (including simple linear regression); product costing (job order-process; actual-normal-standard absorption-variable); standard costs, variances, joint products; budgeting. Prerequisites: 202, MS 251, junior standing.

312—4 MANAGERIAL AND COST ACCOUNTING II. Short and long term decision making; decisions under uncertainty; allocations; evaluation of segments; transfer pricing; behavioral aspects of information; application of various quantitative techniques. Prerequisites: 311 with grade of C or better.

315—4 ACCOUNTING SYSTEMS. Accounting systems, concepts, design, information needs and flows; special emphasis on internal control. Prerequisites: 302, 311.

321—4 INTRODUCTION TO TAXATION. Federal tax laws applicable to individuals, corporations, estates, trusts; special emphasis on corporations, including Subchapter S, consolidated returns, reorganizations. Prerequisites: 302 or concurrent enrollment or consent of instructor.

322—4 ADVANCED TAXATION. Federal tax laws applicable to individuals, special emphasis on tax planning opportunities. Prerequisites: 321 with grade of C or better.

342—4 BUSINESS LAW FOR ACCOUNTANTS. Accounting and auditing implications of legal problems; includes Uniform Commercial Code areas of sales, commercial paper, secured transactions, partnerships, corporations, agency, bankruptcy. Prerequisite: junior standing.

390—2 INTERNSHIP IN ACCOUNTING. On-the-job professional experience with public accounting firms, industrial firms, governmental agencies. By arrangement. Cases, papers. Prerequisites: 301 with grade of C or better, consent of department chairperson.

401—4 ADVANCED ACCOUNTING TOPICS. Accounting principles, procedures related to special entities, including governmental units, partnerships, multi-corporate entities; foreign transactions; primary emphasis upon business combinations and consolidated financial statements. Prerequisites: 303, good standing in Accountancy program.

403—4 SENIOR SEMINAR IN FINANCIAL ACCOUNTING THEORY. Asset, equity, income measurement; theoretical issues related to financial accounting; examination, evaluation of authoritative pronouncements. Prerequisites: 303, good standing in Accountancy program.

411—4 ADVANCED MANAGERIAL ACCOUNTING. Seminar: information economics, simulation, regression, linear programming applications; variances, allocations, and other theory issues. Readings, cases, papers, computer applications. Prerequisites: 312, MS 320 (or concurrently), good standing in Accountancy program or consent of instructor.

431—4 PRINCIPLES OF AUDITING. Auditor's decision process; understanding client's business; development of working papers; audit tests; statistical sampling applications; EDP systems; preparation of audit report; current pronouncements. Prerequisites: 303, 315, good standing in Accountancy program.

433—4 ADVANCED AUDITING TOPICS. Environment of auditing; auditor's legal liability; problems of internal auditing; moral, ethical judgments. Prerequisites: 431, good standing in Accountancy program.

490—1 to 8 INDEPENDENT STUDY IN ACCOUNTING. Topical areas in greater depth than regularly titled courses; individual or small group readings or research projects. May be repeated to a maximum of eight credit hours so long as no topic is repeated. Prerequisites: consent of instructor, department chairperson and good standing in Accountancy program.

ADULT EDUCATION

490—4 INTRODUCTION TO ADULT AND CONTINUING EDUCATION. Nature of field and major areas of professional practice; basic concepts, issues; various program areas, institutional settings.

495—1 to 8 SELECTED TOPICS. Varied content related to adult and continuing education. Offered from time to time as need exists and as faculty interest and time permit. Prerequisite: consent of instructor.

AEROSPACE STUDIES

120—3(1,1,1) THE AIR FORCE TODAY. Theory of officership, characteristics of air doctrine, missions, organizations, and capabilities of aerospace offensive, defensive, and support forces. One hour lecture and one hour laboratory per week.

200—3(1,1,1) THE DEVELOPMENT OF AIR POWER. History of air power. Early balloon and powered flight, WW I, WW II, Berlin Airlift, Korean War, Kennedy years, conflict in Vietnam, and modern Air Force. One hour lecture and one hour laboratory per week. Prerequisite: satisfactory completion of 120 or approval of professor of aerospace studies.

300—9(3,3,3) AIR FORCE MANAGEMENT AND LEADERSHIP. Management and leadership theory and application, decision making processes, communication skills, motivation. Special emphasis on case studies of Air Force and general business situations. Three hours of lecture and one hour of laboratory per week. Prerequisite: satisfactory completion of field training or approval of professor of aerospace studies.

350—2 FLIGHT REGULATION AND NAVIGATION. Flight regulations, weather, and navigation. Prepares students for participation in Air Force Flight Screening Program. Two hours lecture per week. Prerequisite: approval of professor of aerospace studies.

400—9(3,3,3) NATIONAL SECURITY FORCES IN CONTEMPORARY SOCIETY. Armed Forces in contemporary society. Environment in which U.S. defense policy is formulated. Role of military leader. Political, economic, and social constraints on defense structure. Three hours of lecture and one hour of laboratory per week. Prerequisite: satisfactory completion of 300 or approval of professor of aerospace studies.

ANTHROPOLOGY

111—4 INTRODUCTION TO ANTHROPOLOGY. Examines physical and cultural evolution and many different lifestyles of people around the world as a means to better understanding ourselves. Uses museum materials and audiovisual resources for illustration.

301—4 LANGUAGE AND CULTURE. Relationships between language and culture. Considers development of language and culture as human characteristics, diversity and universals; introduces sociolinguistics and ethnography of communication. Prerequisite: 111 or consent of instructor.

305—16(4,4,4,4) PEOPLES AND CULTURES OF THE WORLD. (a) North America. Origins of native North Americans; their economy, politics, family life, and religion. Native American cultures prior to Euroamerican domination. (b) Asia. Geography, history, cultural and social organization of peoples of Asia. Emphasis on South Asia. (c) Latin America and the Caribbean. Social and cultural aspects of contemporary Mexico, Central America, South America, and the Caribbean in historical and environmental contexts. (d) Africa. Cross-cultural comparisons of African tribes to illustrate general principles of anthropology. Emphasis upon tribal backgrounds in relation to contemporary economic and political life.

311—4 CULTURE OF BLACK AMERICANS. Influences shaping cultural communities of Black Americans. Black family, religion and political movements within American social context. Significance of Katherine Dunham. Prerequisite: consent of instructor.

312—4 CONTEMPORARY AMERICAN INDIANS. Contemporary American Indians as minority groups, their unique position in the United States, and economic, political, legal, religious, and other problems they face.

313—4 WOMEN IN CROSS-CULTURAL PERSPECTIVE. Positions and roles of women in cultures from selected world areas and socioeconomic levels. Anthropological contributions to women's studies.

319—4 GROWTH OF OLD WORLD CIVILIZATION. Cultural development from earliest evidences to rise of civilizations in Egypt, Mesopotamia, India, and China. Environmental and cultural factors.

325—4 ARCHAEOLOGICAL METHOD AND THEORY. Major historical developments in Old and New World archaeology; basic methods and current theoretical approaches to data analysis; cultural resource management.

330—4 ARCHAEOLOGY OF NORTH AMERICA. Material and nonmaterial aspects of prehistoric Indian cultures of North America. For students with amateur archaeological or professional interests.

350—4 ANTHROPOLOGY IN CONTEMPORARY LIFE. Current issues from an anthropological perspective. Ethnicity, ethnic and religious divisions, world hunger and populations, concepts of illness, health and medicine, biology and society. Topics vary with instructors.

365—4 HUMAN ORIGINS. Basic principles of human evolution; fossil record emphasizing most recent discoveries. Anthropology Teaching Museum collections used to familiarize students with modern human skeleton and earlier fossil forms.

367—4 GROWTH OF NEW WORLD CIVILIZATION. Origins, development of New World civilizations emphasizing Olmec, Mayan, Teotihuacanan, Toltec, Aztec, and Incan cultures. Spanish conquest of Aztecs and Incas.

373—4 to 8 INTRODUCTION TO ETHNOGRAPHIC FIELD METHODS. Research design, interviewing, participation, data analysis. Ethical and practical problems of ethnographic fieldwork. Directed field research in settings chosen by instructor. May be repeated for total of 8 hours. Prerequisite: 111 or consent of instructor.

375—4 to 8 INTRODUCTION TO ARCHAEOLOGICAL FIELD METHODS. Students participate in site location, survey and evaluation techniques, excavation strategies and methods, recording, laboratory methods and interpretation. Emphasizes learning through participation in excavations. Prerequisite: 111 or consent of instructor.

400—4 CULTURAL ANTHROPOLOGY. How anthropologists use concept of culture and do field work. Cross-cultural study of basic components of culture including language, economics, political organization, kinship, religion.

401—4 ANTHROPOLOGICAL LINGUISTICS. (Same as English 400.) Various theories (such as structural and transformational) regarding language structure (phonology, morphology, syntax, and semantics) and changes within the structure. Recommended for anthropology students, linguistic students, and those preparing to teach English.

404—4 ANTHROPOLOGY AND THE ARTS. Origins and evidence for arts in early human history. Graphic and plastic arts, ethnomusicology, choreology, and folklore in selected non-Western cultures.

405—4 KINSHIP AND KIN GROUPS. Principles of kinship and its foundation for social life. Types of kin groups, their formation and their functions.

407—4 PRIMATOLOGY. Primate evolution, behavior (ethology), physiology, ecology. Development of locomotion, other motor skills, evolution of brain, primate communication, and associated cognitive processes. Prerequisite: 111.

408—4 HISTORY OF ANTHROPOLOGICAL THOUGHT. Historical development of discipline. Major schools of thought and important shifts in theory, method, problem definition. Readings of selected classics and contemporary thought. Prerequisite: junior standing or consent of instructor.

409—4 APPLIED ANTHROPOLOGY. Use of anthropology to solve practical problems in agriculture, health, education, industry. Role of anthropology in contemporary global problems. Case studies of reactions to change.

410—4 ANTHROPOLOGY OF RELIGION. Religion as one aspect of culture. Historical and contemporary perspectives on religion in a wide variety of cultures. Prerequisite: 111 or consent of instructor.

411—4 URBAN ANTHROPOLOGY. People in city environments. History of urban development, lifestyles, rituals, social and ethnic groups and networks, poverty, neighborhood rehabilitation. Includes field trips and/or speakers from urban community programs. Prerequisite: 111 or consent of instructor.

416—4 CULTURE CHANGE. Ways human lifestyles change through evolution, diffusion and innovation. Theories of change and methods of studying change.

420—4 MUSEUM TECHNOLOGY (MUSEOLOGY). Historical development of museums as institutions; dynamics of shifting roles, functions, philosophies, and continuing education. Practical experience in developing and constructing exhibits. Prerequisite: consent of instructor.

424—4 CULTURE AND PERSONALITY. Cross-cultural comparisons of personality, emphasizing socialization of children. Cultural definitions of types and variants of "normal" and "abnormal" adult personalities. Prerequisite: junior standing or consent of instructor.

426—4 THE FAMILY IN CROSS-CULTURAL PERSPECTIVES. Historical and cross-cultural perspectives on North American families. Techniques of oral family history documentation. Studies variety of family experiences through readings,

speakers, class projects, discussions. Prerequisite: 111 or consent of instructor.

432a—4 THE PREHISTORY OF ILLINOIS. Prehistoric cultural developments in midwest between 12,000 B.C. and 1500 A.D. Events leading to climax of Mississippian culture at Cahokia. Extensive utilization of slides, archaeological collections, and displays in anthropology teaching museum.

432b—4 SOUTHWESTERN ARCHAEOLOGY. Prehistoric-historic cultural developments in southwestern United States emphasizing Pueblo culture. Mogollon and Hohokam cultures, Mesoamerican base, theory, analogy in archaeological reasoning. Prerequisite: 330 or consent of instructor.

442—4 HUMAN ECOLOGY. (Same as Environmental Studies 442.) Human habitat relationships and cultural adaptations. Problems related to environmental change, migration, population growth, technological and institutional change, and attitudes toward change. Prerequisite: sophomore standing or consent of instructor.

452—4 POLITICAL ANTHROPOLOGY. Cross-cultural comparisons of political systems emphasizing non-European peoples. Functional relations between politics and society, growth of political complexity; systems of authority/leadership. Prerequisites: junior standing, consent of instructor.

470—4 SPECIAL TOPICS IN ANTHROPOLOGY. Significant problems and issues not treated in other courses. Focus is restricted; content varies and is announced in advance. May be repeated for maximum of 12 hours as long as no topic is repeated. Prerequisite: 111 or consent of instructor.

473—4 ADVANCED ETHNOLOGICAL FIELD METHODS. Additional opportunities for supervised ethnographic fieldwork in settings chosen by instructor. Research proposal development and data analysis, interpretation, and presentation. Undergraduates limited to maximum of 16 hours of field experience in 373, 473, 375, and/or 475. Prerequisite: 373 or consent of instructor.

475—4 ADVANCED ARCHAEOLOGICAL FIELD METHODS. New techniques for data recovery. Opportunities to develop specialized capabilities in ancillary methods including photography, mapping, and faunal, floral, and ceramic analysis. Prerequisite: 375 or consent of instructor.

483—1 to 8 INDIVIDUAL STUDY IN ANTHROPOLOGY. Guided research on anthropological problems supervised by single faculty member chosen by student. Consult department chairperson before enrolling.

ART AND DESIGN

050—3 AVOCATIONAL PAINTING. Painting and drawing media for non-majors. Individual development of understanding and appreciation of painting through direct experience in painting. May be repeated. Three hours credit applicable to degree except in art and design and teacher education. Fee: $7.98.

051—3 AVOCATIONAL CERAMICS. Ceramics for non-art majors. May be repeated up to 12 hours. Three hours credit applicable to degree except in art and design and teacher education. Fee: $19.98.

111—4 INTRODUCTION TO ART. Visual arts; painting, sculpture and architecture. Primary objective to cultivate discrimination in viewing and understanding works of art.

112—15(3,3,3,3,3) BASIC STUDIO. (a) Drawing I. Media and approaches. (b) Visual Organization I. Two-dimensions, color. (c) Drawing II. Ideas. (d) Visual Organization II. Three-dimensions. (e) Life Drawing. Human form and composition. Must be taken in sequence. Fee: a,b,c,d,e—$7.98 per course.

202—24(3,3,3,3,3,3,3,3) INTERMEDIATE STUDIO. (a) Sculpture. Welding, casting, wood construction. (b) Printmaking. Relief, intaglio. (c) Ceramics. Glazing, firing. (d) Painting. Oils. (e) Drawing. Composition, figure. (f) Design. Two-dimensional form. (g) Watercolor. (h) Weaving/Textiles. Off-loom, dying, fibers. Need not be taken in sequence. Prerequisite: sophomore standing or consent of instructor. Fee: a,b,c—$19.98; d,e,f, g,h—$7.98.

225—12(4,4,4) HISTORY OF WORLD ART. Painting, sculpture, architecture. Major periods and styles. (a) Ancient and classical. (b) Medieval epoch and Renaissance. (c) Renaissance to present. (Open to all students.)

289—3 PRACTICUM IN ART EDUCATION. Introduction to art education. Readings, discussions, observations and involvement with children and adults in selected settings. Clinical experience required. Prerequisite: third quarter freshman.

300—9(3,3,3) ART EDUCATION IN THE ELEMENTARY SCHOOLS. Objectives, theory, practice of art activities for grades K-6. (a) Materials used. (b) Motivational and instructional materials used in teaching concepts. (c) Teaching art from Art Specialist's perspective. Prerequisite: junior standing or permission of instructor. Fee: $7.98 per course.

302—12(3,3,3,3) BASIC STILL PHOTOGRAPHY. Black and white photography. Students must provide own equipment, supplies. Darkroom experience. (a) Basic processes; intermediate controls, (b) Lighting; advanced controls, (c) Non-silver processes; zone system, (d) Alternative photographic processes. Must be taken in sequence. Fee: $19.98 per course.

304—1 SEMINAR I. Preparation for career as artist-teachers at college level. Job analysis, job application, exhibiting, galleries, studio development. Prerequisite: upper-class student pursuing BFA degree or consent of instructor.

305—3 to 6 CERAMICS. Advanced study incorporating additional areas of technical and aesthetic development. May be repeated to maximum of 12 hours. Must have consent of

instructors to take more than three quarter hours per quarter. Prerequisite: 202c. Fee: $19.98.

310—3 to 6 PAINTING. Intensive study of painting as medium of expression. Individual rather than group problems are engaged. May be repeated to maximum of 12 hours. Prerequisite: 202—9, including 202d. Fee: $7.98.

312—9(3,3,3) ADVERTISING AND GRAPHIC DESIGN I, II, III. (a) Tools of advertising designer, styles of type, lettering techniques, layout problems, reproduction processes. (b) Layouts in television and print media, incorporating illustration, photography, typography. (c) Reproduction. Intern experiences are encouraged. Prerequisites: 200—9, including 202f, plus 302a or equivalent. Fee: $19.98 per course.

325—3 to 6 STUDIO. No more than 6 hours per quarter. May be repeated to maximum of 12 hours. Prerequisites: 9 hours in medium of choice (except where courses do not exist), consent of instructor. Fee: $7.98.

331—3 to 6 ADVANCED DRAWING. Drawing techniques and media. Intensive study of human figure in environments. May be repeated to maximum of 12 hours. Prerequisite: 9 hours of drawing or consent of instructor. Fee: $7.98.

341—6(3,3) INTRODUCTION TO CARTOONING AND ILLUSTRATION. (a) Cartooning and development of graphic story. Lettering techniques, photomechanical processes, preparation of artwork for reproduction. (b) Story and advertising illustration. Illustration techniques. Prerequisites: 112-15, 202b,d,e,f, or consent of instructor. Fee: $7.98 per course.

358—12(3,3,3,3) PRINTMAKING. (a) Relief. Materials, tools, methods. (b) Intaglio. Fundamental etching, engraving, collographic, embossing processes. (c) Serigraphy. Stencil processes used in screen printing. (d) Lithography. Stone printing. Each part may be repeated once. Prerequisite: 202—9, including 202b. Fee: $19.98.

364—3 CURRICULUM DEVELOPMENT IN ELEMENTARY AND SECONDARY SCHOOL ART EDUCATION. Goals, activities, strategies important to creative growth of children and youth. Prerequisite: junior standing or permission of instructor.

365—3 ART EDUCATION IN THE SECONDARY SCHOOLS. Teaching methodology for Secondary Art Program. Reading, discussion, planning, teaching. Emphasis on studio and art appreciation. Clinical experience at a selected high school. Fee: $7.98.

377—9(3,3,3) MULTIMEDIA. (a) Qualities of materials; (b) Processes and systems; (c) four dimensional work. Should be taken in sequence. Prerequisite: 112-15 or consent of instructor. Fee: $7.98.

384—3 to 6 FIBER/FABRIC. Beginning and advanced problems in frame and floor loom weaving, off-loom fiber techniques, batik, printing, and quilting. May be repeated to maximum of 12 hours. Prerequisite: 202—9. Fee: $7.98.

386—3 to 6 JEWELRY AND DESIGN IN METALS. Basic processes and lost wax process of casting metal via vacuum, centrifugal, gravity and steam techniques. May be repeated to maximum of 12 hours. Prerequisite: 202—9. Fee: $7.98.

393—12(3,3,3,3) SCULPTURE. Individual exploration of advanced sculpture techniques; concepts emphasizing integration of technique and idea. Prerequisite: 202—9, including 202a. Fee: $19.98.

401—3 to 6 RESEARCH IN PAINTING. May be repeated to maximum of 12 hours. Prerequisite: 310—12. Fee: $7.98.

402—3 to 6 RESEARCH IN SCULPTURE. Personalized instruction aimed at professional level development of three-dimensional art making. Prerequisite: 393—12. Fee: $19.98.

405—3 SEMINAR II. Preparation for career as artist-teacher at college level. Career analysis, portfolio preparation, museum and gallery relation. Course activities coordinated with visiting artists' program. Prerequisite: 304 for undergraduates.

408—12(3,3,3,3) ART EDUCATION FOR ELEMENTARY TEACHERS. (a) Art Education for handicapped. (b) Development of motivational and instructional materials. (c) Methods and materials for the classroom teacher. (d) Crafts in the elementary school. Prerequisites: (a) 300a; (b,c) 300a, student teaching, consent of instructor. Fee: $7.98 per course.

410—3 to 6 RESEARCH IN PRINTMAKING. May be repeated to maximum of 12 hours. Prerequisite: 358—12. Fee: $19.98.

412—3 to 6 RESEARCH IN DESIGN. Individual research in technical and conceptual problems in graphic design. May be repeated for total of 12 hours credit. Prerequisites: 302—9, 312—9, 341—3 or equivalent and/or consent of instructor. Fee: $19.98 per course.

416—3 to 6 GLASSWORKING. Basic methods of forming hot and cold glass. Development of creative ideas related to use of glass as art medium. May be repeated for total of 12 hours credit. Fee: $19.98 per course.

417—3 to 6 MULTIMEDIA II. Studio exploration of non-traditional art forms, including conceptual art, artists' performance and events, installation pieces, video, computer graphics, documentation; work incorporating change. May be repeated for a total of 12 hours credit. Prerequisite: 377—6 or consent of instructor. Fee: $7.98.

418—3 METALSMITHING AND DESIGN. Traditional metal forging technique using hammer, anvil, forge to create contemporary sculpture. Prerequisite: 386—9 or 398 or consent of instructor. Fee: $19.98.

420—3 to 6 RESEARCH IN CERAMICS. Supervised research in specific areas of technical and aesthetic interest. May be repeated for total of 12 hours credit. Prerequisite: 305—12 or consent of instructor. Fee: $19.98.

422—3 to 6 RESEARCH IN PHOTOGRAPHY. Advanced pre-professional studio practice for fine arts and/or commercial photography. May be repeated for total of 12 hours credit. Prerequisites: 302—12 quarter credits or equivalent and consent of instructor. Fee: $19.98 per course.

424—9(3,3,3) BAROQUE AND ROCOCO ART. Visual arts throughout Europe during seventeenth and eighteenth centuries. (a) Southern European Baroque. (b) Northern European Baroque. (c) Eighteenth Century. May be taken independently. Prerequisite: 225—12 or consent of instructor.

430—3 to 6 STUDIES IN ART I. Advanced work in art education, ceramics, drawing, fiber/fabric, graphic design, jewelry, multi-media, painting, photography, printmaking, sculpture, or glassworking. May be repeated to maximum of 12 hours. Prerequisites: art major with senior or graduate standing and consent of instructor(s). Fee: $19.98.

441—3 to 6 STUDIO IN DRAWING. Open only to junior, senior and graduate levels. May be repeated to maximum of 12 hours. Prerequisite: 12 hours of 300-level art. Fee: $7.98.

447—9(3,3,3) ANCIENT ART. (a) Prehistoric times through Egypt and Mesopotamia, (b) Aegean and Greek civilizations, (c) Etruscan and Roman civilizations. Prerequisites: 225—12 and/or consent of instructor.

448—9(3,3,3) EARLY CHRISTIAN AND MEDIAEVAL ART. (a) Early Christian and Byzantine Art. (b) Early Mediaeval and Romanesque Art. (c) Gothic Art. Prerequisite: 225a—4 or consent of instructor.

449—9(3,3,3) RENAISSANCE ART. Architecture, sculpture, painting. (a) Renaissance in Northern Europe. (b) Renaissance in Italy and South. (c) Mannerism in Europe. May be taken independently. Prerequisite: 225-12 or consent of instructor.

450—3 EARLY CHILDHOOD ART EDUCATION. Exploration of and experimentation in uses of art education practices in early childhood education. Methods and materials based on developmental needs. Prerequisite: 300a or consent of instructor.

451—3 ART EDUCATION IN CORRECTIONS. Uses of art in prisons, county jails, detention centers. Methods and practices. Prerequisite: senior status.

452—3 ART EDUCATION FOR OLDER ADULTS. Physical, artistic and creative development. Specific instructional approaches for older learners. Prerequisite: senior status.

453—4 INTRODUCTION TO MUSEOLOGY. Museum ethics, collections policies, security, administration and organization, public law, sources of funding, grant preparation. Prerequisite: junior standing or consent of instructor.

454—4 CURATORSHIP: EXHIBITION MANAGEMENT AND DESIGN. Exhibition design, preparation, labeling, security, hanging display techniques and construction, lighting, traffic flow, docent training. Prerequisite: 453.

455—4 DOCUMENTATION OF COLLECTIONS. Accessioning and deaccessioning processes, research, collection management, use of computers, narrative and photo documentation. Prerequisite: 453.

460—9(3,3,3) RESEARCH IN ART EDUCATION. (a) Styles and topics of research in art education. (b) Readings in selected area of research. (c) Design of original research problems. Prerequisites: (a) graduate standing or consent of instructor; (b) 460a; (c) 460b.

466—3 STUDIO IN ART EDUCATION. Drawing, painting, weaving, ceramics, sculpture, and their use in classroom. Each medium studied in separate three-hour unit. For art and elementary majors, public school teachers. May be repeated to maximum of twelve hours so long as no medium is repeated. Prerequisites: admittance to Teacher Education Program, 300a and/or 365, student teaching. Fee: $7.98.

469—9(3,3,3) THE ART OF AFRICA, OCEANIA, AND THE AMERICAS. (a) African Art. (b) Oceanic Art. (c) Pre-Columbian Indian Art of Americas. Prerequisites: 225—12 and/or consent of instructor.

470—3 TOPICS IN ART HISTORY. May include (1) seminars on specific artist, (2) investigations of branches of art historical inquiry, (3) major trends and issues in art since 1970. Course may be repeated for maximum of 12 hours credit as long as no topic is repeated. Prerequisites: 12 hours of art history and/or consent of instructor.

473—9(3,3,3) WOMEN IN ART. (a) Middle Ages through World War I, (b) World War I through 1970's, (c) Seminar focusing on such topics as Feminist politics, approaches to education, impact of Feminism on Regionalism. May be repeated for maximum of 6 hours credit, so long as topics are not repeated. Prerequisite: 225 or consent of instructor. Must be taken in sequence.

480—9(3,3,3) AMERICAN ART. (a) Art of native Americans and Euro-American colonials through Federal period. (b) Nineteenth-century art and architecture in U.S. (c) American art of twentieth century. May be taken in any sequence. Prerequisite: 225—12 or permission of instructor.

481—9(3,3,3) MODERN ART. Principal movements and theories in late nineteenth and twentieth-century art. Developments in visual and plastic arts. (a) Nineteenth Century, (b) 1900-1941, (c) 1941-Present. May be taken independently. Prerequisite: 225—12 or consent of instructor.

483—3 RESEARCH IN ART HISTORY. Individual research in painting, sculpture, architecture, and related arts of various periods. May be repeated to maximum of 12 hours. Prerequisites: 225—12 and/or consent of instructor.

484—3 to 6 RESEARCH IN WEAVING/TEXTILES. Independent research in technical and conceptual problems. May be repeated to maximum of 12 hours. Prerequisites: 202h, 384. Fee: $7.98.

498—3 to 6 INTERNSHIP IN ART. Involvement in work, study, or research designed and supervised by selected faculty members and cooperating institutions. May be repeated to maximum of 12 hours. Prerequisite: advanced undergraduate or graduate standing.

499—1 to 6 SENIOR THESIS. Nature of final thesis is determined according to student's major studio area and is directed by student's major advisor. NOT FOR GRADUATE CREDIT. Prerequisites: senior classification, consent of department. Open to B.F.A. candidates only.

BIOLOGY

111—4 CONTEMPORARY BIOLOGY. Contributions of biology to understanding ourselves and our world. Development, nature and human implications of cell theory, heredity, evolution, population dynamics, ecology and environmental problems.

112—4 DIVERSITY OF LIFE: INTRODUCTION TO ORGANISMAL BIOLOGY. Nature of science, cytogenetics, Mendelian and population genetics, the diversity of organisms, classification and phylogeny, evolution and ecology. Three hours lecture and one laboratory per week. (112 and 113 may be taken in either sequence.)

113—4 UNITY OF LIFE: INTRODUCTION TO CELL BIOLOGY AND PHYSIOLOGY. Cellular organization and metabolism, molecular genetics, reproduction, development and growth of plants and animals, integration, control, and physiology. Three hours lecture and one laboratory per week. (112 and 113 may be taken in either sequence.) Prerequisites: Chemistry 115 or concurrent enrollment in Chemistry 125a and 126a; 112 or high school biology.

202—4 PLANTS AND CIVILIZATION. Role of plants in man's social and economic history. Role of man in the modification and distribution of plants. Prerequisite: one year of high school biology.

203—4 HUMAN SEXUALITY AND REPRODUCTION. Sexual anatomy and physiology, normal and abnormal embryonic and fetal development, pregnancy and birth, birth control, sexual relationships, attitudes, behavior, sexual diseases and disorders. Prerequisite: one year of high school biology.

204—4 HUMAN HEREDITY AND SOCIETY. Human heredity applied to individuals, kindreds, and populations. Genetic aspects of contemporary biological social problems. Prerequisite: one year of high school biology.

205—4 HUMAN DISEASES. Causes and treatment of microbial diseases, metabolic and inherited disorders, cancer, heart disease. Body's defense mechanisms, antibiotics, promises of new DNA technology. Prerequisite: 111.

206—4 HORTICULTURE. Plant propagation, floriculture and ornamental plants. Fruit and vegetable growing. Three lectures, one three-hour lab per week. Prerequisite: 111.

207—4 NUTRITION. Human nutrition with reference to common diets and dietary problems. Nutritional requirements of adults, children and persons with special dietary problems. Prerequisite: 111.

220—5 GENETICS. Mechanisms of inheritance: identification, transmission, distribution, arrangement, change and structure, function of genetic material, genetic diversity in populations. Four hours lecture and three hours laboratory per week. Prerequisites: 112, general chemistry.

240—10(5,5) HUMAN ANATOMY AND PHYSIOLOGY. Functional architecture of the human body. (a) Tissues, bones, muscles, brain, and heart. (b) Circulation, respiration, kidney, endocrines, reproduction and digestion. Four hours lecture, one three-hour laboratory per week. Prerequisites: (a) college chemistry; (b) 240a.

250—4 BACTERIOLOGY. Structure, nutrition, and genetics of bacteria; control of microbial growth; comparison of medically important bacteria and viruses; host response to infectious disease. Three hours of lecture and one laboratory period per week. Prerequisite: 111.

270—5 BOTANY. Plant groups from procaryotes through flowering plants, with emphasis on phylogeny. Structure, nutrition, growth, differentiation and reproduction. Three lecture and four laboratory hours per week. Prerequisite: 112.

280—5 ZOOLOGY. Animal groups from protozoans through mammals. Emphasis on development, anatomy and functional organization as they relate to phylogeny. Three lecture and four laboratory hours per week. Prerequisite: 112.

324—5 COMPARATIVE ANATOMY OF VERTEBRATES. Evolutionary approach to comparative form, function, and development of vertebrate organisms with emphasis on both fossil and living forms. Two hours lecture and six laboratory hours per week. Prerequisite: 280.

325a—3 EMBRYOLOGY. Morphogenesis, fertilization, cleavage, pattern and shape; differentiation, cell specialization, organ formation, patterns of growth in animals with emphasis on vertebrates. Prerequisites: 113, 280.

325b—2 EMBRYOLOGY LABORATORY. Embryology and differentiation of vertebrate forms: fertilization, cleavage, organ

development, patterns of growth. Four laboratory hours per week. Prerequisite: concurrent enrollment in Biology 325a.

327—3 EVOLUTION. Evolutionary change as shown in heredity, population genetics, speciation, adaptation, natural selection, development, behavior, geographical distribution and the origin of life. Three lecture hours per week. Prerequisites: 112, 280.

331—5 CELL BIOLOGY. Structure and function of cell parts. Transport of molecules and information across cellular membranes. Storage and expression of genetic information. Regulation of cellular activities. Four hours lecture and one laboratory per week. Prerequisites: 113, Chemistry 120b or 241a.

332—4 BASIC BIOCHEMISTRY. Relation between structure and function of biologically important macromolecules. Nucleic acids, proteins, carbohydrates. Emphasis on regulation of metabolism, biosynthesis and degradation. Four lecture hours per week. Prerequisite: Chemistry 241.

335—4 INTRODUCTION TO IMMUNOLOGY. Anatomical, cellular, and biochemical aspects of the immune response. Immune mechanisms in transplantation, infectious disease, and autoimmune disease. Prerequisites: 113, and a course in cell biology, genetics, or microbiology.

337—4 ANIMAL HISTOLOGY. Structure and function of animal tissues and techniques used to visualize them microscopically; slide preparation and staining. Three hours lecture, one two-hour laboratory per week. Prerequisites: 112, 113, general chemistry.

340—5 PHYSIOLOGY. Function and regulation of major organ systems in vertebrates: neural responsiveness and integration, homeostasis of body fluids, circulation, respiration, organic maintenance, hormonal control. Four lecture and three laboratory hours per week. Prerequisites: 113, 280, general chemistry.

341—5 FUNCTIONAL HUMAN ANATOMY. Fundamental gross and microscopic structure of human systems. Provides anatomical basis for understanding human physiology. Three hours lecture, one hour tutorial, and one three-hour laboratory per week. Prerequisites: 113, zoology, general chemistry.

350—5 MICROBIOLOGY. Structure, metabolism, and genetics of bacteria and bacteriophages. Role of bacteria in disease, biotechnology, and the environment. Three lectures and two three-hour laboratories per week. Prerequisites: 113, general chemistry.

351—3 DIAGNOSTIC MICROBIOLOGY. Methods for isolating pathogenic bacteria and determining significant properties and immunological features. Two three-hour laboratories per week. Prerequisite: 350.

365—4 ECOLOGY. Scope of ecology, population ecology, models of population growth, competition, predation, diversity and stability of ecosystems, community structure, ecological energetics. Prerequisite: 270 or 280.

410—5(3,1,1) ELECTRON MICROSCOPY. (a) Theory, demonstration, and exercises in basic techniques. (b) Laboratory, fixing and embedding samples. One laboratory per week. (c) Laboratory, sectioning and microscopy. One laboratory per week. Prerequisites: (a) consent of instructor; (b) recent or concurrent enrollment in 410a and consent of instructor; (c) recent or concurrent enrollment in 410a,b and consent of instructor.

411—2 MICROSCOPY AND PHOTOMICROGRAPHY. Principles and use of light microscope. Photography of microscopic images. Manipulation of optical illumination systems. Laboratory exercises. Prerequisite: 20 hours of college biology or consent of instructor.

412—4 CONTEMPORARY ISSUES IN BIO-ETHICS (Same as Philosophy 412). Moral issues in the life sciences including recombinant DNA research, genetic screening, genetic testing, eugenics, and population control, in vitro fertilization, and cloning. Prerequisite: consent of instructor.

415a—2 TECHNIQUES IN CELL AND TISSUE CULTURE. Eukaryotic cell tissue culture, with consideration of growth, differentiation, metabolism and transformation of cells in culture. Introduction to theory, techniques in cell culture. One lecture and one laboratory per week. Prerequisites: junior standing, consent of instructor.

415b—2 LABORATORY IN CELL AND TISSUE CULTURE. Independent supervised projects in cell culture. Eukaryotic cell, tissue culture, growth, differentiation, metabolism and transformation of cells in culture. Methods, applications, tissue culture, eukaryotic cell techniques. Two laboratories per week. Prerequisite: 415a or concurrent enrollment.

417—2 PLANT MICROTECHNIQUE. Preparation of both woody and herbaceous plant tissues for microscopic study. Sectioning, staining. Four hours of laboratory per week. Prerequisite: plant anatomy or consent of instructor.

418a—3 RECOMBINANT DNA. Gene cloning including the methods of creating Recombinant DNA molecules, transfer of genes into recipient cells and regulation following gene transfer. Three hours of lecture per week. NOT FOR GRADUATE CREDIT. Prerequisite: one of the following: 331, 350, 430a,b, or c.

418b—3 RECOMBINANT DNA LABORATORY. Experiments in gene manipulation using bacterial genes exempt from federal guidelines concerning Recombinant DNA. Nine hours of lab per week. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

421—3 HUMAN GENETICS. Human genetics; human chromosomes; Mendelian characters in man; genetic inference; pedigrees, twins, populations—mutation—genetics of races; genetics and medicine. Prerequisite: 220.

422—4 CYTOGENETICS. Cell mechanics, nuclear division; crossing over and mapping of chromosomes; maturation, effect of irradiation, polyploidy, structural aberrations, polytene chromosomes; synthesis of new species; evolution, cytogenetics. NOT FOR GRADUATE CREDIT. Prerequisite: 220.

429—4 IMMUNOLOGIC METHODS. Laboratory course in immunotechniques emphasizing skills and interpretations in antibody identification, separation, and biologic activity. Prerequisites: 335, permission of the instructor.

430—9(3,3,3) MOLECULAR BIOLOGY. (a) Genetic capabilities of living organisms expressed in the structure and function of proteins. (b) Relationship between the structure and function of biological molecules and control of metabolism. (c) Structure and function of nucleic acids in the control of protein synthesis. Must be taken in sequence. Prerequisites: 220, organic chemistry.

431—4 CELLULAR AND MOLECULAR BASES OF MEDICINE. Causes, treatment, and detection of human diseases, as studied from the cellular and molecular levels. Prerequisite: 331 or 430.

433—3 BIOMEMBRANES. Structural organization of biological membranes. Dynamic properties as studied by biophysical techniques. Selected topics of membrane functions related to structural organization. NOT FOR GRADUATE CREDIT. Prerequisites: 331 and 332 or 430 recommended.

434—4 CELLULAR REGULATION. Regulation of gene transcription and translation. Control of metabolism and various cellular activities. NOT FOR GRADUATE CREDIT. Prerequisites: 331 and 332 or 430.

435—4 ADVANCES IN IMMUNOLOGY. Surface receptors on lymphocyte populations, interactions of immune system cells; genetic restrictions of immune response; immunosuppression, tolerance; immune deficiency; host resistance and sensitivity. NOT FOR GRADUATE CREDIT. Prerequisites: 331 and either 335 or a 2-quarter sequence in biochemistry and cell biology.

436—3 CELL ORGANELLES AND INCLUSIONS. Structure, function, and formation of selected organelles of eucaryotic cells. Prerequisite: 331 or 430.

437a—3 BIOLOGICAL ULTRASTRUCTURE. Microscopic structure of animal tissues. NOT FOR GRADUATE CREDIT. Prerequisites: 280, 331.

437b—3 ADVANCED ULTRASTRUCTURE LABORATORY. Ultrastructure of tissues and microorganisms and instruction in advanced electron microscopy technique. Three three-hour laboratories per week. Prerequisites: 410a and concurrent enrollment in 437a or 537 and consent of instructor.

438—3 PROTEINS. Physical and chemical properties of structural and enzymatic proteins. Isolation, primary, secondary, tertiary and quaternary properties. Evolution of proteins. NOT FOR GRADUATE CREDIT. Prerequisite: biochemistry.

439—3 NUCLEIC ACIDS. Physical, chemical, and biological properties of nucleic acids in terms of their structure and function. Primary, secondary and tertiary structure. NOT FOR GRADUATE CREDIT. Prerequisite: biochemistry.

441—3 MAMMALIAN PHYSIOLOGY. Energy procurement and balance, intermediate metabolism; temperature control; advanced topics of cardiovascular and respiratory mechanisms; body fluid regulation, and some environmental adaptations. Prerequisites: 340 and organic chemistry.

444a—3 NEUROPHYSIOLOGY. Mechanisms of information processing and control of behavior. Emphasis on membrane theory, synaptic pharmacology, neuroanatomy. Current mechanisms of learning, memory, drug actions, motor control. NOT FOR GRADUATE CREDIT. Prerequisites: human or animal physiology and calculus or physics.

444b—1 NEUROPHYSIOLOGY LABORATORY. Introduction to neurophysiological research. Demonstrations include electrical recording, drug reactions, brain dissection, stereotaxis, and histology. Prerequisite: 444a or concurrent enrollment.

445—3 ENDOCRINOLOGY. Mammalian hormones as chemical messengers in the control of physiological processes in mammals, including hormonal origins and mechanisms of action. NOT FOR GRADUATE CREDIT. Prerequisite: cell biology or consent of instructor.

446—2 BIOCHEMICAL ASPECTS OF HORMONE REGULATION OF METABOLISM. Cellular and molecular basis for control of metabolism and of cellular activities by hormones. Prerequisite: biochemistry or cell biology.

447a—3 PHYSIOLOGY OF SENSE ORGANS. Mechanisms of sensory receptor response. Includes physical chemistry of transduction, intensity-response functions, information processing, and psychophysics. NOT FOR GRADUATE CREDIT. Prerequisite: human or animal physiology.

447b—1 PHYSIOLOGY OF SENSE ORGANS LABORATORY. Electrophysiological techniques and measurements as applied to selected sensory receptor organs of animals. Prerequisite: concurrent enrollment in 447a or 547a.

448—3 PSYCHOBIOLOGY. Interdisciplinary approach to current and classical topics of neurobiology, sensory receptors, behavior. Includes biological clocks, animal migration and homing, pheromones, and neuroendocrine transduction. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

451—4 MICROBIAL PATHOGENESIS. Mechanisms of pathogenesis employed by medically important bacteria, fungi, and viruses, including discussion of transmission, invasion, colonization, virulence factors, pathology, epidemiology, and treatment. Prerequisite: 350.

452—3 MICROBIAL GENETICS. Prokaryotic genetic information, including DNA structure, replication and transcription; control of gene expression and transfer of genetic material between organisms. Prerequisites: 220, 331, 350.

453—4 MEDICAL MYCOLOGY. Etiology, epidemiology, pathogenic mechanisms, host response to, diagnosis and therapy of fungi and actinomycetes pathogenic for human beings and animals. NOT FOR GRADUATE CREDIT. Prerequisite: 335 or 350 or consent of instructor.

454—3 MICROBIAL PHYSIOLOGY. Bacterial growth and biochemical and genetic regulation of metabolism. Effects of the cellular microenvironment. Prerequisites: 331, 350 and organic chemistry.

455—3 VIROLOGY. Biochemical and physical structure of viruses and their mode of replication in infected cells, including latency and viral oncogenesis. NOT FOR GRADUATE CREDIT. Prerequisites: biochemistry or organic chemistry, microbiology.

460a—3 PLANT COMMUNITIES. Plant communities as components of ecosystems, how communities originate, develop, and maintain themselves. Quantitative measurements and interpretations of successional dynamics stressed. Prerequisite: 365.

460b—1 LABORATORY IN PLANT COMMUNITIES. Experiments and field problems in studying plant communities and plant succession. Techniques of field vegetation analyses and ordering of field data. Some Saturday field trips may be required. Prerequisite: consent of instructor or concurrent enrollment in 460a.

461a—3 PLANTS AND ENVIRONMENT. Environmental complex and ecologic adaptation as seen in environmental relationships of geology, soils, climatology, zoology, chemistry and physics as related to plants. Prerequisite: 270.

461b—1 LABORATORY IN PLANTS AND ENVIRONMENT. Experiments and field problems in studying relationships between plants and environmental factors, including soils, water, light, temperature, atmosphere, fire. Prerequisite: 461a or concurrent enrollment.

462—3 ZOOGEOGRAPHY. Patterns of animal distribution on local, continental and world-wide bases. Speciation, dispersal, and variation are addressed. NOT FOR GRADUATE CREDIT. Prerequisite: 365 or consent of instructor.

463—3 PLANT GEOGRAPHY. Past and present spatial relationships of plants. Present plant groupings and climatic, historical and other causes of plant distribution. NOT FOR GRADUATE CREDIT. Prerequisite: 365 or geography or consent of instructor.

464—3 ECOLOGY AND MAN. Topics relevant to man's interaction with his environment including nutrient cycles, water, pollution, food resources, biotic diversity and population dynamics. Prerequisite: 365.

465—4 AQUATIC ECOSYSTEMS (Same as Environmental Studies 465). Biogeochemistry of community structure of, and man's impact on aquatic systems throughout the world, including lakes, streams, and oceans. Laboratory: local freshwater communities. Three lectures, three laboratory hours per week. Weekend field trips may be required. Prerequisite: 270 or 280 and 365.

466—4 TERRESTRIAL ECOSYSTEMS (Same as Environmental Studies 466). Community structure, succession, biogeochemistry, biomes. Quaternary climate history of the earth, and historical development of terrestrial ecosystems around the world. Laboratory: local terrestrial communities. Three lectures per week. Three laboratory hours per week. Weekend field trips may be required. Prerequisite: 270 or 280 and 365.

467—4 ETHOLOGY. Animal interactions and the response of animals to environmental stimuli. Behavior, learning, motivation and communication. Three lectures, one laboratory per week. Prerequisite: 280.

470—4 FIELD BOTANY. Taxonomy, natural history and distribution of local plants. Students collect from the field, identify, classify and mount specimens. Two lectures and two laboratories per week. Fee required for field trips. Prerequisite: 270.

471—4 PHYCOLOGY. Algae; emphasis on morphology, reproduction, ecology and physiology. Laboratory includes field work, identification, culturing and experimentation. Two lectures, two laboratories per week. Prerequisite: 270 or consent of instructor.

472—4 TOPICS IN PLANT PHYSIOLOGY. Topics include photosynthesis, mineral nutrition, water as related to plants, growth and plant movements. Two lectures and two laboratories per week. Prerequisites: 270 and inorganic chemistry.

474—4 REPRODUCTION AND DISPERSAL OF VASCULAR PLANTS. Morphology and biology of reproduction and dispersal, including implications for species survival, ecology, biogeography, and plant-animal coevolution. Three lectures, one laboratory per week. Prerequisite: 270.

475—4 PLANT ANATOMY. Cell types, tissues, and organography of seed plants with emphasis on phylogeny and ecological specialization. Laboratory: microscopical observations of plant tissues. Three lectures, one laboratory per week. Prerequisite: 270.

477—4 ECONOMIC BOTANY. Influence of plants and plant cultivation on the economic, social, and cultural history of man. Introduction to economically important plants and their products. Prerequisite: 270 or consent of instructor.

480—4 FIELD ZOOLOGY. Taxonomy, natural history and distribution of local animals. Collections of specimens. Two lectures and two laboratories per week. Field trips required; fee required for field trip. Prerequisite: 280.

482—4 PRINCIPLES OF PARASITISM. General principles, life histories, morphologic and physiologic adaptations of parasites, defensive mechanisms, immunity, and specificity, illustrated with animal parasites. Two lectures, two laboratories per week. Prerequisite: 280.

483—5(3,1,1) (a) ENTOMOLOGY. (b) INSECT MORPHOLOGY LABORATORY. (c) INSECT COLLECTION LABORATORY. (a) Insect morphology, physiology, development, systematics, ecology, and pathology. Three lectures per week. (b) Dissection of insects. One three hour laboratory per week. (c) Field collection, pinning, and identification of local insects. One three hour laboratory per week. Prerequisite: 280.

485—4 ICHTHYOLOGY. Relationships, ecology, distribution, behavior, and anatomy of fishes. Emphasis on local fauna. Two lectures and two laboratories per week. Saturday field trips required. Prerequisite: 280 or consent of instructor.

486—4 HERPETOLOGY. Living and fossil amphibians and reptiles; their evolution, relationships, morphology, and behavior. Two lectures, and two laboratories per week. Saturday field trips required. Prerequisites: 270 and 280 or consent of instructor.

487—4 ORNITHOLOGY. Natural history, relationships, behavior, ecology, and evolution of birds. Emphasis on local fauna. Saturday field trips required. Prerequisite: 280.

488—4 MAMMALOGY. Morphology, systematics, natural history and taxonomy, evolution of living and fossil mammals. Two lectures and two laboratories per week. Field trips required. Prerequisite: 280.

489—3 BIOLOGY OF THE PRIMATES. Morphology, systematics, natural history and evolution of living and fossil primates, including man. Prerequisite: 280.

491a-r—1 to 4 READINGS IN BIOLOGY. (a) Anatomy, (b) behavior, (c) biochemistry, (d) botany, (e) cell biology, (f) developmental biology, (g) ecology, (h) endocrinology, (i) entomology, (j) evolution, (k) genetics, (1) immunology, (m) microbiology, (n) parasitology, (o) physiology, (p) research methods, (q) ultrastructure, (r) zoology. Supervised readings in specialized areas. No credit toward minor in biology. May be repeated for total of 8 hours credit. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

493a-r—2 to 8 RESEARCH IN BIOLOGY. (a) Anatomy, (b) behavior, (c) biochemistry, (d) botany, (e) cell biology, (f) developmental biology, (g) ecology, (h) endocrinology, (i) entomology, (j) evolution, (k) genetics, (1) immunology, (m) microbiology, (n) parasitology, (o) physiology, (q) ultrastructure, (r) zoology. Research on biological problems. No credit toward minor in biology. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

494—2 to 4 INTERNSHIP IN BIOLOGY TEACHING. Individually supervised experience in teaching, including planning, laboratories, preparation and presentation of lectures, teaching laboratories, and designing handouts and exams. May be repeated for credit; credit toward concentration limited to 4 hours. Prerequisites: junior or senior standing, 3.5 average in biology, consent of instructor.

495a-f—1 to 16 CLINICAL TOPICS IN MEDICAL TECHNOLOGY. Hospital-based lecture and clinical laboratory in an accredited and affiliated school of medical technology. (a) Clinical Biochemistry (1-16); (b) Clinical Microbiology (1-16); (d) Clinical Immunology/Serology/Immunohematology (1-16); (e) Urinalysis/Clinical Microscopy (1-6); (f) Special Topics in Medical Technology (1-6). Total hours may not exceed 55 hours. Each course may be repeated to maximum indicated. NOT FOR GRADUATE CREDIT. Prerequisite: acceptance for clinical education into an affiliated school of medical technology.

BUSINESS EDUCATION

414—4 ORGANIZATION AND ADMINISTRATION OF VOCATIONAL PROGRAMS. Program philosophy and objectives plus student selection and evaluation, job analysis, curriculum, advisory committees, and instructional systems especially individualized methods.

415—6 SUPERVISED WORK EXPERIENCE. Principles and problems in coordinating vocational business programs. Prerequisite: 414.

416—4 COOPERATIVE COORDINATION TECHNIQUES. Development of techniques for initiation, implementation, and operation of cooperative work coordination. Prerequisite: 414.

CHEMISTRY

111—4 CONTEMPORARY CHEMISTRY. Non-mathematical introduction to chemical principles, atomic and molecular nature of matter, and the pervasive role of chemical knowledge and technology in today's world. Four lecture hours per week.

115—4 INTRODUCTION TO CHEMISTRY. Preparation for university chemistry. Mathematical techniques; problem solving; chemical terms, concepts, laws. For students who do not have the basics in high school chemistry. May not be applied to a major or minor in chemistry. Three lecture hours and one problem session hour per week. Prerequisite: MATH 095 or equivalent. (NOTE: This course is offered through the Office of Academic Services. For further information, please consult that Office in PECK, Rm. 1315.)

120—12(4,4,4) GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY. For other than chemistry majors. (a) General Chemistry. (b) Organic Chemistry. (c) Biological Chemistry. Three lecture hours, one three-hour laboratory per week. Must be taken in sequence.

125—12(4,4,4) CHEMICAL STRUCTURE AND DYNAMICS. University-level modern chemistry; atomic structure, molecular bonding, structure, chemical change, equilibrium, qualitative analysis. Four lecture hours per week. Must be taken in sequence. Requires concurrent enrollment in corresponding 126 laboratory. Prerequisites: (a) high school chemistry or 115; (b) 125a; (c) 125b.

126—3(1,1,1) CHEMICAL STRUCTURE AND DYNAMICS LABORATORY. Laboratory safety practices, techniques, qualitative and quantitative analysis, chemical change and equilibria. (a) one two-hour laboratory per week; (b,c) one three-hour laboratory per week. Requires concurrent enrollment in corresponding 125 lecture. Prerequisites: (a) 115; (b) 126a; (c) 126b.

241—9(3,3,3) ORGANIC CHEMISTRY. Structural types of organic compounds correlated with chemical and physical properties. Bonding, reaction dynamics, reaction types, stereochemistry, functional groups, spectroscopic methods. Three lecture hours per week. Prerequisites: (a) 125c; (b) 241a; (c) 241b.

245—4(2,2) ORGANIC CHEMISTRY LABORATORY. Organic synthesis; techniques for determining physical and chemical properties of organic systems. Two three-hour laboratory periods per week. Prerequisites: (a) 241a; (b) 245a.

311—3 INORGANIC CHEMISTRY. Bonding and structure; descriptive chemistry of less familiar elements, coordination compounds, organometallics. Three lecture hours per week. Prerequisite: 125c.

335—5 QUANTITATIVE CHEMICAL ANALYSIS. Theory and methods, including laboratory experience in gravimetric, volumetric and fundamental instrumental techniques. Three lecture hours and two three-hour laboratories per week. Prerequisites: 125c, 126c.

345—3 IDENTIFICATION OF ORGANIC COMPOUNDS. Theory and practice through determination of physical, chemical and spectroscopic properties. One lecture hour and two three-hour laboratories per week. Prerequisites: 241c, 245b.

361—9(3,3,3) PHYSICAL CHEMISTRY. Mathematical models of causes of chemical behavior; experimental foundations of models; thermodynamics, statistical mechanics, kinetics, and quantum mechanics with applications. Three lecture hours per week. Prerequisites: (a) 125c, PHYS 206c or PHYS 211c, MATH 150b; (b) 361a; (c) 361b.

365—4(2,2) PHYSICAL CHEMISTRY LABORATORY. Investigations of physical chemical phenomena; emphasis on computer aided data analysis and rigorous preparation of written reports. One lecture hour and one four-hour laboratory per week. Must be taken in sequence. Prerequisites: (a) 245a, 361a; (b) 361b.

396—2 INTRODUCTION TO RESEARCH. Investigation of relatively simple research problems in chemistry directed by a staff member. May be repeated for maximum of 6 hours credit. Prerequisites: 3.0 average in chemistry courses, prior arrangement with a staff member, consent of department chairperson.

411—4 PHYSICAL INORGANIC CHEMISTRY. Modern inorganic chemistry including symmetry, atomic structure, chemical bonds, stereochemistry of complex ions and metal chelates. Four lecture hours per week. Prerequisite: successful completion of or concurrent enrollment in 361b.

419—2 SPECIAL TOPICS IN INORGANIC CHEMISTRY. Selected topics such as Magnetic Resonance, Rare Earths, Inorganic Reaction Mechanisms. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

432—8(4,4) INSTRUMENTAL ANALYTICAL MEASUREMENTS. Theory and practice, including spectrophotometric, electro-analytical, and chromatographic methods. Primarily optical instrumentation. Two lecture, six laboratory hours per week. May be taken in either sequence. Prerequisite: 361b.

439—2 to 9 SPECIAL TOPICS IN ANALYTICAL CHEMISTRY. Selected topics such as Chelation, Chromatography, Separations. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

441—3 PHYSICAL ORGANIC CHEMISTRY. Chemical equilibria, kinetics, and structure-reactivity relationships as methods for determining mechanisms of organic reactions. Three lecture hours per week. Prerequisites: 241c and 361b or equivalent.

444—3 ORGANIC REACTIONS. Emphasis on mono-functional compounds. Topics not included in elementary courses. Three lecture hours per week. Prerequisite: 241c.

449—2 to 4 SPECIAL TOPICS IN ORGANIC CHEMISTRY. Selected topics such as Flavor Chemistry, Heterocyclic Chemistry, Steroid Chemistry. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

451—9(3,3,3) BIOCHEMISTRY. Life processes at the molecular level: (a) enzymes and proteins; (b) intermediary metabolism; (c) transmission of hereditary information. Must be taken in sequence. Prerequisite: 241c.

459—2 to 4 SPECIAL TOPICS IN BIOCHEMISTRY. Selected topics such as Enzymology, Metabolism, Nucleic Acids. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

460—5 PHYSICAL CHEMISTRY, PREPROFESSIONAL. Traditional and biological aspects without the requirement of calculus. For secondary concentrations in chemistry and preprofessional students. Suggested for B.S. in Education degree. Four lecture, three laboratory hours per week. Prerequisite: 241c.

464—4 SPECTROSCOPY AND MOLECULAR STRUCTURE. Principles and systematic survey of different types of spectroscopy, emphasis on molecular information obtained from each. Prerequisite: 361c or equivalent.

469—2 to 4 SPECIAL TOPICS IN PHYSICAL CHEMISTRY. Selected topics such as solution Chemistry, Magnetic Resonance, Molecular Orbital Theory. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

471—4 PRINCIPLES OF TOXICOLOGY. Injurious effects of chemicals that enter a biologic species; factors which influence the effects. Detection of hazardous conditions; treatment of effects. Prerequisite: consent of instructor.

479—2 to 4 SPECIAL TOPICS IN CHEMICAL HEALTH AND SAFETY. Selected topics such as Chemistry Safety Management, Occupational Health Chemistry. May be repeated to a total of 8 hours provided no topic is repeated. Prerequisite: consent of instructor.

490—2 CHEMICAL LITERATURE. Various sources of chemical information and techniques for carrying out literature searches. Two lecture hours per week. Prerequisite: 241c.

496—2 to 6 CHEMICAL PROBLEMS. Research problems directed by a staff member. May be repeated to a total of 6 hours. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, major in chemistry with 4.0 average, consent of department chairperson.

CIVIL ENGINEERING

112—0 FRESHMAN SEMINAR. Engineering academic programs, School of Engineering policies; procedures, employment opportunities, and careers. Pass-No Credit grading only.

114—2 ENGINEERING GRAPHICS I. Graphic communications principles; sketching for shape description, pictorial projection multiview, various types of sectional views, auxiliary views, geometric construction. Student must supply own drafting instruments.

115—3 ENGINEERING GRAPHICS II. Shop processes, dimensioning, axonometric drawing, tolerances, fasteners, and the complete detail and assembly drawing of a jig or fixture. Student must supply own drafting instruments. Prerequisite: 114.

199—0 ENGINEERING CO-OPERATIVE EDUCATION I. Supervised work experience with an agency, firm, or organization which uses engineers. The first work period of the five year academic/work experience program. Student will receive a grade of Satisfactory or Unsatisfactory. Prerequisites: sophomore standing in pre-engineering and consent of engineering co-op adviser.

260—4 ENGINEERING MECHANICS-STATICS. Static equilibrium conditions for external and internal force and moment systems. First and second moments of lines, areas, and volumes. Prerequisite: Physics 211a.

263—3 SURVEYING I. Plane surveying, surveying instruments, basic field operations, and computations. Prerequisites: 114, Physics 211a.

270—4 MECHANICS OF SOLIDS. Elastic deformations and stresses in two-dimensional structural elements due to axial, bending, shear and torsion loads. Stress-strain relationships. Mohr's Circle. Elementary design concepts. Prerequisite: 260.

299—0 ENGINEERING CO-OPERATIVE EDUCATION II. Supervised work experience with an agency, firm, or organization which uses engineers. The second work period of the five year academic/work experience program. The student will receive a grade of Satisfactory or Unsatisfactory. Prerequisites: sophomore or junior standing in Civil Engineering and consent of engineering co-op adviser.

314—4 SOIL MECHANICS. Principles for soil sampling, classification, shear strength, stresses, and compressibility. Basic design and estimation of settlement and bearing capacity. Laboratory included. Prerequisites: civil engineering major, ESCI 230, CE 270, or consent of instructor.

315—4 FLUID MECHANICS. Fluid statics problems, closed and open channel flow problems using energy continuity and momentum equations; dimensional analysis, external flow, drag forces. Prerequisites: civil engineering major or consent of instructor.

316—4 WATER RESOURCES ENGINEERING. Rainfall-runoff relationship; probability analysis; surface and ground water hydrology and development. Prerequisites: civil engineering major, 315, IE 319 or concurrent enrollment, or consent of instructor.

340—4 STRUCTURAL ANALYSIS I. Analysis of statically determinate structures: beams, trusses and frames. Influence lines, flexibility methods, and computation of deformations by energy and geometric techniques. Prerequisites: civil engineering major, 270, or consent of instructor.

341—4 STRUCTURAL ANALYSIS II. Classical stiffness and flexibility methods of indeterminate structural analysis; slope-deflection and moment-distribution. Influence lines for indeterminate structures. Matrix notation. Prerequisites: civil engineering major, 340, or consent of instructor.

370—4 ENGINEERING MATERIALS. Physical and chemical properties of engineering materials: (metals, woods, polymers, asphalt, and cement concrete). Laboratory and mixing design of cement concrete. Prerequisite: civil engineering major, 270, or consent of instructor.

376—4 TRANSPORTATION ENGINEERING. Planning and design of air, highway, rail, water, and pipeline transportation facilities (geometric and structural). Prerequisites: civil engineering major, 263, IE 319, or consent of instructor.

380—4 ENVIRONMENTAL ENGINEERING. Analysis and design of water supply treatment and distribution systems; wastewater collection, and treatment systems. Analysis and design laboratory included. Prerequisites: civil engineering major; 316, or consent of instructor.

392—2 to 8 READINGS IN CIVIL ENGINEERING. Supervised reading in selected subjects in civil engineering. Prerequisites: civil engineering major and consent of department chairperson.

399—0 CIVIL ENGINEERING CO-OPERATIVE EDUCATION III. Supervised work experience with an agency, firm or organization which uses engineers. The last work period of the five year academic/work experience program. The student will receive a grade of Satisfactory or Unsatisfactory. Prerequisites: junior or senior standing in civil engineering and consent of engineering co-op adviser.

415—4 FOUNDATION ENGINEERING. Analysis and design of foundations, retaining walls, cofferdams, and earth embankments. Estimates of bearing capacity, settlements, and slope stability values. NOT FOR GRADUATE CREDIT. Prerequisites: civil engineering major, 314, or consent of instructor.

416—4 ADVANCED FLUID MECHANICS. Continuity, energy, and momentum equations in differential form; application to analysis and design for boundary-layer, potential, compressible, and turbulent flow. Prerequisites: civil engineering major, 315, or consent of instructor.

422—4 SOLAR ENGINEERING. Solar radiation; methods of solar thermal collection; determination of space heating requirements; analysis and design of solar thermal systems. Prerequisites: civil engineering major, IE 300, CE 315, or consent of instructor.

440—4 STEEL STRUCTURES. Fundamentals of structural steel design. Familiarization with various steel design codes. NOT FOR GRADUATE CREDIT. Prerequisites: civil engineering major, 340, 370, or consent of instructor.

441—4 TIMBER AND MASONRY DESIGN. Analysis and design of timber and masonry structural elements; properties of materials and composite sections; code design requirements. Prerequisites: civil engineering major, 440, 442 or concurrent enrollment, or consent of instructor.

442—4 CONCRETE STRUCTURES. Investigation and design of reinforced concrete structural elements; ultimate strength, time dependent behavior, and code requirements. NOT FOR GRADUATE CREDIT. Prerequisites: civil engineering major, 340, 370, or consent of instructor.

443—4 ENGINEERING DESIGN. Principles of engineering design. Individual laboratory projects of a research, design, or development nature to study the principles of engineering systems or components. NOT FOR GRADUATE CREDIT. Prerequisites: civil engineering major or consent of instructor.

447—4 PRESTRESSED CONCRETE STRUCTURES. Investigation and design of prestressed concrete structural elements. Code design requirements. Prerequisites: civil engineering major, 442, or consent of instructor.

463—4 TRANSPORTATION SITE SELECTION. Engineering techniques for transportation site selection, route surveying, photogrammetry; geometric design criteria; engineering controls and constraints. Laboratory included. Prerequisites: civil engineering major, 314, 376, or consent of instructor.

475—4 URBAN TRANSPORTATION. Systems engineering and determinate models for traffic generation, distribution assignment, analysis and traffic engineering procedures as applied to urban transportation planning and design. Prerequisites: civil engineering major, 376 or consent of instructor.

477—4 CONSTRUCTION ENGINEERING. Modern methods of construction, construction planning, scheduling by critical path methods, contract documents, economics, estimating and bidding, construction materials. NOT FOR GRADUATE CREDIT. Prerequisites: civil engineering major, 314, IE 305, IE 319; or consent of instructor.

478—4 TRANSPORTATION ENGINEERING - FACILITIES DESIGN. Transportation facilities geometric design and structural design of load-carrying elements. Human factors as related to physical design criteria. Prerequisites: civil engineering major; 314, 376, 463 or consent of instructor.

480—4 ENVIRONMENTAL ENGINEERING UNIT OPERATIONS. Parameters and analytical techniques for examination of water and wastewater; analysis and design of coagulation, sedimentation, filtration and biological processes for water and wastewater treatment. Prerequisites: civil engineering major, 380, or consent of instructor.

488—4 ADVANCED MECHANICS OF DEFORMABLE BODIES. Energy principles and their application. Problems in plane stress and strain. Beams on elastic foundations. Theories of failure. Plates and shells. Prerequisite: civil engineering major, 341, or consent of instructor.

489—4 ENVIRONMENTAL ENGINEERING DESIGN I. Systems for removal of materials from liquid streams, including sedimentation, filtration, and biological wastewater treatment. Prerequisites: civil engineering major, 480, or consent of instructor.

490—4 ENVIRONMENTAL ENGINEERING DESIGN II. Systems for sludge treatment and disposal, including sludge thickening, stabilization, dewatering and final disposal; tertiary treatment processes. Prerequisites: civil engineering major, 480, or consent of instructor.

492—3 to 6 TOPICS IN CIVIL ENGINEERING. A selected topic of special interest. May be repeated to a maximum of 8 hours so long as no topic is repeated. Prerequisites: civil engineering major, consent of instructor.

495—4 PAVEMENT DESIGN. Analysis and design for highway and airport; emphasis on identifying factors affecting pavement performance and code requirements. Prerequisites: civil engineering major, 314, 442, or consent of instructor.

496—4 TRANSPORTATION ENGINEERING-GEOMETRIC DESIGN. Influence of human factors, vehicle, travelway, and their interactions on geometric design criteria, and the design applications for ground transportation systems. Prerequisites: civil engineering major, 478, or consent of instructor.

COLLOQUIUM

300—1 to 4 STUDENT COLLOQUIUM. Student-initiated, student developed, student-run experimental colloquia. Credit offerings for innovative and experimental student-run courses not otherwise available in the University curriculum. Prerequisite: sophomore standing.

COMPUTER SCIENCE

108—4 APPLIED COMPUTER CONCEPTS. Introduction to computer concepts, programming, and software packages. Students will develop skill in use of a computer language, word processing, and spreadsheet software. Societal implications will be examined. Prerequisites: one year of high school algebra and one year of geometry.

172—4 FORTRAN PROGRAMMING. Introduction to programming which stresses writing of well-organized programs for scientific applications. Prerequisite: MATH 150b or concurrent enrollment.

270—12(4,4,4) COMPUTER PROGRAMMING. Introduction to programming, problem solving methods, algorithm development, and data structures; includes complete coverage of the language Pascal. Prerequisites: (a) MATH 125 or consent of instructor; (b) 270a, (c) 270b.

311—8(4,4) INTRODUCTION TO COMPUTER SYSTEMS. Internal logical structure and functioning of computer systems; conventional machine level architecture, storage devices, operating system functions, assemblers, subprogram linkage, linkers, loaders. Prerequisites: (a) 270b, (b) 311a.

361—4 FUNDAMENTAL CONCEPTS OF COMPUTER SCIENCE. Survey of theoretical foundations of computer science: automata, formal languages, computability, correctness of algorithms. Prerequisites: 270c, MATH 323.

404—4 PASCAL PROGRAMMING. Complete language; top-down design; and use of procedures to achieve modularity. Not available for graduate credit to students in computer science and mathematics. Prerequisite: 172 or equivalent.

405—4 PROGRAMMING TECHNIQUES. Fundamental data structures and algorithms; their use in effective programming. Not available for graduate credit to students in computer science and mathematics. Prerequisite: 270b or 404.

406—4 INTRODUCTION TO COMPUTER ORGANIZATION AND PROGRAMMING. Number systems, computer arithmetic, character codes, machine language, assembly language, operating system functions, assemblers, linking and loading. Not available for graduate credit to students in computer science and mathematics. Prerequisite: knowledge of at least one programming language.

408—2 to 4 SPECIAL TOPICS FOR TEACHERS OF SECONDARY MATHEMATICS. Selected topics from areas such as programming languages, programming techniques, algorithms, data structures, computer system organization, models of computation. May not be taken for credit towards a concentration in computer science. May be repeated for a total of 12 hours so long as no topic is repeated.

411—4 INTRODUCTION TO COMPUTER ARCHITECTURE AND ORGANIZATION. Digital logic concepts; register-transfer view of a CPU and methods of implementation of control; input/output concepts. Prerequisite: 311.

415—4 COMPUTER NETWORKS. Introduction to network structures and architectures, basic concepts of data communication, protocols; both long-haul and local networks are covered. Prerequisite: 431 or consent of instructor.

424—4 SOFTWARE DESIGN AND DEVELOPMENT. State-of-the-art techniques; students will work in teams on organization, management, and development of a software project. Prerequisite: 443a or consent of instructor.

431—4 INTRODUCTION TO OPERATING SYSTEMS. Operating system structure; file systems; memory management; concurrent processes, mutual exclusion, synchronization, and deadlocks. Prerequisite: 411 or consent of instructor.

436—4 INTRODUCTION TO DATABASE SYSTEM STRUCTURE. Overview; physical data organization; data models including network, hierarchical, and relational models; specific examples. Prerequisite: 453 or consent of instructor.

443—8(4,4) ORGANIZATION OF PROGRAMMING LANGUAGES. Conceptual study of characteristics together with a closer look at representative languages. Prerequisites: (a) 270c, 311b; (b) 443a.

446—4 COMPILER CONSTRUCTION. Introduction to basic ideas of translation of programming languages; emphasis on techniques used in manual construction of compilers. Prerequisites: 361, 443, 451 or consent of instructor.

451—4 DATA STRUCTURES. Characterizations, applications, and implementations of complex data structures; implementation comparisons in terms of efficiency of algorithms; dynamic storage management techniques. Prerequisites: 270, 311.

453—4 FILE STRUCTURES. Concepts and techniques for structuring data on external storage devices; sequential, relative, indexed, and hashed file types; B-trees; data structures for lookup on non-key fields. Prerequisites: 270, 311.

465—8(4,4) NUMERICAL ANALYSIS. (Same as MATH 465) (a) Error analysis, Lagrange and Newton interpolation, methods for solving non-linear equations, numerical integration, boundary value problems. (b) Methods for solving linear systems, eigenvalve problems, initial value problems, function approximation. Prerequisites: (a) 172 or 270b, and MATH 260c. (b) 465a, MATH 305 and MATH 321; or consent of instructor.

478—4 INTRODUCTION TO ARTIFICIAL INTELLIGENCE. Overview of LISP; heuristic search methods; selected topics from knowledge representation, machine learning, and expert systems. Prerequisite: 451 or consent of instructor.

481—4 COMPUTER GRAPHICS. Introduction to interactive computer graphics; basic graphics programming, graphics hardware, implementation of a graphics package, interaction techniques, user-computer interface design. Prerequisites: 451 and MATH 321 or consent of instructor.

495—1 to 6 INDEPENDENT STUDY. Research and reading in a specified area such as programming languages, software design, operating systems, artificial intelligence, computer graphics. May be repeated to a total of 12 hours. Prerequisites: consent of adviser and instructor.

CONSTRUCTION

120—1 INTRODUCTION TO CONSTRUCTION. Survey of construction industry, typical employment opportunities, history, current development.

130—4 COMPUTER TECHNIQUES FOR CONSTRUCTION. Basic computer programming, use of computer in planning, scheduling, and data management. Prerequisites: 120, CE 114.

201—4 CONSTRUCTION MATERIALS AND METHODS I. Introduction to typical materials including asphalt, concrete, plastic, wood, steel, glass. Examination of molecular structure and factors affecting strength. Prerequisite: Chemistry 120a.

202—4 CONSTRUCTION MATERIALS AND METHODS II. Methods and equipment for handling and storage of materials. Construction procedures used with these materials. Prerequisite: 201.

264—4 CONSTRUCTION LAYOUT AND MEASUREMENTS. Surveying techniques for construction ground control and facility layout during construction. Both vertical and horizontal controls. Prerequisite: CE 263.

301—4 SOILS. Geological distribution, physical properties and behavior of soils. Classification and testing. Field control technique and use of soil reports. Prerequisite: CE 270 or concurrent enrollment.

302—4 WATER RESOURCES. Basic hydraulic and hydrological concepts. Determination of flow and drainage areas. Effect of water on construction procedure, use of maps and air photos. Prerequisites: 130, 301.

321—3 ELECTRICAL SYSTEMS. Basic electrical theory for 60 cycle AC systems. Electrical systems and distribution for facilities and during construction; safety consideration, wiring, and energy consumption. Prerequisite: Physics 211.

331—3 HVAC SYSTEMS. Heating, air conditioning, and ventilation systems. Requirements during construction, construction installation, and for the completed facility. Prerequisite: Physics 211.

332—3 MECHANICAL SYSTEMS. Mechanical systems and distribution, including plumbing, pumps, elevators, and people movers. Requirements during construction and for the completed facility. Prerequisite: Physics 211.

341—4 PLANS AND SPECIFICATIONS. Reading and interpreting plans and specifications. Standard construction specifications and standard procedures. Take-off method from plans and specifications. Prerequisites: 130, junior standing in construction, or consent of instructor.

351—4 INTRODUCTION TO CONCRETE AND TIMBER STRUCTURES. Analysis of statically determinate structures. Design considerations for structural concrete, design codes. Formwork analysis and design. Prerequisite: CE 270.

352—4 INTRODUCTION TO STEEL STRUCTURES. Analysis of statically determinate structures. Design considerations for structural steel elements, design codes. Emphasis on corrections and erection techniques. Prerequisite: CE 270.

375—2 JUNIOR SEMINAR. Pre-project and project management of construction project case history of construction technique. Guest lecturers from construction and allied fields. Prerequisite: junior standing.

395—2 to 8 READINGS IN CONSTRUCTION. Supervised reading in selected construction. Topics selected jointly by student and faculty. Prerequisites: junior or senior standing and consent of department chairperson.

403—4 CONSTRUCTION OPERATIONS. Planning and scheduling construction projects including resource and manpower allocation. CPM and PERT methods, progress reports, records. Prerequisites: 130, 341.

411—4 CONSTRUCTION CONTRACTS. Legal aspects of contracts and bidding. Types of construction contracts and documents including bonds. OSHA, local, state, federal regulations. Prerequisites: 341, Management 342.

441—4 SITE INVESTIGATION. Determination of access routes, haul roads, site topography. Use of existing maps and air photo in site evaluation. Prerequisites: 302, 341.

451—4 ESTIMATING AND BIDDING. Methods and procedures for estimation and bidding construction projects. Use of take-off quantities, productivity and material costs. Prerequisites: 341, 403, Economics 310, Finance 320 or concurrent enrollment.

461—4 MATERIALS SAMPLING AND TESTING. Procedures and methods including standard methods such as ASTM, AWS, ANSI, and ACI standards. Prerequisite: 202.

462—4 CONSTRUCTION EQUIPMENT. Types of construction equipment with methods for selection and evaluation of performance, basic principles to determine size and energy requirements. Prerequisites: 403, CE 270.

463—4 CONCRETE PROPERTIES. Relationships between microstructure and macroproperties. Mechanism of fracture, shrinkage and creep, concretes, effects of environment and mixtures. Individual project required. NOT FOR GRADUATE CREDIT. Prerequisite: 351 or consent of instructor.

464—4 CONSTRUCTION MONITORING AND CONTROL. Job inspection, quality assurance, quality control, time and motion studies, time lapse photographs, progress reports, records, and employee relations. Prerequisite: 341.

475—3 SENIOR SEMINAR. Labor relationship, structure of construction companies, permits, bonding, safety advanced topics, guest lectures from construction industries and allied fields. NOT FOR GRADUATE CREDIT. Prerequisite: senior standing.

COUNSELOR EDUCATION

350—4 SURVEY OF HUMAN DEVELOPMENT. Knowledge and understanding of human development through the life cycle. Includes physical, affectional, socialization, peer-group relationships, and self-development.

422—4 EDUCATIONAL MEASUREMENTS. Philosophy and techniques with emphasis on statistical foundations, test construction, use of teacher-made tests and standardized tests. Prerequisite: consent of instructor.

442—4 INTRODUCTION TO GUIDANCE. Student personnel services. Survey of philosophy, principles and organization of guidance services. NOT FOR GRADUATE CREDIT.

483—4 COMMUNITY PROGRAMS FOR THE PREVENTION OF JUVENILE DELINQUENCY. Analysis of existing and experimental programs administered by schools, social, governmental agencies. Prerequisite: consent of instructor.

DANCE

114—2 or 4 BASIC MOVEMENT SKILLS. Studio course. Fundamental exercises to gain strength, flexibility, coordination. May be taken up to 12 hours.

210—8(4,4) BEGINNING MODERN DANCE TECHNIQUE. Movement course. Modern dance theories, techniques. Types of accompaniment and its relationship to dance. Prerequisites: 114, consent of instructor.

211—4 BEGINNING BALLET. Technique class. Fundamentals of classical ballet through barre and center floor work.

212—4(2,2) JAZZ DANCE. Technique class. Using body percussively and rhythmically through percussive (Matt Mattox) and lyrical (Luigi) jazz dance techniques.

213—2 BEGINNING TAP DANCE. Basic tap steps and vocabulary. Tap choreography.

220—4 DANCE PRODUCTION DESIGN. Lighting, costume, set, and sound design for dance productions. Laboratory work on University Theater productions required.

250—2 CREW WORK IN DANCE. Practical technical experience behind the scenes of production. Students of dance are required to commit to at least one show. May be taken up to 6 hours.

310—12(4,4,4) INTERMEDIATE MODERN DANCE TECHNIQUE. Techniques designed for strength, flexibility, coordination. Dynamics of movement and rhythmic analysis. May be taken up to 12 hours. Prerequisites: 210a and b and consent of instructor.

311—12(4,4,4) INTERMEDIATE BALLET TECHNIQUE. Additional ballet vocabulary through barre and center work of increased difficulty. Prerequisite: 211 or consent of instructor.

320—4(2,2) RHYTHMIC STRUCTURE. Enhances awareness of rhythm both physically and environmentally. Formalized musical structure. Prerequisites: 210a and b and consent of instructor.

399—1 THEATER AND DANCE SEMINAR. People, concepts, events in contemporary theater and dance. Journal articles, guest artists, speakers, video tapes, slides. Weekly seminar. May be repeated once.

410—12(4,4,4) ADVANCED MODERN DANCE TECHNIQUE. Theory and technique. Developing advanced skills in dance movement. Preparing kinetic and artistic abilities for

performance. NOT FOR GRADUATE CREDIT. Prerequisites: 310a,b,c or consent of instructor.

411—8(4,4) ADVANCED BALLET. Mastery of ballet vocabulary through advanced barre and center floor work. NOT FOR GRADUATE CREDIT. Prerequisites: 311a,b,c or consent of instructor.

420—6(2,2,2) DANCE COMPOSITION. Structural choreography; principles of spatial relationships, solo and duet, and group composition. NOT FOR GRADUATE CREDIT. Prerequisites: 210a and b and consent of instructor.

430—4(2,2) HISTORY OF DANCE. Development of dance. (a) Pre-twentieth century; (b) Twentieth century. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

431—6(2,2,2) DANCE TEACHING METHODS. Principles and methodologies of dance instructions. Ballet, modern, and jazz for pre-school, elementary, junior and senior high school, adult. NOT FOR GRADUATE CREDIT. Prerequisities: 310a,b,c or consent of instructor.

432—2 MUSIC SELECTION FOR DANCE. Different styles and composers.

440—2 DANCE REHEARSAL, CHOREOGRAPHY/PERFORMANCE. Choreographing and/or performing in regularly scheduled dance concert. May be taken up to 6 hours. NOT FOR GRADUATE CREDIT. Prerequisite: by audition.

460—2 DANCE COMPANY. SIUE Dance Company is faculty selected and supervised and consists of seven to ten students who tour area schools and organizations performing concerts and lecture/demonstrations. NOT FOR GRADUATE CREDIT. Prerequisite: by audition only.

EARTH SCIENCE

111—4 INTRODUCTION TO PHYSICAL GEOLOGY. A study of the materials and physical processes that occur on and within the earth, and their interrelationships in an evolving planet. Prerequisite: MATH 070 or equivalent.

200—4 EARTH AND ITS ENVIRONMENT. (Same as Geography 200.) The identification and description of the interdependent physical processes that occur on and above the earth's surface that affect the living systems.

201—4 PHYSICAL GEOLOGY. Introduction to structure and composition of the earth; physical and chemical processes responsible for modifying the earth and its surface. Laboratory. Prerequisite: Chemistry 115 or equivalent.

202—4 PHYSICAL-HISTORICAL GEOLOGY. Basic principles of geomorphology; oceanography; the occurrence of mineral and fossil fuels; introduction to historical geology. Laboratory. Prerequisite: 201.

203—4 HISTORICAL GEOLOGY. Formation of the earth, evolution of life, and paleogeography of the past according to time and geographic regions. Laboratory. Prerequisite: 202.

210—4 INTRODUCTION TO CARTOGRAPHIC METHODS. (Same as Geography 210.) Map making with emphasis on map properties, design, production; the use of drafting equipment.

212—4 PHYSICAL GEOGRAPHY. (Same as Geography 212.) Earth's physical surface, world distribution patterns of the physical elements their relationships to each other and their importance to mankind. Field trip and laboratory work. Prerequisite: 201 recommended.

213—4 METEOROLOGY. (Same as Geography 213.) Introduction to weather elements, condensation process, air masses, cyclonic activity and weather movements.

214—4 CLIMATE. (Same as Geography 214.) Elements of weather and climate; identification and classification of climates; climatic effects on landforms, vegetation, soil, and human settlement patterns.

215—4 MINERALOGY. Scientific study of minerals; their internal atomic structures, chemical compositions, internal and external geometrics, and physical properties. Laboratory. One weekend field trip required. Prerequisites: 201; Chemistry 125a, 126a.

216—4 MINERALOGY-PETROLOGY. A continuation of 215; systematic mineralogy of silicate and non-silicate minerals; description, classification, and origin of igneous rocks. Laboratory. Prerequisite: 215.

217—4 PETROLOGY. Natural history of rocks; geological, physical, and chemical factors governing their origin and occurrence; description and identification of common types. Field trip required. Laboratory. Prerequisite: 216.

218—2 GEOGRAPHY AND GEOLOGY OF NATIONAL PARKS. (Same as Geography 218.) Survey of national parks; examination of park types where there exist unique landforms, historical events and/or significant ecological situations.

230—3 ENGINEERING GEOLOGY. Geological principles governing the solution of civil engineering problems connected with the use and occurrence of rocks, minerals, soil and water. Prerequisite: Physics 211a.

307—4 CLIMATOLOGY. (Same as Geography 307.) Special topics course. Focuses upon microclimatology and micrometeorology; application of solar heating; air pollution modeling; the Greenhouse Effect and other climatic phenomena. Prerequisite: 213 or 214.

308—4 INTRODUCTION TO GEOGRAPHIC METHODS. (Same as Geography 308.) Integrating physical, economic and cultural elements in the study of areas, using cartographic and quantitative techniques.

310—4 MAP READING, ANALYSIS AND INTERPRETATION. (Same as Geography 310.) Cartographic symbology, survey systems, horizontal and vertical position, direction, distance, cartometrics; development of map skills in using U.S.G.S. topographic quadrangles.

311—4 COMPUTER MAPPING. (Same as Geography 311.) Computer capability to produce maps; utilizing the computer to complement or replace traditional cartography in representing land features. Prerequisite: 210 or consent of instructor.

317—4 AIR PHOTO INTERPRETATION. (Same as Geography 317.) Techniques in the use of aerial photographs as source material for research in the physical and social sciences. Laboratory. Prerequisites: 210 and 310 or consent of instructor.

318—4 PRODUCTION CARTOGRAPHY. (Same as Geography 318.) Limitations imposed by printing processes, type styles, typesetting, photography and platemaking to relate graphic images to mechanics of cartographic production. Prerequisite: 210.

325—4 STRUCTURAL GEOLOGY. Description and classification of geologic structures, including folds, faults, joints, unconformities; rock deformation; geotectonics, including global plate tectonics. Laboratory. One weekend field trip or field project required. Prerequisite: 217.

342—4 STRATIGRAPHY. The study of sedimentary rocks and their classification; environments of deposition; rules and practice of stratigraphy. Prerequisite: 202.

375—4 FIELD METHODS IN GEOLOGY. Elementary geologic field techniques and methods. Classwork accomplished in the field in selected locations in Illinois and adjacent sites. Prerequisite: 325.

400—4 THE EARTH IN SPACE. (Same as Geography 400.) Planetary and stellar composition and structure; energy sources and arrangements of the universe as to position, size, dimension, age, origin, evolution. Laboratory. Prerequisite: 200.

401—4 SOILS. (Same as Geography 401.) Surficial material from the viewpoint of the earth scientist; examination of soil properties in the field; the soil taxonomic classification system. Prerequisite: 111 or Geography 212 or consent of instructor.

402—4 HYDROLOGY. (Same as Geography 402.) The hydrologic cycle; major stream systems; hydrologic aspects and the uses of water resources and their relationships to quality and future supplies. Prerequisite: 111 or Geography 212 or consent of instructor.

403—4 PRINCIPLES OF GEOMORPHOLOGY. (Same as Geography 403.) Processes and structures influencing the shape of the land surface. Prerequisites: 202, 203.

404—4 REGIONAL PHYSIOGRAPHY OF THE EASTERN UNITED STATES. (Same as Geography 404.) Description, origin and geomorphic history of natural landform regions from the interior lowlands eastward. Prerequisites: 202 or 212; 403.

405—4 REGIONAL PHYSIOGRAPHY OF THE WESTERN UNITED STATES. (Same as Geography 405.) Description, origin and geomorphic history of natural landform regions from the Great Plains westward. Prerequisites: 202 or 212; 403.

410—4 QUANTITATIVE TECHNIQUES. (Same as Geography 410.) Statistical and mathematical techniques utilized in the spatial and geosciences; introduction to the usage of SAS and SPSS package programs. Prerequisite: MATH 120 or equivalent.

412—4 REMOTE SENSING OF THE ENVIRONMENT. (Same as Geography 412.) Physical phenomena involved in identifying objects and landscape features at varying distances in the disciplines of agriculture, forestry, geography, geology, meteorology, and urban planning. Laboratory. Prerequisite: 201 or Geography 212 or consent of the instructor.

416—4 STATISTICAL MAPPING. (Same as Geography 416.) Cartographic analysis of problems related to data conversion into quantitative symbology, map perception, and effective map design. Prerequisite: 210.

417—4 PRINCIPLES OF GEOGRAPHIC INFORMATION SYSTEMS. (Same as Geography 417.) Theory and application of automated approaches to the handling of geographical data; areas covered range from census address matching to statewide natural resource systems. Prerequisite: MIS 108 is the recommended General Education skills requirement course for computer programming (instead of Computer Science 108).

420—4 REGIONAL STRATIGRAPHY. The tectonic and stratigraphic framework of North America and selected areas outside that continent. Local and regional stratigraphic columns, index fossils, and structural features. Prerequisite: 342 or 441.

421—4 PETROLEUM GEOLOGY. Formation, migration, and accumulation of hydrocarbons; discovery, development, and production of oil; selected oil fields as practical examples. Prerequisite: 201 or consent of instructor.

423—4 TERRAIN ANALYSIS. (Same as Geography 423.) Location and interpretation of regolith and bedrock features by aerial and satellite photography and imagery; suitability for judicious land use and site development. Prerequisite: 201 or equivalent.

424—4 REGIONAL PROBLEMS IN CONSERVATION. (Same as Geography 424.) Distribution, use, and interrelationship of U.S. resources; conservation techniques. Field study of selected cases.

427—4 URBAN GEOLOGY. (Same as Geography 427.) Application of geological principles to urban development. Hydrology, foundations, tunnels, building materials, and disposal of construction wastes. Avoidance of potentially danger-

ous geologic hazards for urban analysts and developers. Prerequisite: junior standing or permission of the instructor.

430—4 ADVANCED PETROLOGY. Advanced concepts with specific application to the St. Francois Mountains Region in Southeast Missouri. Includes field trips to the area and laboratory study of rock hand specimens and thin sections from the area. Prerequisite: 215.

441—4 PALEONTOLOGY. Fossils, with emphasis on invertebrates from the standpoint of evolution; functional morphology and taxonomy; study and identification of specimens. Laboratory. Prerequisite: 203.

444—4 TEACHING OF EARTH SCIENCES. (Same as Secondary Education 444.) Objectives of earth science education; emphasis on methods, skills, and techniques of instruction in lectures and laboratories. Prerequisite: junior standing.

450—3 to 15 TRAVEL STUDY COURSE. (Same as Geography 450.) Enrichment through travel, supervised study and reading on areas visited. May be repeated for a total of 15 hours.

471—4 REGIONAL ENVIRONMENTAL PLANNING. (Same as Geography 471.) Concepts and meanings of regions (functional and homogeneous), environment (physical, social and economic), planning (general process and land use), and their interrelationships. Prerequisite: senior standing.

485—4 FIELD STUDY OF ENVIRONMENTAL PROBLEMS. (Same as Geography 485.) Field investigation of physical features of environment and problems relating to man's use of natural environment and resources. Prerequisite: advanced standing.

490—1 to 4 TUTORIAL IN EARTH SCIENCE. Individual and small group conferences with staff members. May be repeated to a total of 8 hours.

ECONOMICS

111—4 PRINCIPLES OF MACROECONOMICS. Measurement and determination of national economic activity including production, income, employment, prices; role of government policy in U.S. macroeconomy. Prerequisite: two years of college preparatory mathematics or equivalent.

112—4 PRINCIPLES OF MICROECONOMICS. Principles and characteristics of the market economy: supply, demand, market equilibrium; household demand, firm cost and supply; market structure, government regulation and deregulation; factor markets. Prerequisite: 111.

221—4 ECONOMIC HISTORY OF THE UNITED STATES. Colonial background; industrialization; 1790-1865; agriculture to industrial economy, 1865-1920; Great Depression, New Deal; challenges of post-war economy. Prerequisites: 111, 112.

241—4 CONTEMPORARY ECONOMIC ISSUES. Application of principles to contemporary policy issues such as inflation, unemployment, international trade, the environment, and government regulation. Topics to vary with the instructor. Prerequisites: 111, 112.

305—4 ENGINEERING ECONOMICS. Economic decisions in engineering. Design of materials, production methods, location, machine use, employment of personnel, choice of long-run investment. Prerequisites: 112, MATH 260a.

327—4 SOCIAL ECONOMICS: ISSUES IN INCOME DISTRIBUTION, EMPLOYMENT AND SOCIAL POLICY. Economic aspects of social problems, issues, and policies including general welfare, income, distribution, property, employment, social services, and programs in U.S. and other countries. Recommended for social work students. Prerequisite: 112.

331—4 LABOR ECONOMICS. Theories of labor force participation, wage determination, employment, theories of unemployment and economic insecurity; trade unionism; collective bargaining; public policy. Prerequisite: 111, 112.

343—4 MONEY AND BANKING. Relationships among money, credit, prices, and macroeconomic activity; money creation; role of Federal Reserve; monetary and fiscal policy; international aspects. Prerequisites: 111, 112.

345—4 ECONOMICS OF THE PUBLIC SECTOR: NATIONAL. Role of government in U.S. economy; federal expenditures, revenue, and debt; evaluation of government policy including analysis of taxes, grants, public services. Prerequisites: 111, 112.

400—4 QUANTITATIVE METHODS FOR ECONOMIC AND BUSINESS ANALYSIS. Applications of mathematical tools to economic analysis; emphasis on using calculus and linear algebra in economic and business models. Prerequisites: 111, 112 or equivalent.

401—4 INTERMEDIATE MICROECONOMIC THEORY. Determination of prices and quantities in markets for goods and services. Theories of consumer behavior, cost structures, and factor payments. Firm behavior in alternative markets. Prerequisite: 112.

402—4 INTERMEDIATE MACROECONOMIC THEORY. Methodology of macroeconomic models used to explain the determination of national income, product, employment, and prices; U.S. policy and performance. Prerequisite: 111.

415—4 ECONOMETRICS I. Hypothesis testing and prediction with OLS regression. Estimation with violations of classical assumptions. Multiple regression problems of multicollinearity and model specification. Introduction to simultaneous equations. Prerequisites: MS 251 or equivalent or consent of instructor.

417—4 ECONOMIC FORECASTING. Methods used in macroeconomic forecasts and business forecasts for firms, industries, sectors, or regions. Techniques included: econometrics, time-series, indicators, input-output; judgmental analysis. Prerequisites: MS 251 and either ECON 343 or 402 or equivalent; basic knowledge of regression analysis recommended.

421—4 ECONOMIC HISTORY OF EUROPE. Sources of growth before the Industrial Revolution. Development of agriculture, industry, finance, commerce, and international trade after 1750. Prerequisites: 111, 112.

423—4 HISTORY OF ECONOMIC THOUGHT. Economic ideas and their influence on contemporary economic theory and policy from mercantilism to the present. Prerequisites: 111, 112.

425—4 COMPARATIVE ECONOMIC SYSTEMS. Nature and functioning of capitalism, socialism, communism, and other systems; historical background and theoretical framework; performance relative to stated goals. Prerequisites: 111, 112.

431—4 LABOR AND PUBLIC POLICY. Government's role in regulating labor markets and labor behavior; legislation governing conditions within the firm and labor markets; legislation affecting welfare of labor. Prerequisites: 331 or consent of the instructor.

432—4 COLLECTIVE BARGAINING AND DISPUTE SETTLEMENT. Collective bargaining process and conflict resolution. Union governance, jurisdiction. Effect of bargaining power on settlement of labor disputes. Prerequisites: 431 or consent of the instructor.

435—4 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY. Economic implications of alternative market structures. Investigation of impact of concentration economies of scale, advertising, and conglomerates on business and society. Prerequisites: 401 or equivalent, or consent of instructor.

443—4 ADVANCED MONEY AND BANKING. Role of money in United States economy; banking market structure; nonbank financial intermediaries; function of Federal Reserve System; monetary theory and policy. Prerequisite: 343.

445—4 ECONOMICS OF THE PUBLIC SECTOR: STATE AND LOCAL. Public expenditure and taxation, intergovernmental fiscal relations, budgeting, grants, and public choice. Prerequisites: 111 and 112 or consent of instructor.

451—4 AN INTRODUCTION TO URBAN ECONOMICS. Spatial pattern of economic activity in urban areas. Implications for public policy responses to problems of housing segregation, racial discrimination, urban transportation, environmental pollution. Prerequisites: 401; 400 and 415 suggested.

453—4 LOCATION OF ECONOMIC ACTIVITY. Impact of space upon economic analysis. Regional economic development. Theoretical and practical problems in planning land use. Prerequisites: 401; 400 and 415 recommended.

461—4 INTERNATIONAL ECONOMICS. Causes and effects of international trade on resource allocation, inflation, national incomes, and employment. Exchange rates, balance of payments, and international monetary system. Prerequisites: 401; 343 or 402 recommended.

463—4 INTRODUCTION TO ECONOMIC DEVELOPMENT. Problems associated with increasing incomes of underdeveloped countries. Necessary changes in internal economic structure. Theories of economic growth. Prerequisites: 111, 112.

490—1 to 8 INDEPENDENT STUDY IN ECONOMICS. Investigation of topical areas. Individual or small group readings under supervision of faculty member. Prerequisites: consent of instructor and department chairperson.

EDUCATION

305—4 EDUCATIONAL PSYCHOLOGY. Learner and the learning process. Behavior, discipline, development, the school environment, application of learning theories, and methods of assessment.

491—2 to 4 INTRODUCTION TO MICRO COMPUTERS IN EDUCATION. Hardware, software, and their use in education. Beginning and elementary programming. May be repeated to a maximum of 4 hours, so long as topics differ.

492—8(4,4) PROGRAMMING MICRO COMPUTERS FOR COMPUTER ASSISTED INSTRUCTION. Programming, design, development style, and packaging computer-assisted instruction programs. (a) Programming. (b) Computer-assisted instruction.

EDUCATIONAL ADMINISTRATION

405—4 TEACHER'S ROLE IN EDUCATION MANAGEMENT. Concepts and principles which provide background for proactive participation in education management.

ELECTRICAL ENGINEERING

112—0 FRESHMAN SEMINAR. Engineering academic programs, School of Engineering policies, and procedures, employment opportunities and careers. Pass-No Credit grading only.

199—0 ELECTRICAL ENGINEERING CO-OP I. Supervised work experience with an agency, firm, or organization which uses engineers. The first work period of five year academic/

work experience program. The student will receive a grade of satisfactory or unsatisfactory. Prerequisites: sophomore standing in pre-engineering, consent of engineering co-op adviser.

210—4 INTRODUCTION TO ELECTRICAL CIRCUITS. DC and AC steady state circuit analysis. Loop and Nodal Analysis, Network Theorems, phasor, complex power, single phase and three phase circuits. Prerequisites: Physics 211, CS 172, Math 305 or concurrent enrollment.

299—0 ELECTRICAL ENGINEERING CO-OP II. Supervised work experience with an agency, firm, or organization which uses engineers. The second work period of five year academic/work experience program. The student will receive a grade of satisfactory or unsatisfactory. Prerequisites: sophomore or junior standing in electrical engineering, consent of engineering co-op adviser.

301—3(1,1,1) JUNIOR ELECTRICAL ENGINEERING LABORATORY. Experiments exemplifying material covered in junior electrical engineering courses. Measurement techniques, Network Theorems, digital circuits, semiconductor devices and circuits, integrated circuits. Prerequisites: electrical engineering major; for a, 326 or concurrent enrollment; for b, 301a and 327 or concurrent enrollment; for c, 301b and 328 or concurrent enrollment.

302—1 ELECTRICAL MACHINES LABORATORY. Experiments exemplifying principles of operation and control of electric machines and measurement techniques discussed in EE 343. Not open for electrical engineering majors. Prerequisites: industrial or civil engineering major, concurrent enrollment in 343, or consent of instructor.

310—4 CIRCUIT ANALYSIS. Solution of linear, time-invariant circuits including graphs and Tellegen's Theorem, node and mesh analysis, Laplace Transform solutions, application of network theorems, two port parameters. Prerequisite: electrical engineering major, 210, MATH 305, or consent of instructor.

326—3 DIGITAL ELECTRONIC CIRCUITS. Digital circuits and systems. Semi-conductor device (diode and transistor) characteristics; gates; combinational systems (adding, multiplexing, demultiplexing, ROM); sequential systems (flip-flops, counters, registers). Prerequisite: electrical engineering major, concurrent enrollment in 301a, or consent of instructor.

327—3 LINEAR ELECTRONIC CIRCUITS. Analog circuits. Diodes; transistors as circuit elements; bias stability; small-signal analysis of common emitter, common collector configurations; multiple-stage circuits; frequency response. Prerequisites: electrical engineering major, 326, concurrent enrollment in 301b, or consent of instructor.

328—3 APPLICATIONS OF INTEGRATED CIRCUITS. Advanced electronic circuits: operational amplifier characteristics; OPAMP applications; D/A and A/D converters; waveform generators; feedback amplifier frequency response; OPAMP compensation; voltage regulators. Prerequisites: electrical engineering major, 327, concurrent enrollment in 301c, or consent of instructor.

340—4 BASIC ENGINEERING ELECTROMAGNETICS. Computation of fields resulting from static charge distributions and steady currents; scalar electric and magnetic potential theories. Prerequisites: electrical engineering major, 350, Computer Science 172, or consent of instructor.

341—4 PRINCIPLES OF ELECTRO-MECHANICAL ENERGY CONVERSION. Electromagnets and transformers; energy-based torque and force calculations; lumped parameter models; steady state operational characteristics of motors and generators. Prerequisites: electrical engineering major, 340, IE 260b, or consent of instructor.

342—4 APPLIED ELECTROMAGNETICS. Applications of Maxwell's equations propagation of electromagnetic waves in bounded and unbounded regions; distributed parameter analysis of transmission lines; design and analysis of antennas. Prerequisites: electrical engineering major, 340, or consent of instructor.

343—3 ELECTRICAL MACHINES, CONTROL AND POWER. Induction synchronous and dc motors for controlled electromechanical energy conversion. Electrical power distribution in industry, principles of control and automation. Not open for electrical engineering majors. Prerequisites: industrial or civil engineering major, 210, or consent of instructor.

351—4 SIGNALS AND SYSTEMS I. Methods for input-output analysis of continuous and discrete systems: convolution integral, Fourier series, and Fourier transforms for continuous and discrete signals. Prerequisites: electrical engineering major, 310, or consent of instructor.

352—4 SIGNALS AND SYSTEMS II. Application of Fourier analysis in filtering, modulation, and sampling. Laplace Transform techniques. Z-transform methods, continuous and discrete system applications. Prerequisite: electrical engineering major, 351, or consent of instructor.

365—4 CONTROL SYSTEMS. Feedback control systems analysis and applications. Signal flow graphs, state variable approach, modeling, Root-Locus, Bode plots and steady state errors. Prerequisite: electrical engineering major, 352, or consent of instructor.

382—4 INTRODUCTION TO MICROPROCESSORS. Elements of microprocessor-based systems including CPU, ALU, control unit, BUS structure, memory, peripheral interfaces, interrupt controllers, DMA, instruction set, machine language programming. Three lecture hours and one laboratory session. Prerequisites: electrical engineering major, 326, or consent of instructor.

392—2 to 8 READINGS IN ELECTRICAL ENGINEERING. Supervised reading in selected topics. Prerequisites: electrical engineering major and consent of instructor.

399—0 ELECTRICAL ENGINEERING CO-OP III. Supervised work experience with an agency, firm, or organization which uses engineers. The third work period of five year academic/work experience program. The student will receive a grade of satisfactory or unsatisfactory. Prerequisites: junior or senior standing in electrical engineering, consent of engineering co-op adviser.

401—2(1,1) SENIOR ELECTRONIC ENGINEERING LABORATORY. Experiments exemplify material covered in junior and senior electrical engineering courses. Advanced measurement techniques. Must be taken in sequence. NOT FOR GRADUATE CREDIT. Prerequisites: electrical engineering major, 301c, 328; or consent of instructor.

404—3 ELECTRICAL ENGINEERING DESIGN. Several paper designs selected from various areas in electrical engineering. Additional design of a student selected project. NOT FOR GRADUATE CREDIT. Prerequisites: electrical engineering major, completion of all 300 level electrical engineering courses, or consent of instructor.

405—1 ELECTRICAL ENGINEERING DESIGN LABORATORY. Construction and testing or computer simulation of student project in EE 404. Student consults with a faculty member. NOT FOR GRADUATE CREDIT. Prerequisites: electrical engineering major, 404, or consent of instructor.

412—4 PHYSICAL ELECTRONICS. Physical analysis of solid-state devices: semi-conductor diodes and transistors; drift and diffusion in solids; MOSFET and BJT characteristics; CCDs; lasers; switching devises; magnetic bubble memory. Prerequisites: electrical engineering major; 340, Physics 302a,b, or consent of instructor.

436—4 DIGITAL SIGNAL PROCESSING. Discrete-time signals and systems; z-transforms; discrete Fourier transform; flow graphs; FIR IIR filter design; FFT; digital simulation of systems. Prerequisites: electrical engineering major, 352, or consent of instructor.

444—4 MICROWAVE CIRCUIT DESIGN. Matrix analysis of transmission lines. Microwave circuit design, microstrip line, parallel coupled lines at microwave frequencies, design of representative networks. Prerequisites: electrical engineering major, 342, or consent of instructor.

445—4 POWER SYSTEM ENGINEERING. Power system modelling and representation; formulation of the steady-state power system problem for iterative solution with computers; fault and economic analysis of power systems. Prerequisites: electrical engineering major, 341, 365, or consent of instructor.

452—STOCHASTIC PROCESSES. Probability, random variables, stochastic processes. Power spectrum of stationary random signals. Noise spectrum. Response of linear systems to random inputs. Optimum filtering. Prerequisites: electrical engineering major, 352, or consent of instructor.

465—4 CONTROL SYSTEMS DESIGN. Root-Locus, Bode, and state variable-feedback. Digital control and nonlinear systems. Prerequisites: electrical engineering major, 365, or consent of instructor.

475—4 COMMUNICATION SYSTEMS. Elements of communication systems including: sampling, waveshaping, detection, modulation (amplitude, exponential and pulse), noise performance, probability of error determination, SNR's. Prerequisites: electrical engineering major, 352, 452, or consent of instructor.

482—4 MICROPROCESSORS. Single board microcomputer systems, comparison of several microprocessor families. Software drivers and hardware designs for control of peripheral BUS circuits. Demonstrations and student design projects. Three hours of lecture and one laboratory session per week. Prerequisites: electrical engineering major, 382, or consent of instructor.

483—4 MICROPROCESSOR PROGRAMMING. Machine instructions and information format for microprocessors; assemblers, translators, compilers, interpreters, loaders. Demonstrations and student design projects in programming algorithms for engineering problems. Three hours of lecture and one laboratory session per week. Prerequisites: electrical engineering major, 382, or consent of instructor.

484—4 MICROPROCESSOR INTERFACING. Serial and parallel network interfaces and communications protocols (current loop, RS-232, RS-422, RS-449, IEEE-488); local area network applications. Demonstrations and student design projects. Three hours of lecture and one laboratory session per week. Prerequisites: electrical engineering major, 382, or consent of instructor.

492—3 to 6 TOPICS IN ELECTRICAL ENGINEERING. A selected topic of special interest. The title includes the name of the topic. May be repeated to a maximum of 8 hours so long as no topic is repeated. Prerequisites: electrical engineering major; consent of instructor.

ELEMENTARY EDUCATION

051—4 READING SKILLS DEVELOPMENT. Comprehension, word-attack, vocabulary, and content area reading techniques. For students needing to improve basic reading ability. Graded on Pass/No Credit basis only. (NOTE: This course is offered through the Office of Academic Services. For further information, please consult that Office in PECK, Rm. 1315.)

200—2 INTRODUCTION TO ELEMENTARY EDUCATION. Assessment of teaching as a career through personal observations, discussion of schools, teacher's roles, and teaching as a profession. Prerequisites: student must have accumulated 64 quarter hours and have a 3.5 G.P.A.

201—4 UNDERSTANDING THE PRE-PRIMARY CHILD. Characteristics of infants, toddlers, and young children (birth through six); study and observation in formal and informal settings.

202—4 LEADERSHIP ROLES IN EARLY CHILDHOOD EDUCATION. Exploration of interpersonal relationships by examining values, beliefs, attitudes and goals. Assessing skills and behavior of children, teachers and administrators.

314—4 ELEMENTARY SCHOOL METHODS. Current educational theory and practice; processes of teaching and learning in elementary education. Prerequisites: admission to program, 200, and concurrent enrollment in 337, 343, 365. Registration by permit only.

317—4 PRE-KINDERGARTEN METHODS. Instructional strategies appropriate for preschool children, with emphasis on interrelatedness of sensorimotor, conceptual, and social development. Prerequisites: 200 or consent of instructor, 201.

337—4 READING IN THE ELEMENTARY SCHOOLS. Factors that condition reading; grade placement of aims and materials; diagnostic and remedial treatment; methodology. Field experiences in public schools are required. Prerequisites: admission to program, 200, and concurrent enrollment in 314, 343. Registration by permit only.

338—4 CORRECTIVE PROCEDURES IN READING. Techniques and materials for diagnosing and correcting reading disabilities, meeting instructional needs of each individual. Prerequisites: completion of Field Experience I, concurrent enrollment in 415, 442, 445. Registration by permit only.

343—4 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. Organization of materials, techniques of presentation and evaluation, use of audio and visual aids for instruction. Field experiences in public schools are required. Prerequisites: admission to program, concurrent enrollment in 314, 337. Registration by permit only.

410—4 PRINCIPLES OF PRE-PRIMARY EDUCATION. Intervention strategies for preschool children, stimulation of readiness for school experience, strategies for parental involvement.

412—4 EARLY CHILDHOOD CURRICULUM. Theory, design, organization, interpretation, and evaluation. Prerequisite: 317 or consent of instructor.

413—4 CHILDREN'S LITERATURE. Types of literature, analysis of literary qualities, selection and presentation of literature for children. Prerequisites: admission to program or graduate standing, 200.

415—4 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL. Grade placement strategies; methodology and materials, including use of computer; strategies for evaluating and encouraging achievement and thinking skills. Field experiences in public schools required. Prerequisites: completion of Field Experience I, concurrent enrollment in 338, 442, and 445. Registration by permit only.

420—4 DEVELOPMENT AND TRENDS IN EARLY CHILDHOOD EDUCATION. History, philosophy, and current trends underlying strategies for teaching the young child. Prerequisite: 201 or 410.

421—4 CHILD, FAMILY AND COMMUNITY RELATIONSHIPS. Parent involvement strategies, insights from community agency personnel pertaining to the goals of early childhood programs. Prerequisite: 201 or 410.

422—4 HEALTH AND NUTRITION FOR THE YOUNG CHILD. Nutrition principles related to development of the young child, food service selection, integration of nutrition concepts into early childhood curriculum. Prerequisite: 201 or 410.

433—4 SELECTED TOPICS IN ELEMENTARY EDUCATION. (a) Curriculum, (b) Language Arts, (c) Science, (d) Reading, (e) Social Studies, (f) Mathematics, (g) Early Childhood Education, (h) Elementary Organization and Supervision, (i) Open Education. Each segment carries four credit hours and each segment may be repeated to a maximum of 12 hours. Prerequisite: consent of instructor.

442—4 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. Content and methods of elementary school science. Field experience required. Prerequisites: completion of Field Experience I, concurrent enrollment in 338, 415 and 445. Registration by permit only.

445—4 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL. Theory, practice, development, and evaluation of materials in teaching language arts other than reading. Field experiences in public schools are required. Prerequisites: completion of Field Experience I, concurrent enrollment in 338, 415, and 442. Registration by permit only.

450—4 to 16 EARLY CHILDHOOD STUDENT TEACHING. Practice of teaching at early childhood level. NOT FOR GRADUATE CREDIT. Prerequisites: 16 hours of Early Childhood course work to include 317. Registration by permit only.

451a—16 ELEMENTARY STUDENT TEACHING. Application of theory to practice of teaching. NOT FOR GRADUATE CREDIT. Prerequisite: completion of Field Experience II. Registration by permit only.

451b—4 to 16 ELEMENTARY STUDENT TEACHING: ART. Practice of teaching art in the elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

451c—4 to 16 ELEMENTARY STUDENT TEACHING: MUSIC. Practice of teaching music in the elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

451d—8 to 16 ELEMENTARY STUDENT TEACHING: PHYSICAL EDUCATION. Practice of teaching physical education in the elementary school. NOT FOR GRADUATE CREDIT. Registration by permit only.

470—4 SEX EDUCATION. (Same as Health Education 470.) Individual, family, school, and community concerns and approaches to sex education. Physiological, psychosocial and environmental factors affecting sexuality in relation to the learning experience. Prerequisite: Health Education 201 or consent of instructor.

480—4 BACKGROUNDS OF URBAN EDUCATION. (Same as Secondary Education 480.) Effects of social, economic, and demographic factors upon programs in urban schools. Prerequisite: consent of instructor.

490—1 to 8 INDEPENDENT PROJECTS: INDEPENDENT READINGS AND PROJECTS IN ELEMENTARY EDUCATION. (a) Curriculum, (b) Language Arts, (c) Science, (d) Reading, (e) Social Studies, (f) Mathematics, (g) Early Childhood Education, (h) Elementary Organization and Supervision, (i) Individual Guided Education, (j) Environmental Education, (k) Metric Education. Prerequisite: consent of instructor.

ENGLISH

100—1 WRITING LAB. Self-instructional materials for improvement of writing skills; tutorial assistance in composing papers, reports, or theses. Word processors available. Not for English major or minor credit.

101—4 ENGLISH COMPOSITION. Instruction and practice in expository writing, including the paragraph and short essay.

101c—4 ENGLISH COMPOSITION. (See English 101.) Computers/Word Processors used. Basic typing skills required. Can be taken *instead of* English 101. Only four hours of English 101 count toward graduation.

101h—4 ENGLISH COMPOSITION. (See English 101.) Honors. Admission only by permit. Can be taken *instead of* English 101. Only four hours of English 101 count toward graduation.

101n—4 ENGLISH COMPOSITION. (See English 101.) For non-native speakers of English. Admission only by permit from foreign student adviser or instructor. Only four hours of English 101 count toward graduation.

102—4 ENGLISH COMPOSITION. Instruction and practice in expository writing, including the essay and research paper. Prerequisite: 101.

102c—4 ENGLISH COMPOSITION. (See English 102.) Computers/Word Processors used. Basic typing skills required. Can be taken *instead of* English 102. Only four hours of English 102 count toward graduation.

102h—4 ENGLISH COMPOSITION. (See English 102.) Honors. Admission only by permit. Can be taken *instead of* English 102. Only four hours of English 102 count toward graduation.

102n—4 ENGLISH COMPOSITION. (See English 102.) For non-native speakers of English. Admission only by permit from foreign student adviser or instructor. Only four hours of English 102 count toward graduation.

111—4 INTRODUCTION TO LITERATURE. Representative works in world drama, fiction, and poetry. Development of appreciation of literature by understanding themes, purposes, techniques, and history. Prerequisite: 101.

169—1 ENGLISH GRAMMAR. Functions of subjects, predicates, objects, and modifiers. Simple, compound, complex sentences. Parts of speech and verbals. Not for English major or minor credit.

201—4 INTERMEDIATE COMPOSITION. Practice in clear, direct, error-free writing of expository themes; emphasis upon organization, rhetorical strategies, and audience. Prerequisite: 102.

202—4 STUDIES IN DRAMA. Reading and discussion of classic examples of the drama, ancient and modern, with attention to themes, techniques, and cultural significance.

203—4 STUDIES IN POETRY. Reading and discussion of selected examples of British and American poetry; recent and traditional.

204—4 STUDIES IN FICTION. Reading and discussion of selected major examples of modern fiction, the short story to the novel. Attention to themes and techniques.

205—4 BLACK AMERICAN LITERATURE. From 1700's to present: slave narratives, classic political speeches and sermons, poetry, fiction, drama.

207—4 LANGUAGE AWARENESS. Introductory course in the nature of language. Focused on the English language; what language is and how people use it.

208—4 SURVEY OF ENGLISH LITERATURE TO 1660. Major works and authors from *Beowulf* through medieval and Renaissance periods.

209—4 SURVEY OF ENGLISH LITERATURE 1660-1830. Major works and authors from Milton through the Augustan and Romantic periods.

210—4 SURVEY OF ENGLISH LITERATURE 1830 TO PRESENT. Major works and authors from the Victorians to the present.

211—4 SURVEY OF AMERICAN LITERATURE TO 1860. Major works and authors from Colonial and Romantic periods; to Whitman.

212—4 SURVEY OF AMERICAN LITERATURE 1860 TO PRESENT. Majors works and authors from Twain to the present.

301—4 BASIC LITERARY CRITICISM AND SCHOLARSHIP. Terminology, theories, and practice of literary criticism. Application of elementary research methods in criticism.

303—4 LITERARY MASTERPIECES OF ANTIQUITY. Reading (in translation) and discussion of selected literary texts from the Greek, Roman and Judeo-Christian traditions.

304—4 LITERARY MASTERPIECES OF THE MIDDLE AGES AND RENAISSANCE. Reading (mostly in translation) and discussion of selected major works of European literature 1200-1650.

305—4 LITERARY MASTERPIECES OF THE MODERN WORLD. Reading (mostly in translation) and discussion of selected major works of European literature 1650 to present.

306—4 INTRODUCTION TO THE BIBLE. Reading and discussion of selected books from Old and New Testaments and Apocrypha in translation, with attention to their literary, historical, and theological contexts.

307—4 INTRODUCTION TO SHAKESPEARE. Shakespeare's life, the Elizabethan theater, and representative plays and poems.

308—4 DETECTIVE FICTION. Development of detective short story and novel from nineteenth-century beginnings to the present.

310—4 CLASSICAL MYTHOLOGY AND ITS INFLUENCE. Major Greek and Roman myths: origin, nature, interpretations, and use in the modern world.

325—4 TECHNICAL WRITING. Principles and practice in writing technical reports, outlines, summaries, instructions, and the annotated library research paper. For students in sciences, engineering, business, and nursing. Prerequisite: 102.

340—4 LITERATURE OF THE THIRD WORLD. Third World literature from antiquity to present; social, political, historical, and philosophical problems reflected in the literature.

341—4 THE BLACK WOMAN IN AMERICAN LITERATURE. Poems, novels, short stories, essays, dramas, biographies, and appropriate historical documents portraying roles of black women in America.

342—4 BLACK AMERICAN FICTION. Study of representative major black fiction by such authors as Baldwin, Ellison, Walker and Wright.

369—4 GRAMMAR FOR TEACHERS. Grammar; practice in grammatical analysis of formal spoken and written English. Inspection of texts currently used in primary and secondary schools. Prerequisite: junior standing or consent of instructor.

370—4 FUNDAMENTALS OF THE ENGLISH LANGUAGE: SOUND PATTERNS AND WORD CONSTRUCTION. Production of English sounds, intonation patterns, and word formations; dialectal variations; relationship of sounds to spelling. For language, speech, education majors, and all foreign students. Prerequisite: junior standing or consent of instructor.

371—4 PRINCIPLES OF ENGLISH SYNTAX. Principles of sentence structures; the way phrases and clauses are organized into English sentences. For language, speech, education, English, and linguistics majors and minors. Prerequisites: 101, 102; junior standing or consent of instructor.

392—4 FICTION WRITING. Creation of short stories; study of plot, point of view, description, dialogue, and other elements in rhetoric of fiction. Workshop format for discussion and evaluation of student manuscripts. Prerequisites: 101 or 102; sophomore standing.

393—4 POETRY WRITING. Creation of poetry; study of poetic fundamentals, including prosody, figurative language, symbolism, and theories. Workshop format for critiques of student work. Prerequisites: 101 or 102; sophomore standing.

400—4 A SURVEY OF LINGUISTIC THEORIES AND CONCEPTS. (Same as Anthropology 401.) Various theories (such as structural and transformational) regarding language structure (phonology, morphology, syntax, and semantics) and changes within the structure. Recommended for anthropology students, linguistics students and those preparing to teach English. Prerequisite: junior standing.

402—4 LINGUISTICS AND LITERATURE. Ways in which linguistic analysis (such as sounds, grammatical and syntactic structures, and meaning) illuminates literary texts. For interested student in any discipline. Prerequisite: junior standing or consent of instructor.

403—4 THE HISTORY OF THE ENGLISH LANGUAGE. English from Indo-European to modern times; changes between Old, Middle, and Early Modern English, particularly in pronunciation and spelling. Prerequisite: junior standing or consent of instructor.

404—4 CHAUCER: CANTERBURY TALES. *The Canterbury Tales* read in Middle English. Prerequisite: junior standing.

405—8(4,4) METHODS AND THEORIES OF LANGUAGE ANALYSIS. (a) Procedures for identifying and describing the units of sound and meaning in the English language. (b) Procedures for identifying and describing units of the English language from word through sentence levels. Prerequisite: junior standing.

406—4 OLD ENGLISH GRAMMAR. Sounds, grammar, and vocabulary of the Old English language through readings in Old

English verse and prose. Prerequisite: junior standing or consent of instructor.

407—4 INTERMEDIATE READINGS IN OLD ENGLISH. Old English poetry and prose. Prerequisite: 406 or consent of instructor.

410—4 RESEARCH REPORT WRITING. Preparation of thesis, major paper, or research report. Research tools, methods of information gathering, analysis and classification of material. Clarity and organization stressed. Not acceptable for B.A. or M.A. in English. Prerequisite: junior standing.

413—4 SPENSER. Reading and analysis of *The Faerie Queene, The Shepheardes Calender, Amoretti,* and other poems. Prerequisite: junior standing.

418—4 APPLIED SEMANTICS. Theories of language meaning; interpretation of actual texts, such as editorials, ads, puns, sexist language, and literature. Prerequisite: junior standing.

421—4 POETRY AND PROSE OF THE MEDIEVAL PERIOD. Verse romances, lyric poetry, drama, and various English prose and poetic works from 1066-1500. Works of Chaucer excluded. Prerequisite: junior standing.

422—4 POETRY AND PROSE OF THE RENAISSANCE. Early Modern English (1500-1600); works by Skelton, Wyatt, Surrey, More, Gascoigne, Spenser, and Sidney. Dramatic works of Marlowe and Shakespeare excluded. Prerequisite: junior standing.

423—4 POETRY AND PROSE OF THE 17TH CENTURY. Literature 1600-1660, including Donne, Jonson, Bacon, Burton, Browne, and Milton. Dramatic works of Shakespeare excluded. Prerequisite: junior standing.

424—4 POETRY AND PROSE OF THE AUGUSTAN AGE. Literature 1660-1740, including Dryden, Pope, Swift, Addison, and Steele. Prerequisite: junior standing.

425—4 POETRY AND PROSE OF THE AGE OF JOHNSON. Literature 1740-1798, including Boswell, Johnson, Gray, Goldsmith, Blake, and Burns. Prerequisite: junior standing.

426—4 POETRY AND PROSE OF THE ROMANTIC PERIOD. Literature 1780-1832, including Blake, Wordsworth, Coleridge, Byron, Shelley, Keats, Lamb, Hazlitt, and DeQuincey; backgrounds of industrial and French revolutions. Prerequisite: junior standing.

427—4 POETRY AND PROSE OF THE VICTORIAN ERA. Poetry of Tennyson, the Brownings, Arnold, and the Pre-Raphaelites; representative prose excluding novels. Prerequisite: junior standing.

428—4 BRITISH POETRY AND PROSE OF THE MODERN ERA. Literature of the twentieth century including Hardy, Housman, Hopkins, Yeats, D. H. Lawrence, W.W.II poets, Auden, Larkin, Hughes. Novels excluded. Prerequisite: junior standing.

430—4 AMERICAN HUMOR AND SATIRE. Writers and forms of nineteenth and twentieth century. Prerequisite: junior standing.

431—4 MAJOR AMERICAN WRITERS: 1800-1865. Short fiction and nonfictional prose; includes Emerson, Thoreau, Irving, Poe, Hawthorne, and Melville. Prerequisite: junior standing.

432—4 MAJOR AMERICAN WRITERS: 1865-1918. Short fiction and nonfictional prose; includes Twain, James, Howells, Crane, and Dreiser. Prerequisite: junior standing.

433—4 MAJOR AMERICAN WRITERS: 1918-PRESENT. Short fiction and nonfictional prose; includes Fitzgerald, Hemingway, Faulkner, Steinbeck, Thurber, Wright, Updike, and Oates. Prerequisite: junior standing.

434—4 AMERICAN POETRY TO 1900. Works by Colonial and nineteenth-century American Poets; includes the Puritans, Longfellow, Bryant, Poe, Emerson, Whitman, and Dickinson. Prerequisite: junior standing.

435—4 AMERICAN POETRY SINCE 1900. Includes Robinson, Frost, Pound, Williams, Cummings, Moore, Eliot, Stevens, Roethke, Lowell, Wilbur, and Dickey. Prerequisite: junior standing.

436—4 AMERICAN DRAMA—BEGINNING TO WORLD WAR I. Rise of popular American theatre. Native American themes and characters in sentimental comedies, historical dramas, Indian and Yankee plays, romantic melodrama, realistic drama. Prerequisite: junior standing.

437—4 MODERN AMERICAN DRAMA. Representative playwrights; includes O'Neill, Rice, Odets, Anderson, Wilder, Williams, Miller, and Simon. Prerequisite: junior standing.

438—4 INTELLECTUAL BACKGROUNDS OF AMERICAN LITERATURE. Intellectual, social, and scientific influences on the development of Realism, Naturalism, and Freudian and Proletarian literature. Prerequisite: junior standing.

439—4 AMERICAN NOVEL TO EARLY 20TH CENTURY. Emergence of native themes, characters, styles. Representative authors; includes Tyler, Brown, Cooper, Hawthorne, Melville, Stowe, James, Crane, Twain, Wharton, Howells, Dreiser. Prerequisite: junior standing.

440—4 AMERICAN NOVEL FROM EARLY 20TH CENTURY TO PRESENT. Trends and techniques in novels; includes Lewis, Hemingway, Faulkner, Steinbeck, Porter, Wright, Ellison, Bellow, Updike, Malamud, Oates. Prerequisite: junior standing.

454—4 18TH CENTURY NOVEL. Defoe through Austen, including Richardson, Fielding, Smollett, and Sterne. Prerequisite: junior standing.

455—4 VICTORIAN NOVEL. Romantic and realistic novels; includes Dickens, Thackeray, Eliot, Bronte, Trollope, and Hardy. Prerequisite: junior standing.

456—4 20TH CENTURY NOVEL. Survey of major novelists from 1900 to present; Joyce, Lawrence, Conrad, and selected contemporary authors. Prerequisite: junior standing.

460—4 ELIZABETHAN AND JACOBEAN DRAMA. Renaissance England, including Marlowe, Jonson, and others such as Beaumont and Fletcher, Middleton, Tourneur, and Webster (excluding Shakespeare). Prerequisite: junior standing.

461—4 RESTORATION AND 18TH CENTURY DRAMA. Representative plays from 1660 to 1800 by Etherege, Wycherley, Congreve, Dryden, Goldsmith, and Sheridan. Prerequisite: junior standing.

462—4 MODERN BRITISH AND CONTINENTAL DRAMA. European drama since 1870; includes Ibsen, Chekhov, Wilde, Shaw, Brecht, and Pirandello. Prerequisite: junior standing.

471a,b—8(4,4) SHAKESPEARE. (a) Comedies and Histories. Comedies such as *A Midsummer Night's Dream, Merchant of Venice, Twelfth Night;* histories such as *Richard III, Richard II, Henry IV,* (Part I), *Henry V.* (b) Tragedies and Non-Dramatic Works. Tragedies such as *Romeo and Juliet, Hamlet, Othello, King Lear, Macbeth, Antony and Cleopatra;* non-dramatic poetry including *The Rape of Lucrece* and sonnets. Prerequisite: junior standing.

473—4 MILTON. *Paradise Lost* and other works such as *Samson Agonistes, Paradise Regained, Lycidas, Comus,* and selected prose. Prerequisite: junior standing.

475—4 MODERN ADOLESCENT LITERATURE. Extensive critical study of the young adult novel.

485—4 PROBLEMS IN THE TEACHING OF ENGLISH. Aims, methods, materials, tests, and programs of English instruction in the junior and senior high schools. Tutorial course normally prior to Secondary Education 352.

488a—4 METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE. Analysis of models of learning and teaching English as a second language. Prerequisite: junior standing.

488b—4 TEACHING ENGLISH AS A SECOND LANGUAGE. Analysis of teaching strategies derived from models of learning and teaching English as a second language. Application of strategies in practicum setting. Prerequisite: junior standing.

490—4 ADVANCED COMPOSITION. Writing sophisticated expository prose. Review of grammatical matters as needed; emphasis upon clarity, organization, effectiveness of writing. May be repeated once for credit with permission. Prerequisite: junior standing.

492—4 ADVANCED FICTION WRITING. Writing fiction that strives for literary excellence. Readings in fiction; problems of fiction in the works of established writers. Workshop format. Prerequisites: 101 or 102; sophomore standing.

493—4 ADVANCED POETRY WRITING. Writing poetry of superior merit. Difficulties of poetic expression examined in selected readings of traditional and contemporary poetry. Workshop format with in-class critiques of student poems. Prerequisites: 101 or 102; sophomore standing.

494—4 LITERARY EDITING. Principles of literary editing, Primarily of fiction and poetry. Prerequisites: 101, 102; junior standing or consent of instructor.

495—4 HISTORY OF CRITICAL THEORY. Major critical theories from Plato to the present, including practice in writing criticism. Prerequisite: junior standing or consent of instructor.

498—4 TUTORIAL IN CREATIVE WRITING. Independent study and practice in creation of fiction and poetry. For undergraduates only, may be repeated once for credit. Prerequisites: 101, 102, consent of instructor.

499—2 to 4 READINGS IN ENGLISH. Independent study in specific area of interest. Extensive reading. For English majors only, may be repeated to maximum of 6 hours. Prerequisite: adviser's approval.

ENVIRONMENTAL STUDIES

415—4 ENVIRONMENTAL PSYCHOLOGY. (See Psychology 415.)

442—4 HUMAN ECOLOGY. (See Anthropology 442.) Prerequisite: consent of instructor.

465—4 AQUATIC ECOSYSTEMS. (See Biology 465.) Prerequisite: BIOL 270 or BIOL 280 or consent of instructor.

466—4 TERRESTRIAL ECOSYSTEMS. (See Biology 466.) Prerequisite: BIOL 270 or BIOL 280 or consent of instructor.

473—4 CHEMICAL SAFETY MANAGEMENT. Concepts in the safe use and handling of chemicals, as recommended by safety professionals. Four lecture hours per week. Prerequisite: consent of instructor.

475—4 PRINCIPLES OF OCCUPATIONAL HEALTH. Concepts in the field of occupational health. Four lecture hours per week. Prerequisite: consent of instructor.

480—4 PRINCIPLES OF INSTRUMENTAL ANALYSIS Chemical analysis and applications of instrumental methods in environmental science. Three lectures, three laboratory hours per week. Prerequisites: college algebra, general chemistry.

FINANCE

320—4 CORPORATE FINANCE. Principles and concepts of finance, financial theory, management of working capital, planning capital budgeting, capital structure, dividend policy, and international aspects. Prerequisites: Accounting 202, Economics 111, 112.

420—4 PROBLEMS IN CORPORATION FINANCE. Development of analytical ability and comprehension of financial problems in business and industry through cases and collateral readings. Prerequisite: 320.

430—4 INVESTMENTS. Investment practices, portfolio theory and instrument selection; stocks, bonds, options, futures and investment companies; investment strategies. Prerequisite: 320.

435—4 REAL ESTATE FINANCE AND INVESTMENT. Fundamental concepts, investigation and evaluation of real (estate) assets. Single residence, multiple dwellings and commercial properties. Applications based on financial theory and methodology. Prerequisite: 320.

440—4 FINANCIAL INSTITUTIONS. Evolution functions and practices of commercial banks, S & L's, insurance companies and other financial institutions. Current operations, asset/liabilities management, deregulation, and future assets. Prerequisite: 320.

445—4 FINANCIAL MARKETS. Functions and practices of domestic and international money and capital markets; recent structural changes, flow of funds, and interest rate forecasting. Prerequisite: 320.

450—4 INTERNATIONAL FINANCE. International financial markets and economic determinants of exchange rates, balance of payment under alternative systems. Investment and financing decisions. Prerequisite: 320.

490—1 to 8 INDEPENDENT STUDY IN FINANCE. Individual, in depth investigation of topics of interest to student. Readings and research completed under faculty supervision. Empirical investigations encouraged. Student begins process by presenting a written proposal to any finance faculty member for acceptance. Final proposal requires chair approval. May be repeated by permission of department chairperson up to a total of 8 hours credit. Prerequisites: consent of instructor and department chairperson.

FOREIGN LANGUAGES

112—4 LEARNING ANOTHER LANGUAGE. Systematic methods for learning a foreign language, presented through lectures and practical exercises.

140—4 AN INTRODUCTION TO MODERN FOREIGN LANGUAGES. Comparative study of modern Romance, Germanic, and Slavic languages, beginning with consideration of the hypothetical Indo-European parent-speech, and its development.

141—4 BUILDING VOCABULARY THROUGH LATIN AND GREEK WORD ELEMENTS. Practical exercises, learning to expand vocabularies through the system of prefix-root-suffix word building which English has borrowed from Latin and Greek.

240—24(4,4,4,4,4,4) MODERN LITERATURE IN TRANSLATION. Study of modern literature in translation. The most significant works of major writers. (a) French; (b) German; (c) Italian; (d) Russian; (e) Spanish; (f) Spanish American. Not applicable toward major or minor in Foreign Languages.

342—24(4,4,4,4,4,4) FOREIGN CULTURE AND CIVILIZATION. Study of culture and civilization approached through literature. Taught in English. Not applicable to major or minor in foreign language (a) France; (b) Germany; (c) Italy; (d) Russia; (e) Spain; (f) Spanish America.

345—12(4,4,4) MASTERPIECES OF WORLD LITERATURE IN TRANSLATION. Representative literary works of selected cultures. (a) Medieval, Renaissance and Baroque; (b) Enlightenment, Romanticism and Realism; (c) Contemporary.

390—2 to 6 READINGS. Selected works of representative writers in student's special field of interest. Offered in French, German, Italian, Russian, Spanish, Latin and Greek. Primarily for students with no foreign language concentration, but may be taken for credit in foreign language concentration with consent of department chairperson. Prerequisites: 203 in the appropriate language offered on campus, consent of department chairperson.

401—4 COMPARATIVE LATIN AND GREEK GRAMMAR. Structural similarities and differences between Latin and Greek as they developed from Primitive Indo-European and as they relate to other Indo-European languages. Prerequisite: consent of instructor.

486—4 MATERIALS AND METHODS FOR TEACHING FOREIGN LANGUAGES. Application of language learning principles to classroom procedures at different levels. Theory and practice of the audio-lingual approach, the language lab, applied linguistics. Required of all majors intending to teach foreign language. Prerequisite: one quarter of any 300-level course, or consent of department chairperson.

491—2 to 8 CULTURAL AND LANGUAGE WORKSHOP. Comparative or contrastive linguistics, advanced methodology and techniques. In-depth study of foreign cultures, travel-study abroad. Supervised projects in foreign studies. Prerequisite: advanced or graduate standing.

FOUNDATIONS OF EDUCATION

355—4 PHILOSOPHY OF EDUCATION. Principles, educational theories, and agencies involved in the work of schools.

380—4 FOUNDATIONS OF EDUCATION. Examination of the structure and function of schooling in the United States in relationship to selected institutional arrangements and practices of the larger society.

406—4 ANTHROPOLOGY AND EDUCATION. Dynamics of enculturation as they affect formal education, interrelations between education and other parts of the culture.

451—4 SEXISM AND EDUCATION. Policies and practices related to sex-role stereotyping: discrimination, bias in curricular materials, personnel policies; strategies for change.

490—4 to 12 INTERCULTURAL STUDY IN EDUCATION. Selected aspects of patterns in their social matrix; field studies, conferences, lectures; or seminars. May be repeated to maximum of 12 hours so long as the target culture selected for study is not repeated.

FRENCH

101—4 ELEMENTARY FRENCH. Reading, writing, listening comprehension, and speaking in French, within the context of French culture. Use of language laboratory.

102—4 ELEMENTARY FRENCH. Continuation of 101. Use of language laboratory. Prerequisite: 101.

103—4 ELEMENTARY FRENCH. Continuation of 102. Use of language laboratory. Prerequisite: 102.

123—12 ELEMENTARY FRENCH. Intensive development of reading, writing, listening comprehension, and speaking in French, within the context of French culture. Intensive course, generally taught in summer term, equivalent to credit which would be earned in 101, 102, and 103 if they were taken separately. Must be taken for full 12 hours credit. Use of language laboratory. Check with department chairperson to determine if the course will be offered.

201—4 INTERMEDIATE FRENCH. Oral skills of understanding and speaking; reading modern prose selections, and writing simple compositions. Use of language laboratory. Prerequisite: 103 or two years of high school French or consent of department chairperson.

202—4 INTERMEDIATE FRENCH. Continuation of 201. Use of language laboratory. Prerequisite: 201.

203—4 INTERMEDIATE FRENCH. Continuation of 202. Use of language laboratory. Prerequisite: 202.

220—4(2,2) INTERMEDIATE FRENCH CONVERSATION. (a) Practice in intermediate level conversation; proper pronunciation and fluency. (b) Additional practice in improving pronunciation and fluency. May be taken separately. Prerequisite: 123 or equivalent.

301—4 ADVANCED FRENCH GRAMMAR. Grammatical problems, development of correct usage, vocabulary building. Prerequisite: equivalent of two years of college French or consent of department chairperson.

302—4 ADVANCED FRENCH CONVERSATION. Additional development of oral skills. Prerequisite: 203 or consent of department chairperson.

303—4 ADVANCED FRENCH COMPOSITION. Additional development of writing skill. Prerequisite: 203 or consent of department chairperson.

304—4 INTERPRETATION. Oral translation of selected passages, alternating between English and French, to develop precision and clarity in both languages. Prerequisite: 203 or consent of department chairperson.

305—4 TRANSLATION. Written translation of selected passages, alternating between English and French, to develop precision and clarity in both languages. Prerequisite: 203 or consent of department chairperson.

308—4 FRENCH PHONETICS. Articulatory exercises to acquire correct pronunciation; difficulties encountered by speakers of American English. Prerequisite: 203.

311—4 CONTEMPORARY FRANCE. Significant aspects of French culture. Prerequisite: 203 or consent of department chairperson.

351—4 SURVEY OF FRENCH LITERATURE (MIDDLE AGES THROUGH RENAISSANCE). Representative prose, poetry, drama, eleventh through sixteenth centuries. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF FRENCH LITERATURE (CLASSICISM THROUGH ENLIGHTENMENT). Representative prose, poetry, drama, seventeenth and eighteenth centuries. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF FRENCH LITERATURE (ROMANTICISM TO PRESENT). Representative prose, poetry, drama of the nineteenth and twentieth centuries. Prerequisite: 203 or consent of department chairperson.

402—4 BUSINESS FRENCH. Oral and written business expression; specialized terminology and idioms. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

451—4 STUDIES IN FRENCH LITERATURE (FROM THE MIDDLE AGES THROUGH THE RENAISSANCE). Literary analysis of prose, poetry, drama; eleventh through sixteenth centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

452—4 STUDIES IN FRENCH LITERATURE (CLASSICISM THROUGH ENLIGHTENMENT). Literary analysis of prose, poetry, drama; seventeenth and eighteenth centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453—4 STUDIES IN FRENCH LITERATURE (ROMANTICISM TO PRESENT). Literary analysis of prose, poetry, drama; nineteenth and twentieth centuries. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Selected topics in literature or literary criticism. May be repeated to a maximum of 6 hours so long as no topic is repeated.

457—4 FRENCH DRAMA IN THEORY AND PRACTICE. Major and typical works; direction and interpretation, emphasis on oral expression. Prerequisite: 203 or consent of department chairperson.

458—4 FRENCH DRAMA IN THEORY AND PRACTICE. Continuation of 457. Prerequisite: 457.

499—2 to 9 READINGS IN FRENCH. Selected areas of language, literature, and culture. Individual work or small groups supervised by one or more members of the French faculty. Prerequisites: 203, consent of department chairperson.

GEOGRAPHY

111—4 ENVIRONMENTS, PLACES AND PEOPLE. Geographic principles in understanding the earth as a varied environment that affects the location, activities and distribution of people.

200—4 EARTH AND ITS ENVIRONMENT. (Same as Earth Science 200.) The identification and description of the interdependent physical processes that occur on and above the earth's surface that affect the living systems.

204—4 INTRODUCTION TO ECONOMIC GEOGRAPHY. Spatial distribution and interaction of economic activities; location theory.

205—4 RESOURCE USE AND MANAGEMENT. Creation, development, and use; theory and application of resource adequacy, allocation and conservation.

206—4 INTRODUCTION TO CULTURAL GEOGRAPHY. Human occupance of the world; population and settlement from a geographic viewpoint; survey of major world areas.

210—4 INTRODUCTION TO CARTOGRAPHIC METHODS. (Same as Earth Science 210.) Map making; map properties, design, production and use of drafting equipment.

212—4 PHYSICAL GEOGRAPHY. (Same as Earth Science 212.) Earth's physical surface, world distribution patterns of the physical elements, their relationships to each other and their importance to mankind. Field trip and laboratory work.

213—4 METEOROLOGY. (Same as Earth Science 213.) Introduction to weather elements, condensation process, air masses, cyclonic activity and weather movements.

214—4 CLIMATE. (Same as Earth Science 214.) Elements of weather and climate; identification and classification of climates; climatic effects on landforms, vegetation, soils, and human settlement patterns.

218—2 GEOGRAPHY AND GEOLOGY OF NATIONAL PARKS. (Same as Earth Science 218.) Park types; unique landforms, historical events, and/or significant ecological situations.

261—8(4,4) GEOGRAPHY OF NORTH AMERICA. Survey of physical and cultural environments; systematic analysis of the geographic patterns of human activities in the U.S., Canada and Mexico.

305—4 GEOGRAPHY OF WORLD POPULATION. Patterns, migrations, and food supply systems; special focus on famine and hunger regions.

306—4 GEOGRAPHIC POPULATION ANALYSIS. Population characteristics; methodologies essential to geographical analysis, forecasting, planning and community/area development. Prerequisite: 206 or consent of instructor.

307—4 CLIMATOLOGY. (Same as Earth Science 307.) Special topics; microclimatology and micrometeorology; applications of solar heating; air pollution modeling; the Greenhouse Effect and other climatic phenomena. Prerequisite: 213 or 214.

308—4 INTRODUCTION TO GEOGRAPHIC METHODS. (Same as Earth Science 308.) Methods of integrating physical, economic and cultural elements in the study of areas; cartographic and quantitative techniques.

310—4 MAP READING, ANALYSIS AND INTERPRETATION. (Same as Earth Science 310.) Cartographic symbology survey systems, horizontal and vertical position; direction, distance, and cartometrics; development of map skills utilizing U.S.G.S. topographic quadrangles.

311—4 COMPUTER MAPPING. (Same as Earth Science 311.) Introduction to computer's capability to produce maps; utilizing the computer to complement or replace traditional cartography in representing land features. Prerequisite: 210 or consent of instructor.

317—4 AIR PHOTO INTERPRETATION. (Same as Earth Science 317.) Techniques in use of aerial photographs as source material for research in the physical and social sciences. Laboratory. Prerequisites: 210, 310.

318—4 PRODUCTION CARTOGRAPHY. (Same as Earth Science 318.) Limitations imposed by printing processes, type styles, typesetting, photography and platemaking to relate graphic images to mechanics of cartographic production. Prerequisite: consent of instructor.

362—4 GEOGRAPHY OF EUROPE. Systematic examination of the physical setting and geographic patterns of human activities with detailed examination of individual countries emphasizing human and environmental interrelationships.

363—4 GEOGRAPHY OF THE MIDDLE EAST. Geographic interpretation of the physical landscapes, climates, soils, vegetation, population, and economic activities patterns extending from Egypt to Iran.

364—4 GEOGRAPHY OF THE SOVIET UNION. Geographic interpretation of the Soviet Union; topical coverage of climate, landforms, vegetation patterns, soils, people and their activities.

365—4 GEOGRAPHY OF AFRICA. Dominant physical, cultural and economic features of the second largest continent in the world.

366—4 GEOGRAPHY OF ASIA. Dominant physical, cultural and economic features (topics) of the world's largest continent.

367—4 GEOGRAPHY OF MIDDLE AMERICA. Middle America and Caribbean; analysis of dominant physical, cultural, historical, and economic features.

368—4 GEOGRAPHY OF SOUTH AMERICA. Topical and regional examination; analysis of dominant physical, cultural, historical and economic features of the world's fourth largest continent.

400—4 THE EARTH IN SPACE. (Same as Earth Science 400.) Planetary and stellar composition and structure; energy sources and arrangements of the universe; position, size, dimension, age, origin and evolution. Laboratory. Prerequisite: 200.

401—4 SOILS. (Same as Earth Science 401.) Surficial material from the viewpoint of the geographer; soil properties in the field; soil taxonomic classification system. Prerequisite: 212 or Earth Science 111 or consent of instructor.

402—4 HYDROLOGY. (Same as Earth Science 402.) The hydrologic cycle; major stream systems; hydrologic aspects and the uses of water resources and their relationships to quality and future supplies. Prerequisite: 212 or Earth Science 111 or consent of the instructor.

403—4 PRINCIPLES OF GEOMORPHOLOGY. (Same as Earth Science 403.) Processes and structures influencing the shape of the land surface. Prerequisite: 212 or equivalent.

404—4 REGIONAL PHYSIOGRAPHY OF THE EASTERN UNITED STATES. (Same as Earth Science 404.) Description, origin and geomorphic history of natural landform regions from the interior lowlands eastward. Prerequisites: 212 or ESCI 202; 403.

405—4 REGIONAL PHYSIOGRAPHY OF THE WESTERN UNITED STATES. (Same as Earth Science 405.) Description, origin and geomorphic history of natural landform regions from the Great Plains westward. Prerequisites: 212 or ESCI 202; 403.

406—4 URBAN GEOGRAPHY. Economic, cultural, political, historical and other factors responsible for distribution of cities and organization of space within cities. Prerequisite: 204.

407—4 COMMERCIAL LOCATION AND DEVELOPMENT. Site, situation, and cause; community actions that influence location. Prerequisite: 204 or consent of instructor.

408—4 AREA ECONOMIC DEVELOPMENT. Location of economic activities, especially manufacturing; area preparation, promotion, improvement; community actions that can influence location. Prerequisite: 204 or consent of instructor.

409—4 TRANSPORTATION GEOGRAPHY AND DEVELOPMENT. Impact of transportation modes, rates and networks on the spatial influence of circulation patterns on community development and growth. Prerequisite: 204 or equivalent.

410—4 QUANTITATIVE TECHNIQUES. (Same as Earth Science 410.) Statistical and mathematical techniques utilized in spatial and geosciences; introduction to SAS and SPSS package programs. Prerequisite: MATH 120 or equivalent.

411—4 QUANTITATIVE APPLICATIONS IN SPATIAL AND ENVIRONMENTAL ANALYSIS. Application of specialized statistical methodology and mathematical techniques to urban and environmental phenomena encountered in land use and development issues. Prerequisite: 410 or equivalent.

412—4 REMOTE SENSING OF THE ENVIRONMENT. (Same as Earth Science 412.) Physical phenomena involved in identifying objects and landscape features at varying distances in the disciplines of agriculture, forestry, geography, geology, meteorology, and urban planning. Laboratory. Prerequisite: 212 or Earth Science 201 or consent of the instructor.

414—4 HISTORICAL GEOGRAPHY. Processes of exploration and discovery in the settlement of North America through the literature and maps contemporaneous to the period. Prerequisite: 206 or consent of instructor.

415—4 THE HISTORICAL LANDSCAPE. Origins and preservations of rural and urban landscapes; the built environment; unique and vernacular examples as related to developmental processes. Field trips required. Prerequisite: 206 or consent of instructor.

416—4 STATISTICAL MAPPING. (Same as Earth Science 416.) Cartographic analysis of problems related to data conversion into quantitative symbology, map perception, and effective map design. Prerequisite: 210.

417—4 PRINCIPLES OF GEOGRAPHIC INFORMATION SYSTEMS. (Same as Earth Science 417.) Theory and application of automated approaches to the handling of geographical data; areas covered range from census address matching to statewide natural resource systems. Prerequisite: MIS 108 is the recommended General Education skills requirement course for computer programming (instead of Computer Science 108).

423—4 TERRAIN ANALYSIS. (Same as Earth Science 423.) Location and interpretation of regolith and bedrock features by aerial and satellite photography and imagery to determine suitability for judicious land utilization and site development. Prerequisite: 212 or equivalent.

424—4 REGIONAL PROBLEMS IN CONSERVATION. (Same as Earth Science 424.) Distribution, use, and interrelationship of U.S. resources; conservation techniques. Field study of selected cases.

427—4 URBAN GEOLOGY. (Same as Earth Science 427.) Application of geologic principles to urban development. Hydrology, foundations, tunnels, building materials, and disposal of construction wastes. Avoidance of potentially dangerous geologic hazards for urban developers and analysts. Prerequisite: junior standing or permission of the instructor.

443—4 TEACHING OF GEOGRAPHY. (Same as Secondary Education 443.) Presentation and evaluation of methods of teaching geography. Emphasis upon geographic literature, illustrative materials, and teaching devices suitable to particular age levels.

450—3 to 15 TRAVEL STUDY COURSE. (Same as Earth Science 450.) Enrichment through travel, supervised study, and reading on areas visited. May be repeated for a total of 15 hours.

461—4 REGIONAL GEOGRAPHY OF ANGLO AMERICA. Selected geographic topics including human use of the physical environment and selected subdivisions of Anglo America focusing upon problems and prospects. Prerequisites: 204, 206, 212 or equivalent.

462—4 REGIONAL GEOGRAPHY OF EUROPE. Analysis of selected geographic topics, including human use of the physical environment, and selected subdivisions of the European continent focusing upon problems and prospects. Prerequisites: 204, 206, 212 or equivalent.

463—4 REGIONAL GEOGRAPHY OF THE MIDDLE EAST. External and regional relationships including physical, economic and cultural characteristics. Prerequisites: 204, 206, 212 or equivalent.

464—4 REGIONAL GEOGRAPHY OF THE SOVIET WORLD. External and internal regional relationships including physical, economic and cultural characteristics. Prerequisites: 204, 206, 212 or equivalent.

465—4 REGIONAL GEOGRAPHY OF AFRICA. Selected geographic topics including human use of the physical environment and selected subdivisions of the African continent focusing upon problems and prospects. Prerequisites: 204, 206, 212 or equivalent.

466—4 REGIONAL GEOGRAPHY OF ASIA. Selected geographic topics including human use of the physical environment and selected subdivisions of the Asian continent focusing upon problems and prospects. Prerequisites: 204, 206, 212 or equivalent.

470—4 LAND USE DEVELOPMENT AND CONTROLS. Legal bases for guiding community development; exercise of police powers/eminent domain; development and administration of sub-division/zoning controls; review of proposed plats; the official map. Prerequisite: 406 or permission of instructor.

471—4 REGIONAL ENVIRONMENTAL PLANNING. (Same as Earth Science 471.) Concepts and meanings of regions (functional and homogeneous), environment (physical, social and economic), planning (general process and land use), and their interrelationships. Prerequisite: senior standing.

472—2 to 12 PLANNING INTERNSHIP. Work experience in various planning agencies, both public and private, located anywhere in Illinois or nearby states. Senior and graduate students are screened for these internships. For major concentrations only. Prerequisite: senior or graduate standing.

473—4 ISSUES IN THE DISBURSEMENTS OF PUBLIC BENEFITS TO PRIVATE DEVELOPERS. Incentives provided to private sector and their application in land use development. Tax benefits, highway systems, community development funds, and other resource allocations in context of development. Field trip(s) required. Prerequisite: 406 or consent of the instructor.

480—4 WORKSHOP IN THE TEACHING OF GEOGRAPHY. Geographic approach to man's activities in various cultural, economic, and political geography problems. Skills, techniques, and visual materials essential to the teaching of geography.

485—4 FIELD STUDY OF ENVIRONMENTAL PROBLEMS. (Same as Earth Science 485.) Field investigation of physical features of environment and problems relating to man's use of natural environment and resources. Prerequisite: advanced standing.

490—1 to 4 TUTORIAL IN GEOGRAPHY. Individual and small group conferences with staff members to examine geographic concepts. May be repeated to a total of 8 hours.

GERMAN

101—4 ELEMENTARY GERMAN. Reading, writing, listening comprehension, and speaking in German, within the context of German culture. Use of the language laboratory.

102—4 ELEMENTARY GERMAN. Continuation of 101. Use of the language laboratory. Prerequisite: 101.

103—4 ELEMENTARY GERMAN. Continuation of 102. Use of the language laboratory. Prerequisite: 102.

126—12 ELEMENTARY GERMAN. Intensive development of reading, writing, listening comprehension, and speaking in German, within the context of German culture. Intensive course, generally taught in summer term, equivalent to credit which would be earned in 101, 102, and 103 if they were taken separately. Must be taken for full 12 hours credit. Use of the language laboratory. Check with department chairperson to determine if the course will be offered.

201—4 INTERMEDIATE GERMAN. Further comprehension of spoken language and oral expression, reading modern prose selections, and writing simple compositions. Use of the language laboratory. Prerequisite: 103 or two years of high school German or consent of department chairperson.

202—4 INTERMEDIATE GERMAN. Continuation of 201. Use of the language laboratory. Prerequisite: 201.

203—4 INTERMEDIATE GERMAN. Continuation of 202. Use of the language laboratory. Prerequisite: 202.

220—4(2,2) INTERMEDIATE GERMAN CONVERSATION. (a) Practice in intermediate level conversation; proper pronunciation and fluency. (b) Additional practice in improving pronunciation and fluency. May be taken separately. Prerequisite: 126 or equivalent.

301—4 GERMAN GRAMMAR AND PHONETICS. Grammatical and phonetic aspects; correct usage and pronunciation. Prerequisite: equivalent of two years of college German or consent of department chairperson.

302—4 GERMAN CONVERSATION. Additional development of oral skills. Prerequisite: 203 or consent of department chairperson.

303—4 GERMAN COMPOSITION. Practical composition for advanced students; basic expository style. Prerequisite: 203 or consent of department chairperson.

304—4 GERMAN PROFESSIONAL READINGS. Selections from publications related to professions and concerns in contemporary Germany and to matters of government and commerce. Prerequisite: 203 or consent of department chairperson.

305—4 TECHNICAL GERMAN. Contrastive analysis; reading skills in scientific and other technical fields. Prerequisite: 203 or consent of department chairperson.

311—4 GERMAN CULTURE. Significant aspects of German culture; their development and manifestation in contemporary Germany. Prerequisite: 203 or consent of department chairperson.

351—4 SURVEY OF GERMAN LITERATURE (MIDDLE AGES TO 1750). Selected readings; literary and cultural background. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF GERMAN LITERATURE (1750 THROUGH THE NINETEENTH CENTURY). Selected readings; literary and cultural background. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF GERMAN LITERATURE (TWENTIETH CENTURY). Selected readings; literary and cultural background. Prerequisite: 203 or consent of department chairperson.

401—4 DEVELOPMENT OF GERMAN STRUCTURE. Historical development of the German language; how modern German structure came into being in the standard and main dialects. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

402—4 BUSINESS GERMAN. Exercises in correspondence; acquisition of contemporary business vocabulary and styles, cultural background of German business practice. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

411—4 GERMAN CIVILIZATION. German speaking areas of the world; anthropological and social aspects of the various cultures. Prerequisite: senior standing in German language.

452—4 FAUST. Goethe's masterpiece, its background, meaning, and impact on world literature; life and times of Goethe. Prerequisite: 203 or consent of department chairperson.

453—4 SEMINAR IN GERMAN LITERATURE. Selected German literary masterpieces organized by theme, historical period, literary movement, or other criteria. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Critical and analytical study of selected topics of German literature or literary criticism. May be repeated to a maximum of 6 hours so long as no topic is repeated.

499—2 to 9 READINGS IN GERMAN. Selected areas of German language, literature, and culture. Individual work or small groups supervised by one or more members of the German faculty. May be repeated to a maximum of 9 hours so long as no topic is repeated. Prerequisite: 203 or consent of department chairperson.

GREEK

101—4 INTRODUCTION TO GREEK. Grammar and vocabulary of ancient Greek within the context of Greek culture; reading knowledge through texts adapted from classical authors.

102—4 INTRODUCTION TO GREEK. Continuation of 101. Prerequisite: 101.

103—4 INTRODUCTION TO GREEK. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE GREEK. Development of reading facility. Reading of selected masterpieces in history, poetry, and philosophy. Prerequisite: 103 or equivalent.

202—4 INTERMEDIATE GREEK. Continuation of 201. Prerequisite: 103 or equivalent.

203—4 INTERMEDIATE GREEK. Continuation of 202. Prerequisite: 103 or equivalent.

499—24(4,4,4,4,4,4) READINGS IN ANCIENT GREEK. (a) Development of lexical and structural competence. (b) Continuation of a. (c) Selected masterpieces of literature. (d) History. (e) Poetry. (f) Philosophy. A,b,c must be taken in sequence and are prerequisites to d,e, or f which may be taken out of sequence with consent of instructor. Individual segments may not be repeated for credit. Prerequisite: for a,b,c — one year of college study of another language, or the equivalent, or consent of instructor.

HISTORY

111—16(4,4,4,4) INTRODUCTION TO THE HISTORY OF WESTERN CIVILIZATION. (a) Ancient times to A.D. 476. (b) 476—1715. (c) 1715-1900. (d) Twentieth Century. Any course in the above sequence may be taken in partial fulfillment of the Introductory General Education requirement in the Social Sciences. Up to two additional courses in this sequence may be taken toward fulfillment of the Advanced General Education requirement in the Social Sciences.

115—4 HISTORY OF BLACK AMERICA. Social, economic, and political experience from colonial era to present; African antecedents.

200—4 UNITED STATES HISTORY AND CONSTITUTION: 1492-1815. Political, social, economic and constitutional development. Satisfies Constitution requirement.

201—4 UNITED STATES HISTORY AND CONSTITUTION: 1815-1900. Political, social, economic, and constitutional development. Satisfies Constitution requirement.

202—4 UNITED STATES HISTORY AND CONSTITUTION: 1900-PRESENT. Political, social, economic, and constitutional development. Satisfies Constitution requirement.

300—2 SPECIAL TOPICS. Single historical topic from areas of political, economic, social, and cultural history. May be repeated for total of 8 hours.

304—4 GREAT TRIALS, ASSASSINATIONS AND EXECUTIONS. Jesus, Caesar, Joan of Arc, Marie Antoinette, Eichmann and others treated as individuals and as symbols of important issues in European history.

305—4 THE AMERICAN CIVIL WAR. Narrative and interpretation of the era 1850-1877; causes of the war, major military campaigns and Reconstruction.

306—12(4,4,4) HISTORY OF ROME. (a) Republic from the origins to 30 B.C. (b) Principate, 30 B.C.—A.D. 285. (c) Late and Byzantine Empire, A.D. 285-1453.

308—4 HISTORY OF ILLINOIS. Political, social, economic, cultural history from French settlement to the present.

313—4 WITCHCRAFT, MAGIC AND THE OCCULT. General theory of magic; history of magic and witchcraft in the western world.

316—12(4,4,4) HISTORY OF AFRICA. (a) Africa south of the Sahara, prehistoric to colonial times. (b) Africa south of Sahara, colonial times to present. (c) Africa north of the Sahara.

317—8(4,4) THE WESTWARD MOVEMENT IN AMERICAN HISTORY. Immigration, settlements, exploitation of American land since first European settlement; influence on national, economic, political, social policies. (a) To 1845. (b) Since 1845.

321—4 MUSSOLINI AND EUROPEAN FASCISM. Circumstances, ideas, and anxieties which produced fascism in Italy.

322—12(4,4,4) HISTORY OF THE ARAB WORLD. (a) Early Islamic experience, 570-945. (b) Islamic civilization during Crusades and Ottoman Empire, 945-1789. (c) Nationalism and modernization in Middle East, 1789-Present.

332—12(4,4,4) MEDIEVAL HISTORY. (a) Early Middle Ages, 500-1000. (b) High Middle Ages, 1000-1300. (c) Late Middle Ages, 1300-1500.

334—12(4,4,4) HISTORY OF CHINA. Prehistoric times to present. (a) Early and Middle Empire—ancient to 1644. (b) Late Empire—1644 to 1912. (c) Revolutionary Era—since 1912.

335—4 HISTORY OF MODERN JAPAN. 19th and 20th centuries. Emphasis on Japanese response to Western impact.

338—8(4,4) HISTORY OF GREECE. (a) Greece and the Aegean from the earliest times to 404 B.C. (b) Greece and the Hellenistic world from 404 B.C. to 30 B.C.

340—8(4,4) HISTORY OF AMERICAN DIPLOMACY. Problems and trends in U.S. diplomatic history. Foreign and domestic pressures affecting policy making. (a) To 1919. (b) Since 1919.

341—8(4,4) HISTORY OF RELIGION IN WESTERN CIVILIZATION. (a) Religious institutions, ideas, and practices in European history from antiquity to the present. (b) Religious institutions, ideas, and practices in American history.

352—12(4,4,4) HISTORY OF LATIN AMERICA. (a) Colonial times. (b) From 1800 to 1914. (c) From 1914 to the present.

355—4 ITALIAN UNIFICATION AND WORLD WAR I. People, movements, and ideas leading to formation of Italian nation; events which led Italy into World War I.

358—4 HISTORY OF SCIENCE: 1300 TO PRESENT. Science and technology in historical perspective.

372—12(4,4,4) HISTORY OF RUSSIA. (a) 900-1801—Early Empire. (b) 1801-1914—Late Empire. (c) Since 1914—War, Revolution, and Soviet Russia.

377—8(4,4) HISTORY OF AMERICAN BUSINESS. (a) Development of corporations, stock markets, banks and agriculture to the Civil War. (b) American business from 1860 to present.

390—4 THE WOMEN'S RIGHTS MOVEMENT IN THE UNITED STATES. Struggle for legal, political, economic, social rights placed in the context of other reform movements.

401—8(4,4) HISTORY OF THE SOUTH. (a) Old South. (b) New South. Social, economic, political, and cultural developments.

407—4 THE BLACK URBAN EXPERIENCE, 1820-1965. Social, economic, and political life; relationships to the larger society.

408—8(4,4) HISTORY OF THE ANCIENT NEAR EAST. (a) Prehistory and Bronze Age, to 1200 B.C. (b) Iron Age and great empires to the conquest of Alexander the Great, 1200 B.C.—330 B.C.

410—2 to 5 SPECIAL READINGS IN HISTORY. Supervised reading. For students with sufficient background. Prerequisites: minimum of 4.00 average in history, consent of chairperson.

412—8(4,4) INTELLECTUAL HISTORY OF THE UNITED STATES. (a) To 1865. (b) Modern period.

414—8(4,4) HISTORY OF EASTERN EUROPE. (a) 1815-1918. Rise of Nationalism with emphasis on Austro-Hungarian Monarchy. (b) Since 1918. Problems of Succession States.

415—12(4,4,4) EARLY MODERN EUROPE. (a) Political, economic, social history of the Renaissance. (b) Age of Protestant and Catholic Reformations. (c) Absolutism in theory and practice; Enlightenment to French Revolution.

419—12(4,4,4) HISTORY OF ENGLAND: 1509 TO THE PRESENT. (a) Reformation and Revolution, 1509-1714. (b) Birth and growth of Industrial England, 1714-1867. (c) Birth and growth of Welfare State, England since 1867.

420—4 THE FRENCH REVOLUTION. The passing of feudalism in France; background and development of the revolutionary movement and the Napoleonic period.

424—12(4,4,4) MODERN EUROPEAN THOUGHT. Liberal, conservative, political, and religious ideas. (a) Before French Revolution: Burke, Rousseau, etc. (b) 19th century: Marx, Darwin, etc. (c) Modern: Nietzsche, Sorel, etc.

425—4 AMERICAN COLONIAL HISTORY. Founding of the American colonies and the development of their institutions to 1763.

426—4 THE REVOLUTION AND THE CONSTITUTION. Conflicting forces which produced the American Revolution, led to the creation of the federal union, and shaped the early republic. Meets Constitution requirement.

427—4 HISTORY OF THE ARAB-ISRAELI CONFLICT. Origins and development of relations between Israel and Arab world.

428—4 THE AGE OF JACKSON. Origins, background, and development of American democracy associated with the Jacksonian era. Political, social, and economic history 1815-1844.

430—12(4,4,4) LATE MODERN EUROPE. (a) Age of Revolution, 1815-1880. (b) Europe in change, 1880-1918. (c) Age of Dictatorships, 1918 to present.

433—4 WORLD WAR I AND ITS AFTERMATH: 1914-1921. War's origins, course, and results; military actions as well as political, social, economic, and cultural effect on home fronts; war and world revolution, 1917-1921.

434—4 THE MIDDLE EAST IN WORLD AFFAIRS. Problems relevant to contemporary times; e.g. the Great Powers and the Middle East, oil and economics, Islam in the modern world, Iranian revolution.

435—12(4,4,4) TWENTIETH CENTURY AMERICAN HISTORY. Politics, culture, and economics in an urban industrial society. (a) 1896-1921. (b) 1921-1945. (c) 1945 to present.

436—4 WOMEN IN AMERICAN SOCIAL HISTORY. Women from various social classes, ethnic and racial groups, and geographic regions. Social institutions such as family, church, and schools. Colonial era to present.

437—8(4,4) AMERICAN MILITARY HISTORY. (a) Development of armed forces through 1914. (b) Expanded roles and influence of military institutions since 1914.

445—4 THE RUSSIAN REVOLUTIONS: 1900-1930. Period's meaning in Russian history; continuity and change of policies under Tsarist and Soviet regimes; historiography; interplay of Western Marxism and Russian cultural traditions.

446—4 THE GRAND DUCHY OF MOSCOW, 1450-1613. Economic, political, and social relations in the emerging Russian state: foreign affairs and Muscovite expansion; Russia, the Renaissance, and the Reformation.

450—4 TOPICS IN HISTORY. Selected topics such as history of the city, labor history, local history, etc. May be repeated to a maximum of 8 hours so long as no topic is repeated.

451—8(4,4) SURVEY OF HISTORICAL WRITING. (a) Major figures in ancient, medieval, and modern periods of European history. (b) Leading American historians to the present era. Prerequisite: (b) a course in U.S. History.

452—4 HISTORICAL RESEARCH. Rules of historical research applied to a selected topic. Required of all undergraduate students with a major in history. Prerequisite: junior standing.

453—8(4,4) HISTORY OF MODERN FRANCE. (a) Problems of nineteenth century from empire to democratic republic. (b) Twentieth century.

454—4 BIOGRAPHY IN AMERICAN HISTORY. Outstanding leaders and their contributions. Attention to historical writers who specialize in biography. Prerequisite: a course in U.S. History.

455—4 MEN AND WOMEN OF MODERN EUROPE. Biography; the lives of representative figures of the eighteenth, nineteenth, and twentieth centuries.

456—8(4,4) RECENT GERMAN HISTORY. (a) Political, social and intellectual developments from the late eighteenth century to German unification. (b) Developments from the Second Empire through World War II.

460—12(4,4,4) SOCIAL AND INTELLECTUAL HISTORY OF THE MIDDLE AGES. Society, culture and ideas from the Early Middle Ages to the 15th century. (a) 500-1000. (b) 1000-1250. (c) 1250-1500.

465—4 CHINESE COMMUNIST REVOLUTIONS. Revolutionary changes since creation of Chinese Communist Party in 1921. Emphasis on postwar period.

471—8(4,4) HISTORY OF MEXICO. (a) From Indian origins through death of Juarez (1872). (b) From 1872 to the present.

473—8(4,4) THE CARIBBEAN AREA. (a) 20th century history of the Caribbean island republics. (b) Central America.

485—4 ORIGINS AND HISTORY OF WORLD WAR II. Causes and evolution of the war; military, technological and diplomatic aspects.

HUMANITIES

150—1 BASICS OF ESPERANTO. Introductory vocabulary and grammar of the International Language developed by Zamenhof.

301—4 HUMANITIES HONORS. Variable content as indicated by subtitle. May be taken more than once as long as the content differs. Decisions about repeated credit are the responsibility of the Coordinator of the Humanities Honors Program. Prerequisite: 4.25 GPA or better or consent of instructor and Coordinator of the Humanities Honors Program.

302—4 HUMANITIES HONORS. Variable content as indicated by subtitle. May be taken more than once as long as the content differs. Decisions about repeated credit are the responsibility of the Coordinator of the Humanities Honors Program. Prerequisite: 4.25 GPA or better or consent of instructor and Coordinator of the Humanities Honors Program.

303—4 HUMANITIES HONORS. Variable content as indicated by subtitle. May be taken more than once as long as the content differs. Decisions about repeated credit are the responsibility of the Coordinator of the Humanities Honors Program. Prerequisite: 4.25 GPA or better or consent of instructor and Coordinator of the Humanities Honors Program.

310—8(4,4) ESPERANTO. Reading, writing, speaking, and understanding the International Language developed by Zamenhof. Must be taken in sequence.

400—1 to 4 SYMPOSIUM IN THE HUMANITIES. Variable content; subject matter beyond areas covered regularly by the standard curriculum. May be repeated up to 8 hours of credit. Credit toward concentration is at discretion of department. Prerequisite: senior standing or consent of instructor.

450—4 CHILDREN AND DEATH. Mortality, dying, bereavement as related to childhood and adolescence; socio-cultural and developmental context; guidelines and resources for caregivers, counselors, educators, parents.

495—2 to 4 INDEPENDENT READINGS. Independent study in the humanities on a tutorial basis. May be repeated to a

maximum of 8 hours. Prerequisites: consent of the instructor and the instructor's chairperson.

INDUSTRIAL ENGINEERING

112—0 FRESHMAN SEMINAR. Discussion of engineering academic programs, School of Engineering policies and procedures, employment opportunities and careers. Pass/No credit grading only.

199—0 INDUSTRIAL ENGINEERING CO-OPERATIVE EDUCATION I. Supervised work experience with an agency, firm, or organization which uses engineers. The first work period of five year academic/work experience program. The student will receive a grade of satisfactory or unsatisfactory. Prerequisites: sophomore standing in pre-engineering, consent of engineering co-op adviser.

262—4 ENGINEERING MECHANICS-DYNAMICS. Kinematics and kinetics of particles. Newton's laws, momentum, energy methods. Vector algebra and calculus used throughout. Prerequisite: Civil Engineering 260.

299—0 INDUSTRIAL ENGINEERING CO-OPERATIVE EDUCATION II. Supervised work experience with an agency, firm, or organization which uses engineers. The second work period of five year academic/work experience program. Student will receive a grade of satisfactory or unsatisfactory. Prerequisites: sophomore or junior standing in pre-engineering, consent of engineering co-op adviser.

305—4 ENGINEERING ECONOMIC ANALYSIS. Present worth, annual worth, rate of return and payout period. Independent capital-constrained and unequal-lived projects. Replacement, breakeven, and minimum cost analysis. Prerequisites: engineering major, ECON 112, or consent of instructor.

315-4 THERMODYNAMICS AND HEAT TRANSFER. Classical thermodynamics: first and second laws, equations of state in graphical, tabular, and analytical form. Conduction, convection, and radiative heat transfer. Prerequisites: engineering major or consent of instructor.

319—4 INTRODUCTION TO SYSTEMS ENGINEERING. Network analysis, linear programming, critical path scheduling, decision analysis, and linear regression. Applications in construction, environmental, structural and transportation engineering. Prerequisites: engineering major, EE 210, CE 270 (or concurrent enrollment), or consent of instructor.

320—1 INDUSTRIAL ENGINEERING LABORATORY I. Microcomputer applications in industrial engineering. Operating systems, languages, word processing, spread sheets, and computer graphics. Prerequisite: concurrent enrollment in 330.

321—1 INDUSTRIAL ENGINEERING LABORATORY II. Work analysis, operations and flow process charts, man-machine charts, flow diagram and plant layout, work sampling, value analysis and cost estimation, human factors in engineering. Prerequisite: concurrent enrollment in 421.

322—1 INDUSTRIAL ENGINEERING LABORATORY III. Data analysis, histograms, variance calculations, curve fitting, random sampling, central limit theorem, regression analysis, analysis of variance, quality control by attributes and by variables. Prerequisite: concurrent enrollment in 422.

330—4 INTRODUCTION TO INDUSTRIAL ENGINEERING. Scientific management, plant location, site selection, time and motion study, methods improvement, resource allocation, transportation and assigment models, forecasting, network methods, job sequencing. Prerequisite: industrial engineering major.

331—4 MANUFACTURING PROCESSES AND MATERIALS. Engineering metals and alloys. Casting and forming processes, metal cutting machines, welding, manufacturing techniques. Prerequisite: industrial engineering major.

392—2 to 8 READINGS IN INDUSTRIAL ENGINEERING. Supervised reading in selected subjects. Prerequisites: junior or senior standing, concentration in industrial engineering, consent of program director.

399—0 ENGINEERING CO-OPERATIVE EDUCATION III. Supervised work experience with an agency, firm, or organization which uses engineers. The third work period of five year academic/work experience program. The student will receive a grade of satisfactory or unsatisfactory. Prerequisites: sophomore or junior standing in pre-engineering, consent of engineering co-op adviser.

420—4 ADVANCED MANUFACTURING ENGINEERING. Automated production facilities, numerical control, manufacturing systems, computer-aided manufacturing, group technology, integrated manufacturing systems. NOT FOR GRADUATE CREDIT. Prerequisites: industrial engineering major, 331, or consent of instructor.

421—4 METHODS DESIGN AND WORK MEASUREMENT. Design of work systems. Methods and techniques employed in measuring work. Current philosophy underlying improvement of work methods and procedures used to measure work performed. Prerequisites: industrial engineering major, 330, STAT 380, or consent of instructor.

422—4 DESIGN OF QUALITY CONTROL SYSTEMS. Application of statistical methods to quality control. Integration of control charts, sampling plans, and other techniques into design of quality control systems. Prerequisites: industrial engineering major, STAT 380, or consent of instructor.

423—4 PRODUCTION PLANNING AND CONTROL. Analysis of recurrent problems of managing the flows of materials, services, and information produced in response to changes in market demand. Prerequisites: industrial engineering major, 421, or consent of instructor.

424—4 FACILITIES LAYOUT AND PLANNING. Plant location and materials handling. Integration of available resources to achieve an effective production facility. Prerequisites: industrial engineering major, 330, or consent of instructor.

428—4 HUMAN FACTORS ENGINEERING. Analysis of man-machine system to increase productivity and meet physiological needs of those involved in the system. NOT FOR GRADUATE CREDIT. Prerequisites: industrial engineering major, 330, or consent of instructor.

438—4 INDUSTRIAL ENGINEERING DESIGN. Individual laboratory projects of a research, design, or developmental nature to study the principles of engineering systems or components. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing in industrial engineering, consent of program director.

440—4 OPERATIONS RESEARCH - DETERMINISTIC MODELS (Same as OR 440.) Linear programming, problem formulation and applications, simplex algorithm, transportation and network problems, duality theory and its economic interpretation, sensitivity analysis. Prerequisite: pre-engineering or consent of instructor.

441—4 OPERATIONS RESEARCH - STOCHASTIC MODELS. (Same as OR 441.)Probability models, elementary queuing theory with single or multiple server systems. Markov processes and models, decision theory. Prerequisite: pre-engineering, STAT 380 or 480a.

442—4 OPERATIONS RESEARCH - SIMULATION. (Same as OR 442.) Simulation models, generation of random variables, discrete event simulation using GPSS. Applications of simulation in production, inventory, and other related problems. Prerequisites: pre-engineering, STAT 380 or 480a.

443—4 APPLICATIONS OF OPERATIONS RESEARCH. Applications of operations research through the use of cases. Cases are equivalent to those normally experienced by beginning professionals. Prerequisites: 440, 441, 442.

492—3 to 6 TOPICS IN INDUSTRIAL ENGINEERING. Selected topics of special interest. May be repeated to a maximum of 8 hours so long as no topic is repeated. Prerequisites: industrial engineering major, consent of instructor.

INSTRUCTIONAL TECHNOLOGY

401—4 INSTRUCTIONAL MEDIA SERVICES. Organization, supervision, finance, housing, equipment, standards and evaluation; in relation to the educational objectives of schools and community college programs.

402—4 MEDIA SELECTION. Selection and evaluation of print and nonprint media; selection aids, reviews, and annotations.

403—4 INSTRUCTIONAL MEDIA FOR CHILDREN AND YOUNG ADULTS. Methods and criteria for selection and use of books and other instructional materials for students in grades K-12. Prerequisite: 402 or consent of instructor.

407—4 BASIC REFERENCES SOURCES. Evaluation, selection, and use of reference sources for elementary and secondary school libraries. Principles and methods of reference service.

408—4 INTRODUCTION TO CATALOGING AND CLASSIFICATION. Book type materials.

417—4 AUDIO-VISUAL METHODS IN EDUCATION. Selection and utilization of instructional materials in the learning environment, elementary through adult levels. Reference books for teachers.

430—2 BASIC AUDIO-VISUAL MAINTENANCE TECHNIQUES. Maintenance techniques useful in media centers without services of an audio-visual technician.

440—2 PHOTOGRAPHY FOR TEACHERS. Techniques of picture-taking and the preparation of color slides of community resources for use in classroom instruction and for school public relations.

445—4 PREPARATION OF TEACHER MADE MATERIALS. Instructional materials for communication including opaque materials, overhead projectuals, mounted visuals, display materials, lettering materials, and other graphics. Laboratory fee. Prerequisite: 417 or consent of instructor.

447—2 AUDIO PROCESSES IN CLASSROOM LEARNING. Sound theory, sound control, sound reproductions and listening skill development in the learning process. Theory and practice. Prerequisite: 417 or consent of instructor.

450—4 INSTRUCTIONAL PHOTOGRAPHIC PROCESSES. Production and use of photographic materials; photographic processes and their application to the development of instructional materials. Prerequisite: senior standing in education.

458—4 THE MEDIUM OF THE MOTION PICTURE. Full range of expression by motion pictures; documentary, theatrical, educational, experimental and industrial films. Representative films are screened.

460—4 TELEVISION IN THE CLASSROOM. Instructional television programming and its value in the learning environment. Instructional sequences are produced with video equipment.

461—4 GRAPHICS FOR INSTRUCTIONAL TELEVISION. Preparation of visual materials for instructional television programs. Prerequisites: 445, 460.

490—1 to 8 SEMINAR: SELECTED TOPICS IN INSTRUCTIONAL TECHNOLOGY. Varied content. Topics selected from instructional technology field which are considered innovative

and of immediate concern to existing educational needs. May be repeated to maximum of 8 hours with no topic repeating itself. Prerequisite: senior standing.

INTERDISCIPLINARY STUDIES

321—4 ORIGINS OF LIFE. Scientific findings and traditional concepts; insights these provide about rationality and scientific methodology.

324—4 PEOPLES AND CULTURES OF THE EAST. Key organization principles, religious and philosophical norms, social customs, aesthetic tastes, of China, Japan and other selected Asian nations.

328—4 HISTORY AND SCIENCE. Development of scientific questions in historical perspective; relation of scientific concepts to development of culture; Ancient Greece to present. Satisfies Interdisciplinary Studies course requirement *or* one of the Advanced course requirements in either natural sciences and mathematics or social sciences. May not count as both Interdisciplinary Studies and Advanced in any one student's record.

330—4 CONCEPTIONS OF HUMAN NATURE. Western views since the Middle Ages, including Aquinas, Machiavelli, Descartes, Marx, Darwin, Galton, Conrad, Freud, Orwell, Golding, Sartre, Skinner, and Rogers.

334—4 NATURAL RESOURCES: ISSUES AND CONFLICTS. American land resource conservation, principles, practices and problems from the perspectives of biology, geography and earth science. Prerequisite: sophomore standing.

335—4 EARLY ILLINOIS: ITS LAND AND PEOPLE. Prehistoric and historic Indian cultures and European settlement prior to 1818 in relation to geography and geology. Extensive use of visual materials to demonstrate relationships between people and their physical environment.

336—4 GLOBAL PROBLEMS AND HUMAN SURVIVAL. Effects of pollution, resource depletion, over-population, underdevelopment, war, and misuse of oceans on the future of humanity.

340—4 THE PROBLEM OF WAR AND PEACE. Historical background; perspectives of major nations; causes; contemporary aspects such as ideological, economic, political, legal and military; proposals for controlling conflict.

341—4 THE IMMIGRANT IN AMERICA. Impact of immigrant groups on American social, political, and cultural patterns: assimilation, stereotyping, generational conflict, nativism.

342—4 DEATH AND DYING. Individual and cultural confrontations with mortality, demographic patterns, coping with terminal illness, hospice care, bereavement, definition and determination, euthanasia, suicide, children, valuational aspects, education.

350—4 WOMEN IN SOCIAL INSTITUTIONS: A COMPARATIVE APPROACH. Historical, cultural, and social class differences in contexts of education, family, health care, economics, religion, politics.

380—4 SONG AND POETRY. Non-technical survey of creative relationship between composer and poet, emphasizing Renaissance court music, folk song, art song, oratorio, opera, and contemporary serious and popular songs. Considerable class listening and discussion.

ITALIAN

101—4 ELEMENTARY ITALIAN. Reading, writing, listening comprehension, and speaking within the context of Italian culture. Use of the language laboratory.

102—4 ELEMENTARY ITALIAN. Continuation of 101. Use of language laboratory. Prerequisite: 101.

103—4 ELEMENTARY ITALIAN. Continuation of 102. Use of language laboratory. Prerequisite: 102.

144—4 ELEMENTARY ITALIAN. Intensive development of reading, writing, listening comprehension, and speaking within the context of Italian culture. Intensive course, generally taught in summer term, equivalent to credit which would be earned in 101, 102, and 103 if they were taken separately. Must be taken for the full 12 hours credit. Use of the language laboratory. Check with department chairperson to determine if the course will be offered.

201—4 INTERMEDIATE ITALIAN. Oral skills of understanding and speaking the language; reading modern prose selections, and writing simple compositions. Use of language laboratory. Prerequisite: 103 or two years of high school Italian or consent of department chairperson.

202—4 INTERMEDIATE ITALIAN. Continuation of 201. Use of the language laboratory. Prerequisite: 201.

203—4 INTERMEDIATE ITALIAN. Continuation of 202. Use of language laboratory. Prerequisite: 202.

220—4(2,2) INTERMEDIATE ITALIAN CONVERSATION. (a) Practice in intermediate level conversation, proper pronunciation and fluency. (b) Additional practice in improving pronunciation and fluency. May be taken separately. Prerequisite: 144 or equivalent.

311—4 ITALIAN CULTURE AND CIVILIZATION. Significant aspects of Italian culture. Prerequisite: 203 or consent of department chairperson.

499—2 to 9 READINGS IN ITALIAN. Selected areas of language, literature, and culture. Individual work or small groups supervised by one or more members of the Italian faculty. Prerequisites: 203, consent of department chairperson.

JOURNALISM

130—4 NEWS. Experience in reporting, writing, and rewriting news; fundamentals of copyreading.

201—4 NEWS WRITING AND EDITING. Advanced experience in reporting and writing news for newspapers, magazines, public relations, corporate and institutional publications. Prerequisite: 130 with a grade of C or better.

202—4 LANGUAGE AND STYLE OF JOURNALISM. Style, language and special writing techniques. Prerequisite: 130.

210—4 INTRODUCTION TO PHOTOJOURNALISM. Experience with cameras; darkroom techniques. News and feature photography. Covering news stories with camera; exercises in photo editing. Still photography, black and white. Laboratory hours required. Prerequisites: 130, consent of instructor.

212—4 EDITING OF PHOTOGRAPHS AND ARTWORK. Illustration of newspapers and magazine stories; evaluation of photographs and artwork; selection, editing, and production; values of photography; exercises in editing and displaying photography. Laboratory hours required. Prerequisite: 130.

303—8(4,4) NEWS EDITING AND DESIGN. (a) Advanced copy editing, headlining and makeup for newspapers, magazines and public relations. (b) Publication design and graphic arts. Weekly laboratory sessions required. Prerequisite: 201 with a grade of B or better.

310—4 ADVANCED PHOTOGRAPHY IN MASS COMMUNICATIONS. Studio photography. Aesthetics of photojournalism. Documentary photograph. Creative darkroom experience. How to see and use color. Shooting color positives. Prerequisite: 210.

320—4 DEPTH REPORTING AND WRITING. Contemporary events, problems, issues. Techniques for long news story; interpretive and investigative reporting; analyzing and backgrounding news; planning, reporting, and writing series. Prerequisite: 201 or Television/Radio 302.

321—4 COMMUNITY REPORTING. Reporting and writing news related to government, politics, law enforcement, educational institutions and courts. Class lectures, field trips and conferences with visiting experts. Prerequisite: 201.

330—4 EDITORIALS. Responsibility of editor, editorial writer, and broadcast commentator. Emphasis on persuasive writing and thinking. Problems, methods, policies, and styles of persuasion.

340—4 THE LAW OF JOURNALISM. Historical development and current status of law as it relates to journalism practitioners. Analysis of statutory and case law.

344—4 THE CONTRIBUTIONS OF JOURNALISM TO LITERATURE. Includes newspaper and magazine writings of Hemingway, Twain, Dreiser, Crane. Study of contemporary press; studying history to determine journalism's contribution to literature.

345—4 HISTORY OF MASS COMMUNICATIONS. Development of American journalism. Struggle for freedom of press; outstanding journalists and institutions; social, political, and technological influences.

346—4 HISTORY AND PHILOSOPHY OF PHOTOJOURNALISM. Visual communicators to understand growth of photographic communication in mass media and to gain insight into motives behind photojournalism.

352—4 MAGAZINE ARTICLE WRITING AND PRODUCTION. Magazine operation as applied to staff member and free lance writer; studies of nonfiction articles with submission of articles for publication; editing and production. Prerequisites: 130, 391, or consent of instructor.

361—1 to 4 CONTEMPORARY READINGS IN JOURNALISM. New books about mass communications and discussing responses to them. Final paper required. May be repeated for 8 hours credit. Prerequisite: consent of instructor.

362—1 to 4 INDEPENDENT STUDIES IN JOURNALISM. Selecting area of journalism for reading and research, presenting written report to faculty member who approves plan and agrees to be consultant to student. May be repeated for total of 8 hours credit. Prerequisite: consent of instructor.

370—4 PRINCIPLES OF ADVERTISING. Advertising fundamentals in relation to modern business activities; economic and social aspects, research media, appeals, production schedules.

375—4 ADVERTISING COPYWRITING. Processes and practices in preparation of copy and layouts in production of advertising for print media.

380—8(4,4) MASS COMMUNICATIONS AND PUBLIC RELATIONS. How reporting, writing, editing, photography, graphic arts, and broadcasting apply to public relations. (a) Principles and basic practices. (b) Case studies. Must be taken in sequence.

381—4 BUSINESS AND INDUSTRIAL PUBLICATIONS. Role of trade, company and institutional newspapers and magazines; their function, staff, and production. Relationship of management and administration to editorial policies. Articles will be written by students for submission to specialized publications. Prerequisites: 130 and consent of instructor.

391—4 FEATURE WRITING. Planning and writing features and special articles for newspapers, magazines and public relations.

402—2 to 8 CAMPUS PUBLICATIONS PRACTICUM. Study, observation, participation in production of journalism laboratory or student publications and/or participation in professional setting. Number of credit hours to be determined by agreement of instructor and adviser in concentration. Prerequisite: consent of instructor.

410—5 INTERNSHIP IN JOURNALISM. Professional experience with local media in various phases of journalism, under joint supervision of members of journalism faculty and of media. Prerequisite: consent of director of journalism.

435—4 SEMINAR IN PUBLICATIONS MANAGEMENT. Advertising, business and circulation phases of newspaper production with guest speakers and instructors; professional techniques, operations; assignments in solving management problems.

480—1 to 4 JOURNALISM PROBLEMS AND POLICIES. Significant topics drawn from journalism; students investigate topics, making reports in oral and written form.

481—4 SPECIALIZED JOURNALISM. Sports, science, education, critical writing for mass media, technical writing, investigative journalism, precision reportage, ecology, urban affairs, agency advertising, ad campaigns. Each offering designates one of these areas for study. May be repeated for credit. Prerequisite: consent of instructor.

482—4 SPECIAL STUDIES IN PHOTOJOURNALISM. Students and faculty choose area in photojournalism for special study and combine theory and experience to solve problems in that area. May be repeated to include total of 8 hours credit. Prerequisites: 210 and consent of instructor.

LATIN

101—4 INTRODUCTION TO LATIN. Grammar and vocabulary of classical Latin, within the context of Roman culture; reading knowledge through texts adapted from classical authors.

102—4 INTRODUCTION TO LATIN. Continuation of 101. Prerequisite: 101.

103—4 INTRODUCTION TO LATIN. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE LATIN. Basic principles; reading selections from classical medieval, and renaissance periods. Prerequisite: 103 or equivalent.

202—4 INTERMEDIATE LATIN. Continuation of 201. Prerequisite: 103 or equivalent.

203—4 INTERMEDIATE LATIN. Continuation of 202. Prerequisite: 103 or equivalent.

499—24(4,4,4,4,4,4) READINGS IN LATIN. (a) Learning the language through selections from classical, medieval, renaissance Latin. (b) Continuation of a. (c) Continuation of b. (d-f) second year level. Content varies with instructor. A,b,c must be taken in sequence and are prerequisite to d, e, or f which may be taken out of sequence with consent of instructor. Individual segments may not be repeated for credit. Prerequisite: for a,b,c — one year college study of another language, or the equivalent, or consent of instructor.

MANAGEMENT

140—4 INTRODUCTION TO BUSINESS. Basic nature of business in an essentially market-disciplined economic system with emphasis on the interdisciplinary nature of business. Junior and senior business majors are not eligible to take this course.

242—4 CONTRACTS AND AGENCY LAW. Terminology and principles of business contract law. Applications of principles of contract and agency law by entrepreneurs and managers. Prerequisite: sophomore standing.

290—4 BUSINESS COMMUNICATION. Development of skill in business writing with emphasis on letters, memoranda, reports and oral presentations. Prerequisite: completion of General Education skills requirements.

340—4 MANAGEMENT FUNDAMENTALS. Basic components of management (planning, organizing, staffing, directing, and controlling). Emphasizes understanding of these components and inter-relationships among all components. Prerequisite: junior standing.

341—4 ORGANIZATIONAL BEHAVIOR. Knowledge and skill in the application of behavioral science theories to interpersonal, small group, intergroup, managerial, and total organizational issues. Prerequisites: 290, 340.

430—4 PERSONNEL ADMINISTRATION. Personnel function including theory, practice and future trends. Includes selection, training, compensation, discrimination, and legal environment. Prerequisites: 340, 341 or consent of instructor.

431—4 MANAGERIAL LEADERSHIP PROCESSES. Individual and group leadership functions, methods to negotiate influence and increase effectiveness. Cases, field study, and/or class exercises. Prerequisites: 340, 341 or consent of instructor.

432—4 ORGANIZATIONAL DEVELOPMENT. Organizational change with emphasis on individual and team problem identification and problem solving processes. Prerequisites: 340, 341 or consent of instructor.

433—4 ORGANIZATION THEORY AND DESIGN. Interrelationships between human, technological, managerial, and environmental factors as they influence organizational design. Theoretical models, case studies, and empirical studies. Prerequisites: 340, 341 or consent of instructor.

434—4 MANAGEMENT OF HUMAN RESOURCES. Advanced seminar in personnel. Focus on contemporary issues in the area of personnel and human resource management. Prerequisites: 340, 341, 430 or consent of instructor.

435—4 PERSONNEL PLANNING AND SELECTION. Theory and practice of recruitment, placement, planning and selection. Special attention to equal employment, affirmative action, legal requirements, selection validation, recruitment and selection. Prerequisites: 430 or consent of instructor.

436—4 COMPENSATION AND BENEFIT ADMINISTRATION. Development and administration of wage and salary programs. Includes factors influencing compensation, job evaluation, motivation theory, forms of compensation, and special issues. Prerequisites: 430 or consent of instructor.

437—4 PERFORMANCE AND PRODUCTIVITY. Multiple elements accounting for productivity; measurement techniques as diagnostic instruments for productivity and performance improvement; policy options at the firm level. Prerequisite: 430 or consent of instructor.

440—4 THE LEGAL ENVIRONMENT OF BUSINESS. External environment of business with emphasis upon economic, legal, political, international and social factors affecting organizations. Prerequisites: 340, 341, Economics 111, 112 or consent of instructor.

441—4 BUSINESS POLICY. Development, implementation, and appraisal of overall organizational strategy. Analysis of cases requiring integration of prior learning from all areas. Prerequisites: completion of BSBA core requirements or concurrent enrollment in final core requirements and final quarter standing or consent of instructor.

475—4 to 16 ORGANIZING AND OPERATING A SMALL BUSINESS. Management of small business. Topics such as strategy, marketing, organization, and control. Individualized projects and problems. Graduate students limited to 4 hours credit. Prerequisites: 340, 341, Accounting 201 and senior standing or consent of instructor.

490—1 to 8 INDEPENDENT STUDY OF BUSINESS ADMINISTRATION. Topical areas investigated under faculty direction in greater depth than other courses permit. May be repeated by permission up to total of 8 hours credit. Prerequisite: consent of instructor and chairperson.

MANAGEMENT INFORMATION SYSTEMS

108—4 APPLIED COMPUTER CONCEPTS. Computer programming principles and computer utilization with attention to spreadsheets and word processing. Along with computer concepts, high-level languages and statistical packages will be examined. Students will design, write, debug problems using a computer. Prerequisites: 1 year of high school algebra and 1 year of high school geometry or equivalent.

260—12(4,4,4) COMPUTER PROGRAMMING. Business-oriented computer programming using listings; computations, comparisons; tables/arrays; and files. Students design, write, debug, and process programs in (a) COBOL; (b) RPG; (c) BAL. Prerequisite: 108 or equivalent.

270—4 STRUCTURED SYSTEMS TECHNIQUES. Structured systems principles in business analysis and design. System cycle examined from theoretical view with examples drawn from actual organizations. Prerequisite: 108 or equivalent.

342—4 MANAGEMENT INFORMATION SYSTEMS. Information systems principles applied to business. Computer use analyzed in both theoretical and real-world applications using systems approach. Prerequisite: 108 or equivalent.

360—4 FILE TECHNIQUES AND PROGRAM DESIGN. Advanced programming/design for file processing to include design, write, debug, and process of COBOL programs. Requires above normal time commitment to practice computer skills. Prerequisite: 260a (minimum "C" grade recommended).

488—4 MIS INTERNSHIP. Application of tools from information systems program to an organization under supervision with written report of experiences. May be repeated for total of 12 hours. Prerequisites: consent of instructor and internship company.

490—1 to 8 INDEPENDENT STUDY IN MANAGEMENT INFORMATION SYSTEMS. Investigation of topical MIS area resulting in deliverable unit. May be repeated to total of 8 hours. Prerequisites: consent of instructor, chair, and program director.

495—1 to 4 SEMINAR: MANAGEMENT INFORMATION SYSTEMS. Current issues related to business aspects dealing with information systems. May be repeated to total of 8 hours. Prerequisite: consent of instructor.

MANAGEMENT SCIENCE

251—4 STATISTICAL ANALYSIS FOR BUSINESS DECISIONS. Inferential statistics. Estimation and hypothesis testing of means and proportions. Inference with simple and multiple regression. Analysis of variance and contingency table analysis. Prerequisite: STAT 244 or equivalent.

312—4 STATISTICAL ANALYSIS OF BUSINESS ORIENTED PROBLEMS. Business applications of intermediate statistical techniques, including multivariate regression; emphasizes sample design, data collection and analysis; uses computer software. Prerequisite: 251.

314—4 INTRODUCTION TO DEMAND FORECASTING. Commonly used methods for forecasting business data. Moving averages, exponential smoothing, regression, trend and seasonal models. Selecting and evaluating forecasting techniques. Prerequisite: 251.

320—4 INTRODUCTION TO OPTIMIZATION MODELS. Linear programming and business calculus. Recognizing and setting up business Problems for LP solution; graphical solution; sensitivity analysis. Differential and integral applications to business problems. Prerequisite: college algebra.

402—1 to 4 SEMINAR IN MANAGEMENT SCIENCE. Quantitative and non-quantitative models for organizational situations; relation of management objectives to management decision information systems. May be repeated to a total of 8 hours without topic repetition. Prerequisites: consent of instructor and department chairperson.

490—1 to 8 INDEPENDENT STUDY IN MANAGEMENT SCIENCE. Investigation of topical areas in greater depth than regularly scheduled courses permit. Individual readings or research projects. Repeated, by permission, to a total of 8 credit hours. Prerequisites: consent of instructor and department chairperson.

MARKETING

370—4 MARKETING AND ITS ENVIRONMENTS. Macro view of marketing encompassing interdisciplinary approach to analysis and interpretation of consumer motives and purchase behavior and other cultural, economic, and competitive factors.

371—4 PRINCIPLES OF MARKETING MANAGEMENT. Micro view of marketing emphasizing management of concepts and approaches in the areas of markets, products, distribution, promotion, pricing. Prerequisite: 370.

377—4 MARKETING RESEARCH. Concepts necessary for understanding/performing business research. Investigation, evaluation, basic procedures, theories. Research applied to marketing decision-making. Market, advertising, and sales research. Prerequisites: 371, Management Science 251.

470—4 MARKETING LOGISTICS AND DISTRIBUTION. System design and management of flows of goods and services from source to consumer. Transportation, inventory management, order processing, acquisition, warehousing, channel selection, location. Prerequisite: 377 or equivalent.

471—4 ADVERTISING POLICY AND MANAGEMENT. Advertising strategy, planning, and research in the context of marketing decision making and environmental considerations. Prerequisite: 377.

472—4 SALES POLICY AND MANAGEMENT. Organization and operational functions of salespeople and sales managers. Selling skills, forecasting, recruiting, selection, training, territory design and assignment, supervision, compensation, motivation, and performance appraisal. Prerequisite: 377.

474—4 RETAIL MANAGEMENT AND PROMOTION. Functions, organization, management of retail enterprises. Impact of recent and contemporary forces. Systems for merchandising and promotional activities. Retailing careers and appropriate preparation. Prerequisite: 377.

475—4 CONSUMER BEHAVIOR. Consumer motivation, buying behavior, cultural forces, information processing, and product diffusion. Explanatory theories and product development. Prerequisite: 377.

476—4 INTERNATIONAL MARKETING. Impact of tariffs, cultural social restrictions, economic political environments, legal restrictions, international distribution pricing, multinational product planning, communications decisions, international marketing research. Prerequisite: 377.

478—4 INTERMEDIATE MARKETING RESEARCH AND DATA ANALYSIS. Advanced consideration of statistical research techniques for analyzing marketing research data and developing marketing models. Use of major statistical software packages for data analysis projects. Prerequisite: 377.

480—4 ADVANCED MARKETING MANAGEMENT. Analyze market structure and behavior. Research and select marketing opportunities. Develop marketing strategies. Plan marketing tactics. Implementation and control of marketing efforts. This is the final marketing course. Prerequisites: 377 or equivalent, senior standing.

490—1 to 8 INDEPENDENT STUDY IN MARKETING. Topical areas in graater depth or unavailable in regular courses. Individual or small group readings and/or research projects. May repeat to 8 hours by permission. Prerequisites: consent of instructor and department chairperson.

MATHEMATICS

070—4 BEGINNING ALGEBRA. Operations with real numbers, first degree equations and inequalities, absolute value, operations with polynomials, factoring, operations with rational expressions. Five contact hours per week. Does not carry credit toward a degree. Graded on Pass/No Credit basis only. (NOTE: This course is offered through the Office of Academic Services. For further information, please consult that Office in PECK, Rm. 1315.)

095—4 INTERMEDIATE ALGEBRA. Continued study of operations with polynomials and rational expressions, complex numbers, quadratic equations, elementary functions. Five contact hours per week. Will not carry credit toward a degree in the School of Sciences.

106—4 REASONING AND PROBLEM SOLVING. Theory and practice of approaching problems and issues rationally through reliable analytic and synthetic techniques: Evaluating evidence and hypotheses and making warranted inferences relevant to a problem or issue; analyzing, assessing, and constructing sound arguments, formally; detecting fallacies, ambiguities, inconsistencies, propaganda, and biases. Prerequisite: two years of high school mathematics.

111—4 THE NATURE OF MATHEMATICS. A broad view of mathematics. Examines topics from games such as magic squares and 3-dimensional tic-tac-toe to one sided surfaces and the development of non-euclidean geometries. Prerequisites: one and one-half years of high school algebra and one year of geometry.

120—5 COLLEGE ALGEBRA. Operations with polynomial and rational expressions; exponents; radicals; complex numbers; variation; equations and systems of equations; inequalities; exponential and logarithmic functions; matrices; determinants; binomial theorem. Applications. Prerequisites: one and one-half years high school algebra and one year high school geometry, or equivalent.

125—4 PRECALCULUS MATHEMATICS WITH TRIGONOMETRY. Elementary properties and applications of exponential, logarithmic, trigonometric, and certain other functions; topics from analytic geometry. Prerequisites: 6 semesters of high school mathematics and ACT score of 23 or higher or 120 with a grade of C or higher.

150—8(4,4) ELEMENTARY CALCULUS AND ANALYTICAL GEOMETRY. (a) Limits and continuity of functions, the derivative, applications of the derivative, analytic geometry, (b) Definite integral; differentiation and integration of exponential, logarithmic, trigonometric functions, techniques of integration; applications. Prerequisites: (a) 7 semesters of high school mathematics including a semester of trigonometry and an ACT score of 23 or higher, or 125 with grade C or higher; (b) 150a with grade C or higher.

223—4 INTRODUCTION TO DISCRETE MATHEMATICS. Concepts and techniques essential to both mathematics and computer science. Logic, methods of proof, sets, relations, mathematical induction, recursion, introduction to graph theory. Prerequisite: CS 172 or CS 270a.

260—12(4,4,4) CALCULUS AND ANALYTIC GEOMETRY. (a) Indeterminate forms, improper integrals, infinite series, polar coordinates, linear algebra; (b) Vectors and solid analytic geometry, vector valued functions, partial differentiation; (c) Multiple integrals, topics in vector calculus. Prerequisites: (a) 150b with grade C of higher, must be taken in sequence with grade C or higher in preceding course.

305—4 DIFFERENTIAL EQUATIONS FOR APPLICATIONS. First order differential equations, linear differential equations of higher order, initial value problems, applications. Prerequisite: 260c.

321—4 ELEMENTARY LINEAR ALGEBRA. Arithmetic of matrices, determinants, and inverses; systems of linear equations; a first look at vector spaces, linear mappings, Euclidean spaces, and eigenvalue problems. Prerequisite: 260c.

323—4 COMBINATORICS AND GRAPH THEORY. Combinatorics and graph theory methods of solving problems which are discrete in nature. Combinatorial reasoning and modeling, graphs, trees, network algorithms, generating functions and recurrence relations. Prerequisite: 223 or equivalent.

400—4 HISTORY OF MATHEMATICS. Emphasis on the development of Western mathematics from the Greeks through Newton and Leibniz with selected topics from the 19th and 20th centuries. Prerequisites: 260b and one course from 260c, 223, 321, and STAT 380.

416—2 to 12 SPECIAL TOPICS FOR TEACHERS OF SECONDARY MATHEMATICS. (a) Analysis. (b) Algebra. (c) Number Theory. (d) Probability and Statistics. (f) Geometry. (g) History of Mathematics. (h) Applied Mathematics. (i) Logic and Foundations. May not be taken for credit towards a concentration in mathematics. Prerequisite: consent of instructor.

420—8(4,4) APPLIED ALGEBRA. Introduction to abstract algebraic structures and their applications. (a) Sets, relations, Boolean algebras, lattices, finite-state machines, groups, quotient groups, symmetry groups, Polya-Burnside method of enumeration. (b) Integers, Euclidean algorithm, integers modulon, polynomial and Euclidean rings, fields, field entensions, error-correcting codes. Prerequisite: 321 or consent of instructor.

421—8(4,4) LINEAR ALGEBRA. Finite dimensional vector spaces and linear transformations with applications to physical and engineering problems. (a) Vector spaces, linear transformations, similarity and diagonalization, orthogonality, applications. (b) Normal forms of linear transformations, Jordan canonical form, matrix calculus, systems of linear differential equations, applications. Must be taken in sequence. Prerequisite: 321 or consent of instructor.

422—4 DISCRETE MATHEMATICS. Set theory, logic, induction, and an introduction to combinations and graph theory. May not be taken for credit by students who have completed the sequence 223, 323. Prerequisite: 321.

425—4 ELEMENTARY NUMBER THEORY. Divisibility of integers, linear and quadratic congruences, primitive roots, quadratic reciprocity, number theoretic functions, distribution of primes, computers and number theory. Applications. Prerequisite: 223.

430—4 INTRODUCTION TO TOPOLOGY. Elements of set theory, metric spaces, mappings, convergence, completeness and compactness; applications. Prerequisites: 260c, 321.

435—4 TOPICS IN GEOMETRY. Topics include: foundations for Euclidean and non-Euclidean geometry; projective geometry; differential geometry; geometry of convex bodies. May be repeated with different topics for a maximum of 8 hours. Prerequisites: 260c and 321, or consent of instructor.

450—8(4,4) INTRODUCTION TO REAL ANALYSIS. (a) Real numbers, topology of R^n, continuity and differentiability of functions from R^m into R^n, (b) implicit function theorem, characterization of Riemann integrable function, uniform convergence. Must be taken in sequence. Prerequisites: 260c, 321.

451—4 ELEMENTARY COMPLEX VARIABLES. Analytic functions, rational functions, mapping properties of bilinear transformations and rational functions of second order, the Cauchy integral theorem and formula, Laurent series, and the calculus of residues. Prerequisite: 260c.

461—4 ENGINEERING MATHEMATICS. Review of ordinary differential equations followed by: power series solution of differential equations, Laplace transforms, Fourier series applications to partial differential equations and boundary value problems. Prerequisites: 305 and consent of major department.

463—8(4,4) ADVANCED CALCULUS FOR APPLICATIONS. (a) Review of ordinary differential equations; Power series solutions of differential equations; Legendre polynomials; Bessel functions; Laplace transform; divergence, curl, line and surface integrals. Gauss' and Stokes' Theorems. (b) Fourier series; partial differential equations; wave, heat, and Laplace equations. Prerequisites: (a) 260, 305; (b) 463a.

465—8(4,4) NUMERICAL ANALYSIS. (Same as Computer Science 465) (a) Error analysis, Lagrange and Newton interpolation, methods for solving non-linear equations, numerical integration, boundary value problems; (b) Methods for solving linear systems, eigenvalve problems, initial value problems, function approximation. Prerequisites: (a) 260c and CS 172 or CS 270a; (b) 305, 321 and 465a or consent of instructor.

495—1 to 6 INDEPENDENT STUDY. Research and reading in specified area of interest. (a) Algebra. (b) Geometry. (c) Analysis. (d) Mathematics Education. (e) Logic and Foundations. (f) Topology. (g) Numerical Analysis. May be repeated to a total of 24 hours so long as no topic is repeated and not more than 6 hours are accumulated in a single segment nor more than 12 in one quarter. Prerequisite: written consent of adviser and instructor.

MUSIC

040A-U—1(each) CLASS APPLIED MUSIC. Preparation for individual applied instruction. Students assimilate fundamental techniques and basic psychomotor skills on their instrument for purpose of qualifying for enrollment at 140-level. May be repeated for a maximum of three quarters.

111—4 INTRODUCTION TO MUSIC HISTORY/LITERATURE. Elements of music. Important composers, periods, styles and forms of music.

112—2(1,1) CLASS APPLIED WOODWINDS. Introductory methods for teaching these instruments in elementary and secondary schools. (a) Clarinet, saxophone. (b) Flute, oboe, bassoon. Must be taken in sequence.

113—2(1,1) CLASS APPLIED BRASS. Introductory methods for teaching these instruments in elementary and secondary schools.

114—1 CLASS APPLIED PERCUSSION. Instruments. Introductory methods for teaching these instruments in elementary and secondary schools.

115—3(1,1,1) CLASS APPLIED VOICE. Training in singing and diction. Introductory methods for teaching singing in elementary and secondary schools.

116—2(1,1) CLASS APPLIED STRINGS. Practical training in basic principles of playing violin, viola, cello, and string bass. Introductory techniques and methods for teaching these instruments in elementary and secondary schools.

121—3(1,1,1) CLASS APPLIED PIANO. Minimum instruction for passing proficiency examination in piano which is required for all music concentrations. Must be taken in sequence.

123—9(3,3,3) PRE-THEORY OF MUSIC. Study of music reading literacy, dealing with the fundamentals of pitch and rhythm organization and notation. Must be taken in sequence.

124—4 FOUNDATIONS OF MUSIC. Overview of the principles and procedures applicable to reading, writing, and perception of music including rhythm, pitch, notation, scales, keys, intervals, chord structures, symbols and performance terms, with reference to application to musical form and design.

125—12(4,4,4) THEORY OF MUSIC. Fundamentals of music through sight singing, dictation, written and keyboard harmony. Must be taken in sequence. Prerequisite: piano proficiency or concurrent enrollment in 121.

140, 240, 340, 440—2 or 4 PRIVATE APPLIED MUSIC. Offered at five levels in areas listed. Credits given at 2 or 4 hours on each level. Consult with adviser for details of credit and requirements. May be repeated for three quarters at each level. Students with concentration in performance usually take 4 hours. Concentration in Music Education and all secondary concentrations usually take 2 hours. Prerequisites: for 140: music concentration or secondary concentration or consent of

music faculty; for higher levels: 3 quarters at previous level on same instrument or consent of instructor.

a. Violin
b. Viola
c. Cello
d. String Bass
e. Flute
f. Oboe
g. Clarinet
h. Bassoon
i. Saxophone
j. Percussion
k. Piano
l. Horn
m. Trumpet
n. Trombone
o. Tuba
p. Baritone
q. Voice
r. Organ
s. Harpsichord
t. Harp
u. Guitar

141, 241, 341, 441—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. Individual instruction in performance of various jazz styles. Offered at four levels in areas listed. Credit is given at 2 or 4 hours on each level. Students majoring in Performance usually take 4 hours; Music Education majors and Music minors usually take 2 hours. 441 is NOT FOR GRADUATE CREDIT. Prerequisites: for 141: admission as a music major and audition; for higher levels: three quarters at previous level on same instrument, and consent of instructor.

a. Jazz Piano
b. Jazz Percussion
c. Jazz Guitar
d. Jazz Bass
e. Jazz Saxophone
f. Jazz Voice

144—1 UNIVERSITY SINGERS. University Singers perform music suitable for chamber choir and large chorus (they often collaborate with other university choral organizations). May be repeated.

165—3(1,1,1) PIANO PRACTICUM. Keyboard harmony, sight reading, score reading, transposition, analysis at keyboard, improvisation, and harmonic examination of keyboard forms and techniques. May be repeated for credit up to 3 hours.

200—3 FUNDAMENTALS OF MUSIC. Rudiments of music for beginners. Recommended as course preliminary to 300. Not for music concentrations. May be taken concurrently with 121.

211—4 MUSIC HISTORY/LITERATURE. Development of choral and instrumental music from the Renaissance to the present. Prerequisite: 111 or equivalent.

219—9(3,3,3) LYRIC DICTION. (a) French, (b) German, (c) Italian lyric diction utilizing solo vocal literature; emphasis on IPA, diacritical marks, vowels, consonants, semiconsonants, diphthongs, syllabification formal STYLE. May be taken in any sequence. Prerequisite: 125c.

221—3(1,1,1) CLASS APPLIED PIANO. Minimum instruction for passing piano proficiency examination required of all music concentrations. Must be taken in sequence.

222—1 UNIVERSITY BAND. May be repeated.

225—12(4,4,4) THEORY OF MUSIC. Advanced harmonic techniques, modulation, altered chords, chromatic harmony, counterpoint, introduction to contemporary harmonic principles. Must be taken in sequence. Prerequisite: 125c.

231—3(1,1,1) JAZZ KEYBOARD THEORY. Jazz harmonic structures, utilizing piano as means of expression and standard jazz tunes as practice materials. Must be taken in sequence. Prerequisites: 121c, 125c.

233—1 JAZZ LAB I. May be repeated. Prerequisite: consent of instructor.

240—2 or 4 PRIVATE APPLIED MUSIC. See 140.

241—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. See 141.

244—1 COMMUNITY CHORAL SOCIETY. May be repeated.

301—9(3,3,3) MUSIC EDUCATION. Teaching music: (a) grades K-6, (b) junior high school, (c) senior high school. May be taken in any sequence. For music concentration only.

309—9(3,3,3) ORCHESTRATION. Writing for orchestral instruments. Must be taken in sequence. Prerequisite: 225c.

311—4 TWENTIETH CENTURY MUSIC: THE CLASSICAL TRADITION. Major composers and musical works of the fine art tradition, seen in relationship to other important cultural events of the time.

312—9(3,3,3) COMPOSITION. Original composition in smaller forms. Must be taken in sequence. Prerequisite: 225c or consent of instructor.

318—6(3,3) CONDUCTING. (a) General fundamental conducting patterns, conducting experience, musical terminology. (b) Choral and instrumental conducing experience, rehearsal techniques, analysis of literature suitable for all levels of ability. Must be taken in sequence.

322—1 SYMPHONIC BAND. May be repeated. Prerequisite: by audition.

326—9(3,3,3) ANALYSIS. Important musical forms and styles. Must be taken in sequence. Prerequisite: 225c.

330—6(2,2,2) JAZZ IMPROVIZATION. Theory and techniques, functional harmony, melodic form, special scales, tune studies, ear training, development of style. Prerequisite: consent of instructor.

331—3(1,1,1) JAZZ KEYBOARD THEORY. Jazz harmonic structures, utilizing piano as means of expression and standard jazz tunes as practice materials. Must be taken in sequence. Prerequisite: 231c or consent of instructor.

333—1 JAZZ COMBO. May be repeated. Prerequisite: by audition.

337—4 ANALYSIS OF JAZZ STYLES. For music majors. Historical research, transcription and analysis of particular styles of jazz innovators. Prerequisite: 225c.

338—4 JAZZ. Jazz forms and styles: development, illustrations, performance. Prerequisite: 111.

340—2 or 4 PRIVATE APPLIED MUSIC. See 140.

341—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. See 141.

355—4(1,1,1,1) CHAMBER MUSIC ENSEMBLES. (a) Brass, (b) Woodwinds, (c) Strings, (d) Percussion. May be taken in any sequence. Any part may be repeated for 12 quarters. Prerequisite: consent of instructor.

357—9(3,3,3) MUSIC HISTORY AND LITERATURE. Prerequisite: 211.

365—1 PIANO ENSEMBLE. Piano four hands, two pianos; piano and voice; piano and other instruments. May be repeated for credit at discretion of instructor.

377—1 UNIVERSITY SYMPHONY ORCHESTRA. May be repeated. Prerequisite: by audition.

395—9(3,3,3) MUSIC MERCHANDISING. Copyright law, published music, teaching of music, recorded music, performed music, musical instrument manufacturing, musical reproducing instruments, music store, non-commercial music and musical promotion. May be taken in any sequence. Prerequisite: junior standing.

401—3 PSYCHO-PHYSIOLOGY OF MUSIC. Human capacities, their relationship to musical potentials and development. Acoustical foundations of music.

409—6(2,2,2) JAZZ ARRANGING. Basic skills in arranging music for combo, big band, studio orchestra. Rhythmn section continuity, orchestration, stylistic variety, tension and release. Writing project required for each section. NOT FOR GRADUATE CREDIT. Prerequisite: 231c or consent of instructor.

411—12(3,3,3,3) MUSIC LITERATURE. (a) Symphonic literature to 1900. (b) Choral literature to 1900. (c) Chamber music literature, Renaissance to present. (d) Special areas. Study of period, composer, style, or medium.

412—9(3,3,3) COMPOSITION. Original composition in larger forms for various media. Must be taken in sequence. Prerequisite: 312c or consent of instructor.

413—9(3,3,3) PIANO LITERATURE. Repertory for piano; teaching techniques of such literature. Taught in sequence. May be repeated to maximum of 9 hours so long as no topic is repeated. Prerequisite: 340k.

420—1 MUSIC EDUCATION PRACTICUM. Shop laboratory course. Selection, adjustments, maintenance, and repair of musical instruments.

422—1 WIND ENSEMBLE. May be repeated. Prerequisites: by audition, concurrent enrollment in 222 or 322.

430—6(3,3) ADVANCED IMPROVIZATION. Variety of jazz structures. Real-time composition and Leonard Meyer analytical approach. Students should know principles of note selection, time-feel, phrasing and articulation as developed in 330. NOT FOR GRADUATE CREDIT. Prerequisite: 330c or equivalent.

433—1 CONCERT JAZZ BAND. May be repeated. Prerequisite: by audition.

436—3 JAZZ EDUCATION. Teaching jazz at elementary, secondary, and college levels, both group and individual instruction. Prerequisite: consent of instructor.

440—2 or 4 PRIVATE APPLIED MUSIC. See 140.

441—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. See 141. NOT FOR GRADUATE CREDIT.

442—9(3,3,3) COUNTERPOINT. (a) Sixteenth century; (b) Eighteenth century; (c) Larger contrapuntal forms with emphasis on fugue. Prerequisite: 225c.

444—1 CONCERT CHORALE. May be repeated. Prerequisite: by audition.

451—3 TEACHING GENERAL CLASSROOM MUSIC.

455-2 to 6 ELEMENTARY MUSIC EDUCATION WORKSHOP.

460—6(2,2,2) PRACTICUM IN OPERA. Skills, techniques, and literature used in performance and production of operatic scenes, chamber operas, and operettas. Prerequisites: by audition, six hours in applied theater.

461—9(3,3,3) TEACHING TECHNIQUES AND MATERIALS. (a) Methods, (b) Materials, (c) Observation and teaching. Problems of private studio teaching and college-level teaching. Must be taken in sequence. Prerequisite: 340k.

465—3 DEVELOPMENT AND TEACHING OF STRINGS. String education in elementary and secondary schools. Techniques of heterogeneous and homogeneous string teaching. Resource aids. May be repeated for a total of 9 hours credit. Prerequisite: senior standing.

477—1 CHAMBER ORCHESTRA. May be repeated. Prerequisite: by audition.

481—1 to 3 READINGS IN MUSIC THEORY.

483—1 to 3 READINGS IN MUSIC EDUCATION.

495—16 SUPERVISED INTERNSHIP IN MUSIC MERCHANDISING. Involves at least ten weeks of full-time work experience with music industry under supervision of faculty and/or person in music industry. NOT FOR GRADUATE CREDIT. Prerequisite: 395.

499—1 to 3 INDEPENDENT STUDY. The capable student engages in original investigation with faculty specialists. May be repeated for credit. Prerequisite: consent of instructor.

NURSING

151—2 PROFESSIONAL NURSING PERSPECTIVES. Historical approach to professional components of nursing with emphasis on assertiveness, client advocacy and autonomy. Prerequisite: R.N. licensure.

170—4 LIFE SPAN DEVELOPMENTAL CONCEPTS. Developmental study of man from conception to senescence. Physiologic, psychologic, and social development emphasized. Prerequisite: general psychology or consent of instructor.

201—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN MAINTAINING EQUILIBRATION I. Health maintenance aspects of client care. Focuses on concepts of environment interaction, metabolism, perception, coordination, immunity, inflammation, and oxygenation. School of Nursing conceptual framework studied. Prerequisites: admission to School of Nursing; concurrent enrollment in 211, 221, 231 and 241 is expected.

202—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN MAINTAINING EQUILIBRATION II. Biological, psychological and social concepts related to care of clients with stressors affecting reproductive status, perception, coordination, fluid and electrolyte dynamics, oxygenation. Prerequisites: completion of Quarter 5 nursing courses; concurrent enrollment in 212, 222, 232 and 242 is expected.

211—2 PROFESSIONAL NURSING PROCESSES: NURSING PROCESS I. Historical perspective of nursing process as framework for providing care. Phases of assessing, diagnosing, planning, implementing and evaluating. Prerequisites: admission to School of Nursing; concurrent enrollment in 201, 221, 231 and 241 is expected.

212—2 PROFESSIONAL NURSING PROCESSES: NURSING PROCESS II. Nursing process in providing care. Transcultural needs, nursing practice standards, strengths and limitations of professional nursing in relation to providing quality care. Prerequisites: completion of Quarter 5 nursing courses; concurrent enrollment in 202, 222, 232 and 242 is expected.

221—2 INTERPERSONAL RELATIONS I. Intra- and interpersonal systems and communication process. Effects of role behaviors. Factors affecting nurse-client relationship and nursing practice. Prerequisites: admission to the School of Nursing; concurrent enrollment in 201, 211, 231 and 241 is expected.

222—2 INTERPERSONAL RELATIONS II. Stress in relation to developmental, situational events and the defense, coping strategies used to accommodate. Nurse's role in preventing, alleviating stress. Prerequisites: completion of Quarter 5 nursing courses; concurrent enrollment in 202, 212, 232, 242 is expected.

231—1 PSYCHOMOTOR NURSING SKILLS I. Simple skills of client care; emphasis on maintaining client equilibration; practice in simulated clinical situations. Prerequisites: admission to School of Nursing; concurrent enrollment in, or completion of 201, 211, 221; concurrent enrollment in 241 is expected.

232—1 PSYCHOMOTOR NURSING SKILLS II. Moderately complex skills with emphasis on maintenance of client equilibration. Practice in simulated clinical situations. Prerequisites: completion of Quarter 5 nursing courses; completion or concurrent enrollment in 202, 212, 222; concurrent enrollment in 242 is expected.

241—2 NURSING MAINTENANCE PRACTICUM I. Strategies and simple skills needed to assist clients with health maintenance and coping with usual life stressors. Variety of experiences and settings utilized. Prerequisites: admission to School of Nursing; concurrent enrollment in, or completion of, other Quarter 5 nursing courses.

242—2 NURSING MAINTENANCE PRACTICUM II. Nursing skills to maintain client health when changes in reproduction, perception, coordination, fluid and electrolyte dynamics, or oxygenation occur. Variety of settings utilized. Prerequisites: completion of Quarter 5 nursing courses; completion of or concurrent enrollment in other Quarter 6 nursing courses.

301—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION I. Care of clients and their families in various stages of restorative health. Focus on pregnancy, infection, injury, surgical therapies, changes in female reproductive status. Prerequisites: completion of Quarter 6 nursing courses; Sociology 440; concurrent enrollment in 311, 331, 341 is expected.

302—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION II. Care of clients and their families in various stages of restorative health. Focus on immunity, inflammation, coordination, oxygenation. Prerequisites: completion of Quarter 7 nursing courses; Psychology 205; concurrent enrollment in 332, 342 is expected.

303—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION III. Care of clients and their families in various stages of restorative health. Focus on fluid and electrolyte balance, metabolism, proliferation of cells. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in 313, 333 and 343 is expected.

304—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION IV. Care of clients and their families in various stages of restorative health. Focus on disturbances in perception. Prerequisites: completion of

Quarter 9 nursing courses and Psychology 465; concurrent enrollment in 314, 324 and 344 is expected.

311—2 PROFESSIONAL NURSING PROCESSES: TEACHING-LEARNING. Components of teaching in nursing practice. Focus on assessment of learning needs, formulating teaching plans, evaluating health teaching. Prerequisites: completion of Quarter 6 nursing courses; concurrent enrollment in 301, 331 and 341 is expected.

313—3 PROFESSIONAL NURSING PROCESSES: MANAGEMENT I. Management theories, concepts, principles related to health care administration and nursing practice. Focus on decision making and problem solving in developing management skills. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in 303, 333 and 343 is expected.

314—2 PROFESSIONAL NURSING PROCESSES: MANAGEMENT II, THE MANAGEMENT OF CHANGE. Concepts and major theories of change. Explores need for management of change within health care system and professional nursing relationships. Prerequisites: completion of Quarter 9 nursing courses; concurrent enrollment in 304, 324 and 344 is expected.

324—2 INTERPERSONAL RELATIONS III. Group process in promoting, restoring, maintaining health. Group development theories. Leadership functions, strategies utilized in nurse/client relationships emphasized. Prerequisites: completion of Quarter 9 nursing courses and Psychology 465; concurrent enrollment in 304, 314 and 344 is expected.

331—2 PSYCHOMOTOR NURSING SKILLS III. Performance of assessment and restorative intervention skills. Focus on labor and delivery, neonate, emergencies, infection control, surgical therapies, female reproductive status. Prerequisites: completion of Quarter 6 nursing courses and Sociology 440; concurrent enrollment in, or completion of, 301 and 311; concurrent enrollment in 341 is expected.

332—2 PSYCHOMOTOR NURSING SKILLS IV. Performance of assessment and restorative intervention skills related to immunity, coordination, oxygenation. Prerequisites: Quarter 7 nursing courses and Psychology 205; concurrent enrollment in or completion of 302; concurrent enrollment in 342 is expected.

333—2 PSYCHOMOTOR NURSING SKILLS V. Performance of nursing assessment and restorative intervention skills. Focus on perception, fluid and electrolyte balance, metabolism. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in, or completion of, 303, 313; concurrent enrollment in 343 is expected.

341—3 NURSING RESTORATION PRACTICUM I. Changing families during intrapartum and postpartum periods. Care of clients facing infection, emergencies, surgery or change in female reproduction. Prerequisites: completion of Quarter 6 nursing courses and Sociology 440; concurrent enrollment in, or completion of, other Quarter 7 nursing courses.

342—3 NURSING RESTORATION PRACTICUM II. Skills with pediatric/adult clients experiencing disturbances in immunity, inflammation, coordination, oxygenation. Teaching/learning process and various professional role observation. Prerequisites: completion of Quarter 7 nursing courses and Psychology 205; concurrent enrollment in, or completion of, Quarter 8 nursing courses.

343—3 NURSING RESTORATION PRACTICUM III. Skills with pediatric/adult clients with disturbances in fluid/electrolyte balance, metabolism, cell proliferation. Various professional roles studied. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in, or completion of, other Quarter 9 courses.

344—3 NURSING RESTORATION PRACTICUM IV. Skills with clients experiencing perceptual difficulties using management principles, group process skills in selected settings. Prerequisites: completion of Quarter 9 nursing courses and Psychology 465; concurrent enrollment in, or completion of, other Quarter 10 nursing courses.

351—1 to 4 INDEPENDENT INQUIRY IN NURSING. Elective. An area of personal interest investigated through individually planned experiences with the guidance of instructor. May be repeated for a maximum of 8 credit hours. Prerequisites: Quarter 8 nursing courses; consent of instructor and level coordinator, application filed in School of Nursing.

352—4 UNDERGRADUATE NURSING INTERNSHIP. Elective. Further development of psychomotor, organizational and interpersonal relationship skills in clinical area with guidance of instructor/staff. Professional issues explored. Prerequisite: satisfactory completion of courses through Quarter 7 of the nursing curriculum.

354—4 LEGAL ASPECTS OF PROFESSIONAL NURSING PRACTICE. Elective. Indepth examination of legal responsibilities. Case law relevant to practice, teaching, management and research emphasized. Prerequisite: completion of Quarter 8 nursing courses.

356—2 NURSING INTERVENTIONS FOR CLIENTS WITH EKG AND HEMODYNAMIC MONITORING. Selected advanced measures related to critical care. Management of clients with dysrhythmias and hemodynamic alterations. Prerequisite: 302 or consent of instructor.

357—4 HEALTH ASSESSMENT. Basic skills required for taking comprehensive health histories, performing physical examinations and recording findings in adults and children. Prerequisite: consent of instructor.

358—4 HEALTH ASSESSMENT OF CLIENTS IN THE PEDIATRIC AGE GROUP. Pediatric clients, especially in school and health department settings. Emphasizes skills in assessment, interviewing, history taking. This course may be taken in addition to or independent of 357. Students will need to plan for reading, practice and preparation time outside of the classroom setting. Prerequisite: R.N. licensure.

361—4 CONCEPTUAL BASIS: HIGH-RISK MATERNAL/NEWBORN NURSING. Elective. Focuses on family members at risk before, during and after pregnancy and delivery. Application of current interventions in nursing education/practice. Prerequisites: generic students; completion of Quarter 7 nursing courses.

362—2 PRACTICUM: HIGH-RISK MATERNAL/NEWBORN NURSING. Clinical course in a variety of high risk maternal/newborn settings. Prerequisites: generic students; completion of Quarter 7 nursing courses; previous/concurrent enrollment in 361.

401—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN PREVENTING DISEQUILIBRATION I. Evaluating clients' health needs in the community to support health promotion and prevention. Focus on levels of prevention, epidemiology principles, and cultural variables affecting health. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 10 nursing courses; concurrent enrollment in 411 and 441 is expected.

402—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN PREVENTION OF DISEQUILIBRATION II. Health maintenance, restoration or promotion processes of communities. Optimum level of functioning and community social systems affecting health care. NOT FOR GRADUATE CREDIT. Prerequisite: completion of Quarter 11 nursing courses; concurrent enrollment in 412 and 442 is expected.

411—3 PROFESSIONAL NURSING PROCESS: RESEARCH. Introduction to research process and its importance to nursing practice. Identification of nursing research problem and strategies to test associated hypothesis(es) devised. Research critique done. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 10 nursing courses and STAT 107; concurrent enrollment in 401 and 441 expected.

412—2 PROFESSIONAL NURSING PROCESSES: CURRENT ISSUES. Expands and updates content from previous Professional Nursing Processes courses and gives students an opportunity to examine their own values, beliefs and attitudes. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 11 nursing courses; concurrent enrollment in 402 and 442 is expected.

441—3 PREVENTIVE NURSING PRACTICUM I. Nursing strategies emphasizing prevention used in care of clients in a variety of community settings. Promoting change in order to strengthen coping abilities emphasized. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 10 nursing courses; concurrent enrollment in, or completion of, other Quarter 11 nursing courses.

442—3 to 6 PREVENTIVE NURSING PRACTICUM II. Synthesizes concepts of prevention at all levels of health care. Focus on utilization of nursing processes in a variety of community settings. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 11 nursing courses; concurrent enrollment in, or completion of, other Quarter 12 nursing courses.

451—4 NURSING IMPLICATIONS OF DRUG INTERACTIONS AND CLIENT BIOPHYSICAL EQUILIBRATION. Elective. Explores pharmacologic classifications, drug interactions and side effects in relation to clients receiving multiple drugs. Nursing process and simulated cases utilized to plan care. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

452—4 COMPUTER APPLICATIONS IN NURSING. Computers in nursing with emphasis on the microcomputer to support nursing information-processing tasks. Prerequisite: introductory course in computers or equivalent experience or consent of instructor.

461—4 CONCEPTUAL BASIS FOR ASSISTING THE SERIOUSLY DISTURBED AND CHRONICALLY MENTALLY ILL CLIENT IN PREVENTING DISEQUILIBRATION. Maintenance, restoration and tertiary prevention of seriously disturbed and chronically mentally ill. Prerequisites: Level III nursing students; Phase II of R.N. track; graduate level major in nursing; psychology or counselor education major.

462—8 INTERNSHIP IN CARE OF CHRONICALLY MENTALLY ILL CLIENTS. Opportunity to provide appropriate and innovative care to seriously disturbed and/or chronically mentally ill clients. NOT FOR GRADUATE CREDIT. Prerequisites: Level III nursing student; admission to Phase II of R.N. track; concurrent enrollment in 461.

495—4 PRIMARY PREVENTION IN COMMUNITY MENTAL HEALTH NURSING. Reducing new incidences of mental disorders, disabilities through examination of selected inner city, rural populations. Students implement short term primary prevention programs. Prerequisite: senior or graduate level nursing major.

OFFICE INFORMATION SYSTEMS

150—4 KEYBOARDING AND TYPING. Beginning keying skills for data entry and typewriting plus concepts for basic correspondence and manuscripts.

152—4 REPORT FORMATTING. Keying skills with emphasis on formatting basic correspondence and manuscripts. Prerequisite: 150 or typing speed of 30 WPM.

250—4 WORD PROCESSING CONCEPTS AND OPERATIONS. Theory and applied concepts plus analysis and skill development in machine use. Prerequisite: 150 or typing speed 30 WPM (minimum).

350—4 ADVANCED WORD PROCESSING AND OFFICE PRACTICE. Applied operations and implementation of clerical concepts into office applications. Prerequisite: 250 (minimum grade B).

OPERATIONS RESEARCH

440—4 OPERATIONS RESEARCH — DETERMINISTIC MODELS. (Same as IE 440.) Linear programming, problem formulation, simplex algorithm, transportation and assignment problems, duality theory and its economic interpretation, application of L.P. models to industrial problems, sensitivity, dynamic programming. Prerequisite: knowledge of FORTRAN, MATH 260c, or consent of instructor.

441—4 OPERATIONS RESEARCH — STOCHASTIC MODELS. (Same as IE 441.) Probabalistic models, elementary queing theory with single or multiple server systems, use of queues in the facility designs, elementary decisions theory. Markov processes and decision making. Prerequisite: STAT 380 or STAT 480a.

442—4 OPERATIONS RESEARCH — SIMULATION. (Same as IE 442.) Inventory theory, simulation models, generation of random variables, discrete event simulation using GPSS, continuous event simulation using CSMP. Prerequisite: STAT 380 or STAT 480a.

495—1 to 6 INDEPENDENT STUDY. Research and reading in specified area of interest such as mathematical programming, dynamic programming, simulation, queueing theory, Markov processes, inventory and production control. May be repeated to a total of 12 hours. Prerequisite: consent of adviser and instructor.

PHILOSOPHY

106—4 CRITICAL THINKING. Study and practice of critical thinking and correct problem-solving methods. Organizing information; analyzing meaning; developing correct arguments; detecting fallacies; using effective methods of investigation.

111—4 INTRODUCTION TO PHILOSOPHY. Traditional branches and problems of philosophy, including metaphysics, theory of knowledge, and ethics.

115—4 CONTEMPORARY MORAL ISSUES. Identification and clarification of arguments employed for and against positions on controversial ethical issues such as abortion, euthanasia, pornography; techniques for critical and fair evaluation.

120—4 RELIGION, REASON AND HUMANITY. Different views of religious dimension in human experience; rationality of belief and non-belief.

230—4 INTRODUCTION TO DEDUCTIVE LOGIC. Formal techniques for analyzing correct deductions. Propositional, syllogistic, class, and predicate logic with quantifiers; applications to philosophic problems.

283—4 THE NATURE AND IMPACT OF PHYSICAL SCIENCE. Investigation of physical science as a discipline, and of its importance for individuals and society; relationship to social science.

284—4 THE NATURE AND IMPACT OF SOCIAL SCIENCE. Investigation of social science as a discipline, and of its importance for individuals and society; relationship to physical science.

300—4 METAPHYSICS. Problems such as personal identity, mind-body relationship, causality, the nature of reality.

301—4 PHILOSOPHY OF RELIGION. Problems in the epistemology, metaphysics, psychology and sociology of religion. Questions about divine existence, mystical experience, human suffering, immortality.

302—4 WORLD RELIGIONS. Historical and comparative study; particular attention to such non-Christian faiths as Hinduism, Buddhism, Confucianism, Taoism and Islam.

306—4 EXISTENTIALISM AND PHENOMENOLOGY. Representative thinkers of two related movements in contemporary continental philosophy, such as Husserl, Heidegger, Sartre, Merleau-Ponty, and Ricoeur. Prerequisite: sophomore standing.

307—4 PRAGMATISM. Representative thinkers of this contemporary perspective on life, reality, and American culture, such as Peirce, James, Dewey, Mead.

308—4 TWENTIETH CENTURY ANALYTIC PHILOSOPHY. Representative thinkers of one significant movement in Anglo-American philosophy, such as Moore, Russell, Ryle, Wittgenstein, and others. Prerequisite: sophomore standing.

310—4 PHILOSOPHY OF LAW. Basic theories of law and discussion of legal problems in contemporary society, such as rights, justice, responsibility, and punishment.

311—4 ENGINEERING, ETHICS, AND PROFESSIONALISM. Issues arising in and affecting professional engineering. Safety assessment, liability, codes, employer-employee relationships, alleged special responsibilities to protect the public. Prerequisite: junior standing.

312—4 ETHICS IN THE MEDICAL COMMUNITY. Topics include procreative decisions, euthanasia, experimentation on human subjects, truth-telling in professional-patient relationships, consumer protection in health-delivery systems.

320—4 PHILOSOPHICAL CONCEPTIONS OF WOMAN. Theories of the nature and role of women as expounded by philosophers past and present. Prerequisite: junior standing.

321—4 SOCIAL PHILOSOPHIES OF THE WOMEN'S MOVEMENT. Social philosophy from a feminist perspective. Major theoretical works of the women's movement. Prerequisite: WmSt 200 strongly recommended.

322—4 ETHICS. Basic problems in deciding how humans ought to act; discussions of individual and social morality.

342—4 SOCIAL AND POLITICAL PHILOSOPHY. Philosophical problems of social and political theory and conduct. Prerequisite: sophomore standing.

345—4 THE AESTHETICS OF FILM. Film theory, criticism, and major genres of film. Prerequisite: sophomore standing or consent of instructor.

360—4 PHILOSOPHY OF ART. Significance of art as human activity; nature and standards as evidenced in problems of criticism; relation of art to theory of knowledge.

380—4 CHINESE PHILOSOPHY. Historical development from Confucius and Lao Tzu to Mao Tze-Dong.

385—20(4,4,4,4,4) HISTORY OF WESTERN PHILOSOPHY. (a) Greek and Roman. Pre-Socratics, Socrates, Plato, Aristotle, Epicureanism, Stoicism, Skepticism, Plotinus. (b) Medieval and Renaissance. Major Christian and Jewish thinkers; Neo-Platonism; Aristoteleanism; rise of science. (c) Classical Modern (17th and 18th centuries). Bacon and Hobbes; rationalists such as Descartes, Leibniz and Spinoza; empiricists such as Locke, Berkeley and Hume; Kant. (d) 19th century. Kant and post-Kantians; Hegel and Hegelianism; Marx; Kierkegaard; Nietzsche; Mill; the Idealists. (e) 20th century. Phenomenological movement; analytic movement; pragmatism; process philosophy.

386—4 AMERICAN PHILOSOPHY. Major thinkers and movements; e.g., Puritanism, revolution and democracy, transcendentalism, pragmatism, Royce, Santayana, Whitehead. Contemporary criticism.

388—4 COMMUNISM. Modern theories such as those of Marx, Engels, Lenin, Stalin, Mao. Prerequisite: junior standing.

391—4 THEORY OF KNOWLEDGE. Kinds of knowledge; foundation in thought and perception; rational and empirical elements constituting the structure of knowledge.

402—4 HINDU THOUGHT. Indian philosophy from the Upanishads to Vedanta. Prerequisite: 302.

403—4 BUDDHIST THOUGHT. Buddhist philosophy from Theravada through Zen. Prerequisite: 302.

412—4 CONTEMPORARY ISSUES IN BIO-ETHICS (Same as Biology 412). Moral issues in the life sciences including recombinant DNA research, genetic screening, genetic testing, eugenics and population control, in vitro fertilization, and cloning. Prerequisite: consent of instructor.

430—4 SYMBOLIC LOGIC. Symbols as tools for analysis and deduction; truth tables, Boolean expansions, propositional calculus and quantifiers, logic of relations; logistic systems.

470—4 TOPICS OF BUSINESS ETHICS. Ethical issues arising within the economic and business framework; emphasis on decisions confronting the manager. Attention to the problem of corporate responsibility.

484—12(4,4,4) HISTORY OF WESTERN POLITICAL THEORY. (Same as Political Science 484.) (a) Ancient and Medieval. Plato, Aristotle, Stoics, St. Augustine, and St. Thomas. (b) Renaissance and Early Modern. Machiavelli, Hobbes, Locke, Montesquieu and Rousseau. (c) Recent. Nineteenth and twentieth centuries including liberalism, socialism, communism, conservatism, and fascism. Each course in series may be taken separately. Prerequisite: junior standing or higher.

490—2 to 6 SPECIAL PROBLEMS. Seminar for qualified seniors and graduate students to pursue specific topics in depth. Varied content. May be repeated to a maximum of 16 hours so long as no topic is repeated. Prerequisite: consent of instructor.

495—2 to 6 INDEPENDENT READINGS. Independent study on a tutorial basis. May be repeated to a maximum of 12 hours. Prerequisites: consent of instructor and department chairperson.

PHYSICAL EDUCATION

112—1 BASIC BODY MOVEMENT. Skill patterns including locomotor, stability and manipulative concepts.

113—3(1,1,1) PHYSICAL FITNESS. (a) Movement activities designed to achieve flexibility, strength, muscular and aerobic endurance. (b) Aerobic dance activities. Level one. (c) Aerobic activity. Jogging and distance running.

114—1(1 per activity) INDIVIDUAL AND TEAM ACTIVITY. (c) Basketball, (j) Softball, (n) Cross Country, (r) Racquetball, (u) Wrestling, (x) Handball.

115—3(1,1,1) RESTRICTED PHYSICAL EDUCATION. Individual exercise and movement activity prescriptions based on student's limitations, needs and goals.

116—2(1,1) SWIMMING. (a) Beginning swimming: water adaptation and basic swimming skills. (b) Intermediate swimming: stroke variation, refinement of skills and aquatic endurance. Prerequisite: (b) 116a, entry level testing, or consent of instructor.

116d—1 LIFE SAVING AND WATER SAFETY. Theory and practice of techniques. Prerequisites: proficiency test, preliminary swimming.

117—5(1,1,1,1,1) DANCE. (a) Square, (b) Folk, (c) Social, (d) Beginning Contemporary, (g) Modern Jazz Dance.

118—1(1 per activity) INDIVIDUAL AND TEAM ACTIVITY. (a) Archery, (b) Badminton, (d) Bowling, (e) Golf, (f) Billiards, (h) Tennis, (i) Volleyball, (l) Sailing, (m) Fencing, (r) Stunts and Tumbling, (s) Gymnastics, (w) Track and Field, (z) Recreational Sports.

200—2(2 per activity) SELECTED FITNESS ACTIVITIES. Formats designed to reflect recent trends; flexibility, strength, muscle and aerobic endurance are emphasized; individualized programs. 12 credit hour maximum; type of format or level must not be repeated.

300—10(2,2,2,2,2) TECHNIQUES FOR MEN AND WOMEN. (b) Tumbling and Gymnastics, (f) Archery and Flag Football, (g) Fitness and Track and Field, (h) Basketball and Tennis, (i) Volleyball and Golf. Prerequisite: declared major in physical education or consent of instructor.

301—8(2,2,2,2) TECHNIQUES FOR MEN AND WOMEN. (a) Soccer and Field Hockey, (g) Modern Dance, (h) Softball and Wrestling, (i) Bowling and Field Sports. Prerequisite: declared major in physical education or consent of instructor.

302—8(2,2,2,2) TECHNIQUES FOR MEN AND WOMEN. (a) Basic Rhythms, Folk Dancing and Square Dancing, (e) Beginning and Intermediate Swimming, (f) Advanced Swimming and Senior Life Saving, (g) Fencing and Badminton. Prerequisite: primary or secondary concentration in physical education.

303—8(4,4) HOMOKINETICS. (a) Structural and functional basis of human performance. (b) Mechanics applied to physical performance; analysis of selected motor activities; application to the instructional process. Prerequisites: (a) course in general biology; (b) 303a, four activity courses.

304a—4 BASIC CONCEPTS OF PHYSICAL EDUCATION. History, principles and scientific bases of the profession; career options. Prerequisite: concurrent enrollment in 304b.

304b—2 BASIC CONCEPTS OF MOVEMENT. Activity format providing a wide variety of physical education skills; skill learning theory and instructional process stressed. Prerequisite: concurrent enrollment with 304a.

305—4 PHYSICAL EDUCATION FOR THE ATYPICAL STUDENT. Design and assessment strategies to meet movement activity needs of special students; essential curricular considerations. Prerequisite: 303a.

323—3(1,1,1) OFFICIATING TECHNIQUES. Rules and interpretations; national sport organization rating requirements; officiating practice required. (a) Fall: field hockey and soccer. (b) Winter: basketball. (c) Spring: volleyball and softball.

350—4 METHODS AND MATERIALS FOR TEACHING PHYSICAL EDUCATION ACTIVITIES IN THE ELEMENTARY SCHOOL. Planning, conducting and evaluating the program; fitness, game, rhythm, sport and movement activities; applied theory instructional format utilized. (Required for elementary education.)

382—4 METHODS AND MATERIALS FOR TEACHING SECONDARY PHYSICAL EDUCATION. Planning, conducting and evaluating the program; teacher effectiveness and instructional process studied and practiced; design, organization and administration of the curriculum. Prerequisite: six 300-level activity courses.

383—3 OUTDOOR AND INDOOR GROUP GAMES. Selection and implementation of developmentally appropriate games, sport lead-up activities and movement skills for elementary children.

384—2 RHYTHMICAL ACTIVITIES. Movement skill developed via rhythmical patterns; teacher effectiveness and instructional process strategic to develop and refine rhythmic skills in all phases of rhythms program. Prerequisite: 302a or equivalent.

387—2 DEVELOPMENTAL SKILLS. Movement skill activities essential to the child; motor development and learning theories impact on activity selection and teaching process; skill analysis related to improved instruction. Prerequisite: consent on instructor.

388—2 SELF-TESTING ACTIVITIES. Fitness and movement challenges for the elementary child. Task design and evaluation concepts related to apparatus and skill pattern development.

389—2 to 6 AFFILIATION IN PHYSICAL EDUCATION. Observing and assisting instructor in planning and conducting a physical education program by working in area schools. Repeat up to 6 hour credit maximum. Prerequisite: consent of instructor.

390—2 EVALUATION TECHNIQUES IN THE ELEMENTARY SCHOOL PHYSICAL EDUCATION PROGRAM. Methods and concepts in measuring a child's growth and development and physical fitness index; analyzing skill tests and their applications. Prerequisite: 350.

400—16(2,2,2,2,2,2,2,2) COACHING. Advanced theory and practice of skills, strategies, conditioning, organization, and administration of interscholastic (a) soccer, (b) baseball, (c) basketball, (d) wrestling, (e) cross country, (f) track and field, (g) golf, (h) tennis. Prerequisite: related activity course.

402—4 ORGANIZATION AND ADMINISTRATION OF INTRAMURAL AND EXTRAMURAL ACTIVITIES. Planning intramural programs of sports. Planning and coordinating extramural activities commonly associated with physical education.

404—4 WORKSHOP IN DANCE FOR IN-SERVICE TEACHERS. History of dance; values of dance; interpretation of music; teaching techniques and facilities; knowledge and command of dance skills.

410—4 ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION PROGRAMS. Administrative process; analysis of resources; policies and procedures; line and staff relationships; budget and finance; facility use; legal considerations. Prerequisite: consent of instructor.

420—4 PHYSIOLOGICAL EFFECTS OF MOTOR ACTIVITY. Structure and function of muscular and other body systems; guidelines related to levels of stress, body responses and type of motor activity. Prerequisite: 303a or equivalent.

425—4 CARE AND PREVENTION OF ATHLETIC INJURIES. Conditioning techniques to minimize injuries; athletic training techniques to identify and utilize appropriate treatment modalities for sport related injuries. Prerequisite: 303a or equivalent.

427—4 PHYSICAL EDUCATION AND RECREATION FOR THE HANDICAPPED. (Same as Special Education 427.) Characteristics of handicapped children. Values of specific activities for certain types of children; methods and materials for teaching physical education and recreation skills.

470—4 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION. Design and analyze tests for the learning domains; determining criteria for student evaluation. Prerequisite: six 300-level activity courses.

473—4 THEORY OF COACHING. Principles and theory of coaching interscholastic athletics. Psychology of coaching, organization and selection of teams, training techniques and coaching methods.

476—2 to 4 TEACHING ATHLETIC SKILLS. Modern techniques of teaching skills, conditioning, and strategies in activities such as basketball, golf, gymnastics, soccer, tennis, track and wrestling. Maximum of 12 credit hours; no activity may be repeated.

490—1 to 4 SELECTED TOPICS IN APPLIED PHYSICAL EDUCATION AND SPORT. Theory and practice in topical areas such as exercise physiology, biomechanics, skill teaching, facility and sport management, and sociology and psychology of sport. 12 credit hour maximum; limited by program requirements; topics may not be duplicated. Prerequisite: consent of instructor.

499—2 to 4 INDIVIDUAL RESEARCH. Selection, investigation, and writing of research paper under supervision of instructor.

PHYSICS

111—4 CONCEPTS OF PHYSICS. Motion, matter, electricity, magnetism, and the atom. No special mathematical preparation assumed.

206—15(5,5,5) COLLEGE PHYSICS. Designed to meet premedical requirements and the needs of students majoring in the biological sciences. (a) Mechanics. (b) Heat; waves and sound; electrostatics. (c) Circuits; magnetism; electromagnetic waves; optics; modern physics. Includes weekly 2-hour laboratory. Prerequisites: (a) MATH 120; (b) 206a; (c) 206b.

211—12(4,4,4) UNIVERSITY PHYSICS. Calculus-based course designed to meet needs of engineering and physical science students. (a) Kinematics; dynamics; planar motion; work and energy; momentum; rotational motion. (b) Oscillations; gravitation; fluids; waves and sound; electric charge; electric fields; Gauss' law; potentials. (c) Circuits; magnetic fields; electromagnetic waves; geometrical and physical optics. Prerequisites: (a) MATH 150b or concurrent enrollment; (b) 211a; (c) 211b.

212—2(1,1) INTRODUCTORY PHYSICS LABORATORY. Physical measurements; data analysis and presentation; error analysis. (a) Velocity; acceleration; moments; potential, kinetic, and heat energy; simple harmonic motion. (b) Additional experiments in classical mechanics; electromagnetism; electrical measurements; simple circuits; optics. Prerequisites: (a) 211b or concurrent enrollment; (b) 212a, 211c or concurrent enrollment.

302—8(4,4) MODERN PHYSICS. A continuation of the University Physics sequence. (a) Thermodynamics; special relativity; photoelectric effect; Planck's radiation theory; Compton effect. (b) Matter waves; uncertainty principle; Schroedinger solutions for confined particles; hydrogen atom; atomic, nuclear, and solid state physics. Prerequisites: 211c, MATH 260a; (b) 302a.

304—4 THERMODYNAMICS AND KINETIC THEORY. Classical thermodynamics and applications including Gibbs-Helmholtz theory of Phase transitions; introduction to kinetic theory. Prerequisite: 302a.

308—8(4,4) INTRODUCTION TO CLASSICAL MECHANICS. (a) Newtonian particle mechanics including oscillations and damping, noninertial frames, central forces. (b) Many-particle systems; rigid bodies; Lagrangians and Hamiltonians; normal coordinates; other selected topics. Prerequisites: (a) 211c, MATH 260a; (b) 308a.

310—4 PHYSICAL OPTICS. Interference and interferometers; Fresnel and Fraunhofer diffraction; polarization; Fresnel's equations; crystal optics; dispersion; quantum optics; electro-optical scattering; lasers. Prerequisites: 211c, MATH 260a.

312—2(1,1) INTERMEDIATE PHYSICS LABORATORY. Continuation of 212. (a) Physical and geometrical optics; thermodynamics; introductory experiments in modern physics. (b) Additional experiments in modern physics: photoelectric effect; measurement of e/m; Millikan oil drop experiment; half-life of radioactive isotopes; Frank-Hertz experiment. Prerequisites: (a) 212b, 302a or concurrent enrollment; (b) 312a, 302b or concurrent enrollment.

320—4 SPECIAL RELATIVITY. Michelson-Morley experiment; Lorentz transformation; relativistic notions of space and time; relativistic kinematics and dynamics; relativistic view of electricity and magnetism. Prerequisite: 302a.

350—4 ENERGY AND THE ENVIRONMENT. Problems and prospects of meeting national and worldwide energy demands. Scientific background, role, and environmental impact of fossil fuel, nuclear, solar, geothermal, and other technologies.

351—4 PHYSICS OF MUSIC AND ACOUSTICS. Vibrations; nature and propagation of sound waves; musical pitch and intervals; tone quality, analysis, and synthesis; instruments; speech; ears and hearing; psychological aspects; other topics.

352—4 PHYSICS OF MODERN SOUND REPRODUCTION. Equipment and principles of operation: speakers; microphones; amplifiers; tuners; magnetic and optical recording. Includes a 2-hour laboratory meeting every other week.

355—4 LIGHT AND COLOR. Nature of light; ray and wave phenomena; optical devices; the eye; color theory; lasers and holography; applications to art, photography, and other visual media.

356—4 ASTRONOMY. Introduction to astronomical observation; time and seasons; light and telescopes; planetary motion; solar system; stellar structure, classification, and evolution; star clusters, nebulae, and galaxies; cosmology. Supplemented by weekly night viewing sessions.

375—1 SEMINAR. Selected topics in theories and applications. May be repeated to a maximum of 3 hours; graded on a Pass/No Credit basis only. Prerequisite: consent of instructor.

390—1 to 4 PHYSICS HONOR PROJECT. Advanced project. Prerequisites: 308b, 405b, invitation from physics faculty member.

404—4 INTRODUCTION TO STATISTICAL MECHANICS. Phase space; ensemble theory; classical and quantum statistics with applications. Prerequisites: 304, 308b.

405—8(4,4) INTRODUCTION TO ELECTROMAGNETIC FIELD THEORY. Vector treatment of the theory: (a) Electrostatics in vacuum and in matter; steady currents. (b) Magnetism; magnetic materials; electromagnetic radiation. Prerequisites: (a) 308b or concurrent enrollment; (b) 405a.

415—8(4,4) WAVE MECHANICS AND ATOMIC PHYSICS. (a) Foundations of quantum mechanics: wave functions; expectation values; operators; Schroedinger equation; simple applications including step potentials and harmonic oscillator; perturbation theory. (b) Topics in atomic and molecular systems: angular momentum; electron spin; hydrogen atom; atomic transitions and spectra; exclusion principle; multi-electron atoms; molecular structure. Prerequisites: (a) 302b, MATH 305; (b) 415a.

417—4 NUCLEAR PHYSICS. Applications of wave mechanics to the study of the atomic nucleus: scattering theory; nuclear forces; nuclear models; nuclear reactions. Prerequisite: 415b.

418—2 ADVANCED PHYSICS LABORATORY. Experiments chosen from solid state physics, optical spectroscopy, nuclear spectroscopy; work with lasers and optical detectors. May be repeated to a maximum of 4 hours provided no experiment is repeated. Prerequisites: 302b, 312b.

419—4 INTRODUCTION TO THEORETICAL PHYSICS. Mathematical techniques in theoretical physics: vectors; tensors; matrices; differential equations; special functions; other selected topics. Prerequisites: 302b, MATH 305.

420—2 to 4 SPECIAL EXPERIMENTAL PROJECT. Individual experimental investigation of a topic to be agreed upon with instructor. May be repeated to a maximum of 6 hours. Prerequisites: 308b, 405b.

421—2 to 4 SPECIAL THEORETICAL PROJECT. Individual investigation of a topic to be agreed upon with instructor, using mathematical techniques and often involving systematic library research and computer use. May be repeated to a maximum of 6 hours. Prerequisites: 308b, 405b.

450—4 INTRODUCTION TO SOLID-STATE PHYSICS. Crystal structure and binding; lattice vibrations; thermal properties; electronic states; energy band theory; other selected topics. Prerequisite: 415a.

480—2 to 4 SELECTED TOPICS IN PHYSICS. Classroom instruction in a topic of special interest not covered in other undergraduate courses. May be repeated to a maximum of 8 hours provided that no topic is repeated. Prerequisite: consent of instructor.

POLITICAL SCIENCE

111—4 INTRODUCTION TO POLITICAL SCIENCE. Institutional, behavioral, ideological comparisons of major types of political systems and processes; approaches and systems.

112—4 AMERICAN NATIONAL GOVERNMENT AND POLITICS. Principles and practices of American political systems, constitutions, governmental institutions, political parties, interest groups, and elections. Public participation, resultant policies. Meets state Constitution requirement.

201—2 POLITICAL TOPICS. One important, contemporary issue/problem from perspectives of political science. Designed for non-majors; does not count toward major or minor in Political Science.

301—2 POLITICAL SCIENCE TOPICS. Single political topic that falls outside or overlaps regular course boundaries. May be repeated once. Prerequisite: 111 or 112.

320—4 INTRODUCTION TO PUBLIC ADMINISTRATION. Processes and problems of managing government agencies; political context, policy impact; effects of bureaucratic organization; managing personnel and finances; evaluating administrative effectiveness; controlling bureaucratic discretion. Prerequisite: 111 or 112.

321—1 to 6 READINGS IN GOVERNMENT. Individualized instruction through specialized reading program designed jointly by instructor and student. Normal assignment 1000 pages per credit hour; specific requirements determined prior to registration. For majors and minors only. Prerequisites: 111, 112, consent of instructor.

330—4 ILLINOIS GOVERNMENT. Historic, social, political context; government institutions, political parties, public agencies, regional rivalries as elements of state level political system. Prerequisite: 112.

340—12(4,4,4) AMERICAN POLITICAL INSTITUTIONS. (a) The Presidency: Presidential powers and responsibilities; political, legal, constitutional, administrative. Evolution of presidency; its relationships to Congress and Judiciary. Impact on political system. (b) The Legislature: Legislative organization and processes, past and present; Constitutional responsibilities and political dynamics. Impact on political system. (c) The Judiciary: Development, organization, and operation of federal court system. Roles and powers of courts, judges, juries, and prosecutors. Each course in series may be taken separately. Prerequisite: 112 or consent of instructor.

342—4 ISSUES IN AMERICAN PUBLIC POLICY. Domestic public policy, emphasis on substantive results. Poverty, civil rights, education, regulation of business, labor, agriculture.

343—4 AMERICAN STATE GOVERNMENTS. Comparative survey; historic and cultural influences; role of parties, interest groups, legislatures, governors, and courts; impact on provision of state services. Prerequisite: 112 or consent of instructor.

344—4 LOCAL GOVERNMENT IN THE UNITED STATES. Structure, functions, and problems; historic and cultural development; local power structures; the urban crisis and local government response. Prerequisite: 112 or consent of instructor.

345—8(4,4) AMERICAN POLITICAL PARTY SYSTEMS. (a) Historical Development: Evolution of political party systems; features of systems; causes and consequences of changes. (b) Contemporary Political Parties and Interest Groups: Their interrelationships and impact on the political system; recent changes. Each course in series may be taken separately. Prerequisite: 112 or consent of instructor.

350—8(4,4) POLITICAL SYSTEMS OF MAJOR EUROPEAN STATES. (a) Britain, France, West Germany: Comparative analysis; historical development, constitutional foundations, political cultures; governmental processes, political participation and dynamics; problems and prospects. (c) Soviet Union: Historical development, political culture, governmental processes, political participation; problems and prospects. Each course in series may be taken separately. Prerequisite: 111 or consent of instructor.

355—8(4,4) POLITICAL SYSTEMS OF MAJOR NON-EUROPEAN STATES. (a) Latin America: Selected political systems: historical context, political culture, governmental processes, political participation; problems and prospects. (b) Asia: Chinese, Japanese, Indian and Indonesian political systems: historical context, political cultures, governmental processes, political participation; problems and prospects. Each course in this series may be taken separately. Prerequisite: 111 or consent of instructor.

370—4 INTRODUCTION TO INTERNATIONAL RELATIONS. Past and contemporary nation-state system; foreign policy behavior and processes; power, national interests; war; international law, organizations, economy; global problems and prospects. Prerequisite: 111 or consent of instructor.

385—4 INTRODUCTION TO POLITICAL THEORY. Basic concepts of political theory (e.g., justice, liberty, equality); forms of political systems; ideas of major political theorists. Prerequisite: 111 or consent of instructor.

386—4 AMERICAN POLITICAL IDEAS AND THEIR ORIGINS. Sources of contemporary political ideas; colonial, revolutionary, and constitution-building periods; era of democratization, industrialization and civil war. Prerequisite: 111 or 112 or consent of instructor.

410—4 INTERMEDIATE SOCIAL STATISTICS. (Same as Sociology 410.) Descriptive and inferential statistical techniques with computer applications. Graphic presentation; central tendancy and dispersion; association. Prerequisite: Sociology 310, its equivalent, or consent of instructor.

411—4 ADVANCED SOCIAL STATISTICS. (Same as Sociology 411.) Multivariate techniques; factor analysis, analysis of covariance, multiple regression, path analysis, and models. Prerequisite: 410 or consent of instructor.

422—4 PUBLIC FINANCIAL ADMINISTRATION. Budget as statement of national priorities; political, organizational, and personal influences; agency, executive, and legislative roles; sources of budget growth; attempts at reform and control. Prerequisite: 320 or consent of instructor.

424—4 ADMINISTRATIVE LAW. Principles of administrative law in United States; extent of, and limitations on, powers of government regulatory agencies.

425—4 CONSTITUTIONAL LAW AND THE MASS MEDIA. First amendment: free speech, assembly, mass media; libel, invasion of privacy, prior restraint and right of access.

426—4 PUBLIC ADMINISTRATION AND PUBLIC POLICY FORMATION. Role of administrative agencies in formulation, implementation of public policies; impact of organization; sources, effects of bureaucratic power; exercise, control of bureaucratic discretion. Prerequisite: 320 or consent of instructor.

429—2 to 4 TOPICS IN PUBLIC ADMINISTRATION. Selected administrative problem or process; content may vary

from quarter to quarter. Primarily for advanced undergraduates and graduates; may be repeated for a total of 8 hours. Prerequisites: 320 or consent of instructor.

442—4 POLITICS IN METROPOLITAN AREAS. Government and politics in metropolitan areas; problems facing urban governments; forces shaping solutions; strategies for producing change in urban arena. Prerequisite: 112 or consent of instructor.

445—8(4,4) AMERICAN POLITICAL BEHAVIOR. (a) Voting Behavior: Political-legal, sociological, psychological bases; theories of electoral outcomes and consequences. (c) Public Opinion: Formation, transmission, maintenance of political attitudes and opinions; role of political elites and mass media; implications and consequences for American political system. Each course in series may be taken separately. Prerequisite: 112 or consent of instructor.

446—4 PUBLIC POLICY ANALYSIS. Concepts and methods for analyzing public policies; intensive application to specific public policy area such as environment, education, or welfare; content varies. May be repeated for total of 8 hours. Prerequisite: 112 or consent of instructor.

448—4 INTERGOVERNMENTAL RELATIONS IN THE UNITED STATES. Political, legal, fiscal and administrative relationships among national, state and local governments; impact of relationships upon formulation and implementation of public policies. Prerequisite: 112 or consent of instructor.

449—2 to 4 TOPICS IN AMERICAN POLITICS. Selected topic in American politics; context may vary from quarter to quarter. Primarily for advanced undergraduate and graduate students; may be repeated for total of 8 hours. Prerequisite: 112 or consent of instructor.

459—2 to 4 TOPICS IN COMPARATIVE POLITICS. Selected topic in comparative politics; content may vary from quarter to quarter. Primarily for advanced undergraduate and graduate students; may be repeated for a total of 8 hours. Prerequisite: 111 or consent of instructor.

472—4 INTERNATIONAL ORGANIZATIONS. Past and present international organizations; origins, structure; decision-making processes, functioning of United Nations and its specialized agencies; problems and prospects. Prerequisite: 111 or consent of instructor.

473—12(4,4,4) FOREIGN POLICY OF MAJOR POWERS. (a) United States: Formulation, implementation, content; general policy patterns; international, domestic sources; policy instruments; regional dimensions and implications. (b) Soviet Union: Formulation, implementation, content; general policy patterns; international, domestic sources; policy instruments; regional dimensions and implications. (c) Western European States: Foreign policies of major states: formulation, implementation and content; domestic and international sources; political instruments; regional dimensions and implications. Each course in series may be taken separately. Prerequisite: 370 or consent of instructor.

474—8(4,4) PUBLIC INTERNATIONAL LAW. (a) Introduction and basic concepts: Nature, background source and development of international law; importance in international political order. (b) Jurisdiction, boundaries, and war: Legal aspects of interstate behavior, settlement of disputes, and use of force. Prospects for further development. Prerequisite: (a) 370 or consent of instructor; (b) 474a or consent of instructor.

479—2 to 4 TOPICS IN INTERNATIONAL RELATIONS. Selected topics in international relations; content may vary from quarter to quarter. Primarily for advanced undergraduate or graduate students; may be repeated for a total of 8 hours. Prerequisite: 370 or consent of instructor.

481—4 DESCRIPTIVE POLITICAL THEORY. Important contemporary efforts to produce systematic explanations of political phenomena. Prerequisite: 111 or consent of instructor.

484—12(4,4,4) HISTORY OF WESTERN POLITICAL THEORY. (Same as Philosophy 484.) (a) Ancient and Medieval: Works of great political thinkers, including Plato, Aristotle, Stoics, St. Augustine, and St. Thomas. (b) Renaissance and Early Modern: Works of great political thinkers, including Machiavelli, Hobbes, Locke, Montesquieu and Rousseau. (c) Recent: Political theories and ideologies of nineteenth and twentieth centuries including liberalism, socialism, communism, conservatism and fascism. Each course in series may be taken separately. Prerequisite: junior standing or higher.

489—4 TOPICS IN POLITICAL THEORY. Major issues in political theory or works of one major political thinker. Prerequisite: 385 or consent of instructor.

495—16(4,4,4,4) CONSTITUTIONAL LAW. (a) Supreme Court decisions on constitutional powers and limitations of U.S. legislative, executive, and judicial branches. (b) United States Supreme Court decisions on governmental regulation of commerce, taxing and spending powers, regulation of private business. (c) United States Supreme Court decisions on Bill of Rights and limitations on state power under the 14th Amendment. (d) United States Supreme Court decisions on rights of persons accused of crime; search and seizure, criminal trials, and the death penalty. Each course in series may be taken separately. Prerequisite: 340c or consent of instructor.

498—2 to 8 LEGAL AID INTERNSHIP. Assignment as paralegal assistant to legal aid attorneys, public defenders, prosecuting officers under supervision of professional legal officers. 10 hours per week for 4 credit hours. NOT FOR GRADUATE CREDIT. Prerequisites: 340c and consent of instructor.

499—4 to 8 INTERNSHIP IN GOVERNMENT. Assignment as para-professional in legislative or administrative offices assisting, and under supervision of, regular professional employees. 10 hours per week for 4 credit hours. Prerequisites: senior standing, government major.

PRODUCTION

315—4 PRODUCTION AND OPERATIONS MANAGEMENT MODELS AND SYSTEMS. Operations management function and strategies; production and inventory planning; process flow analysis; MRP; project management; quality control; and JIT. Prerequisite: MS 251.

410—4 QUALITY CONTROL SYSTEMS. Quality management policies, strategies, culture and systems; statistical process control; control charts and acceptance sampling; preventing defects; zero defects and total quality control. Prerequisite: MS 251.

461—4 PRODUCTION PLANNING AND CONTROL. Long range and aggregate planning; master scheduling; rough cut capacity planning; MRP; CRP; lead time management; production activity control, sequencing, and line balancing. Prerequisites: 315, MS 251.

462—4 INVENTORY MANAGEMENT. Aggregate inventory management, joint replenishment, discrete lot sizes; inventory constraints; distribution; DRP; push and pull systems; projecting inventory investment; purchasing; just-in-time approach. Prerequisites: 315, MS 251.

463—4 AUTOMATION AND CAM SYSTEMS. Process flows transfer lines, process efficiency measures, group technology, manufacturing systems, computerized machining, CIM, scheduling MC's and FMS's and line balancing. Prerequisites: 315, MS 251.

468—4 POM POLICY/STRATEGY. Operations strategy and corporate objectives; major operations management strategic decisions; operations/manufacturing structure; focused factory, strategy/technology interface, multinational environment. Prerequisites: 315, MS 251.

490—1 to 8 INDEPENDENT STUDY IN PRODUCTION AND OPERATIONS MANAGEMENT. Topical areas in greater depth than regularly titled courses permit. Individual or small group readings or projects. Repeated to 8 hours by permission. Prerequisites: consent of instructor and department chairperson.

PSYCHOLOGY

111—4 FOUNDATIONS OF PSYCHOLOGY. History, psychological methods and techniques, biological foundations of behavior, learning, motivation, development, personality, social and psychopathology.

201—4 CHILD PSYCHOLOGY. Biological and psychological development of the child from birth through puberty. Prerequisite: 111.

203—4 ADOLESCENT PSYCHOLOGY. Biological and psychological development of the adolescent; relationship between childhood development and adolescent behavior. Prerequisite: 111.

204—4 PSYCHOLOGY OF MATURITY AND OLD AGE. Biological and psychological factors in later maturity and old age, their concomitant individual and societal problems. Prerequisite: 111.

205—4 INTRODUCTION TO PERSONALITY DYNAMICS. Human motivations, personality patterns, and methods of coping with stress. Prerequisite: 111.

206—4 SOCIAL PSYCHOLOGY. Individual in interaction with social environment, social perception, attitude formation and change, social influence processes, group processes. Prerequisite: 111.

211—4 INTRODUCTION TO STATISTICS. Methods for organizing, presenting and describing data, correlation concepts, statistical inference, and hypothesis testing. Three lecture and two laboratory hours per week. Prerequisite: 111 for majors and minors, consent of instructor for others.

212—5 METHODS OF PSYCHOLOGICAL ENQUIRY. Laboratory, field, and group techniques psychologists use to study behavior. Four lecture, two laboratory hours per week. Prerequisites: 111, 211 for psychology majors, consent of instructor for non-majors.

308—4 SOCIAL PSYCHOLOGY OF NONVERBAL BEHAVIOR. Concepts from anthropology, psychology and speech applied to nonverbal behavior and communication. Prerequisite: 111.

311—4 EXPERIMENTAL PSYCHOLOGY: LEARNING. Conditioning, memory, and forgetting; students design and conduct experiments with humans and animal subjects. Lecture and laboratory. Prerequisites: 111 or consent of instructor; 211 and 212 recommended.

312—4 EXPERIMENTAL PSYCHOLOGY: PERCEPTION. Structure and operation of sensory systems and perceptual processes. Lecture and laboratory. Prerequisites: 111, 211, 212.

313—4 EXPERIMENTAL PSYCHOLOGY: MOTIVATION. Biological, psychological, and social variables influencing the activation, direction and maintenance of behavior. Lecture and laboratory. Prerequisites: 111, 211, 212.

314—4 PHYSIOLOGICAL PSYCHOLOGY. Biological foundations of behavior; structure and function of brain related to personality, behavior and health. Prerequisite: 111 or consent of instructor.

320—4 INTRODUCTION TO INDUSTRIAL PSYCHOLOGY. Psychological principles and methods of analysis applied to problems in contemporary work settings. Prerequisite: 111.

374—4 ORGANIZATIONAL PSYCHOLOGY. Relationship between organizational functioning and job satisfaction, motivation, performance and psychological climate in the work setting. Prerequisite: 320 or consent of instructor.

404—4 CONTEMPORARY THEORIES OF LEARNING, PERCEPTION AND MOTIVATION. Theories and relevant research findings. Prerequisite: One of 311, 312, 313, or consent of instructor.

405—4 PSYCHOLOGY OF WOMEN. Psychological and cultural history; sexuality, theories of socialization, psychopathology and related issues. Lecture and laboratory. Prerequisite: 111.

409—4 HISTORY AND SYSTEMS. Important antecedents of contemporary scientific psychology; issues, conceptual development, major schools and systems. Prerequisite: 111.

410—4 PROFESSIONAL ISSUES IN TEACHING PSYCHOLOGY. Secondary, college, and graduate levels; different models for teaching psychology and library, laboratory, and testing resources. Prerequisite: 111.

414—4 ALTERED STATES OF CONSCIOUSNESS. Principles of sensation, perception, and neuro-psychology applied to phenomena of normal and altered states of consciousness. Prerequisite: 111.

415—4 ENVIRONMENTAL PSYCHOLOGY (Same as Environmental Studies 415.) Environmental issues examined as problems of perception, learning, or attitude development; crowding, noise, and other stress factors. Prerequisite: 111 or consent of instructor.

420—4 BEHAVIOR MODIFICATION. Learning principles, evaluation methods and techniques of managing and modifying human behavior, based upon operant and respondant conditioning. Prerequisite: 111.

421—4 PSYCHOLOGICAL TESTS AND MEASUREMENTS. Principles of psychological measurement, test construction and evaluation; problems in assessment and prediction. Prerequisite: 211.

430—4 APPLIED BEHAVIOR ANALYSIS. Applying behavior management principles to human behavior; reinforcement, shaping, stimulus control, fading and punishment in laboratory and applied settings. Prerequisite: 420.

431—4 PSYCHOPATHOLOGY. Classification, description, etiology and treatment of disorders of personality organization and behavioral integration. Prerequisite: 205 or consent of instructor.

432—4 MENTAL HYGIENE. Integration of psychological data and principles concerning factors affecting mental health and adjustment. Not for majors or minors.

437—4 THE PSYCHOLOGICAL INTERVIEW. Skill development through role playing with videotape feedback. Data interpretation and evaluation, types and theories of interviews for business, health and social sciences. Prerequisite: 205 or 206.

440—4 THEORIES OF PERSONALITY. Review and critical evaluation of major theories and supporting evidence. Prerequisite: 205 or consent of instructor.

451—4 ADVANCED CHILD PSYCHOLOGY. Concepts, methods and problems of human psychological and psychosocial development. Prerequisite: 201 or 203 or graduate standing.

461—4 ADVANCED SOCIAL PSYCHOLOGY. Roles of language, communication, social influence, attitude change and interpersonal perception. Prerequisite: 206 or consent of instructor.

465—4 GROUP DYNAMICS AND INDIVIDUAL BEHAVIOR. Small group interaction, including topics of group structure and function, group problem-solving, leadership, etc. Prerequisite: 205 or graduate standing.

468—4 PSYCHOLOGY OF HUMAN SEXUALITY. Psychological aspects of human sexuality, pre-adulthood sexuality, adult sexuality, sex roles, special forms of sexual expression, and sexual dysfunction. Prerequisite: consent of instructor.

473—4 PERSONNEL PSYCHOLOGY. Psychological principles and techniques used in job selection, placement, training, and employee evaluation. Prerequisite: 320.

479—4 PSYCHOLOGY OF INDUSTRIAL CONFLICT. Social and psychological factors in labor-management conflicts. Prerequisite: 320 or consent of instructor.

487—4 PSYCHOLOGY OF AGING. Adjustment to aging process; problems include retirement, leisure time, widowhood, and death. Prerequisite: 204 or graduate standing.

488—4 COMPUTER SOFTWARE FOR PSYCHOLOGICAL RESEARCH. Programs for data management, statistical computation and report writing. Prerequisite: 211 or equivalent.

490—1 to 8 INDEPENDENT PROJECTS. Readings, research or supervised field experiences. May be repeated for credit. Only 12 hours may be applied toward major or 4 hours to a minor in psychology. Prerequisite: consent of instructor and chairperson.

495—1 to 4 SEMINAR: SELECTED TOPICS. Offered occasionally when needed. May be repeated for total of 16 hours so long as no topic is repeated. Prerequisite: consent of instructor.

497—8 (1-4) HONORS SEMINAR IN PSYCHOLOGY. Varied topics, offered occasionally when needed. May be repeated for up to 8 hours credit; no topic may be repeated. NOT

FOR GRADUATE CREDIT. Prerequisite: admission to Psychology Honors Program.

498—0 HONORS COORDINATING SEMINAR. Coordinating seminar for Psychology Honors Program; students develop and report on individual and group projects involving honors level work. No credit. Prerequisite: admission to Psychology Honors Program.

499—2 to 6 PSYCHOLOGY SENIOR HONORS PAPER. Independent project to be completed during senior year, under faculty supervision. Committee chairperson must be member of Psychology Department. NOT FOR GRADUATE CREDIT. Prerequisites: senior standing, admission to Psychology Honors Program.

RECREATION

150—4 INTRODUCTION TO RECREATION. Philosophy, history, exploration of recreational fields.

200—4 PROGRAMS IN RECREATION. Principles, standards conducive to program development. Emphasis on activities in a leisure-oriented society. Prerequisite: 150.

312—2 to 6 PLAYGROUND LEADERSHIP. Field experiences at approved recreational sites under professional supervision. Prerequisite: consent of instructor.

348—3 RECREATION LEADERSHIP. Leadership functions and skills related to recreational settings.

349—2 CAMPING EDUCATION. Basics of resident camps, physical design, equipment, routines, personnel, purpose, traditions, possibilities.

365—3 ORGANIZATION AND ADMINISTRATION OF COMMUNITY RECREATION. Facilities, equipment, finance, promotion, personnel, maintenance, policies. Prerequisite: consent of instructor.

389—4 to 6 AFFILIATION IN RECREATION. Practicum for majors. Observe and assist in an approved program under professional supervision prior to internship. Prerequisite: consent of instructor.

390—4 RECREATIONAL PLANNING. General features, special requirements, principles, standards for areas and facilities. Prerequisite: 200.

400—16 INTERNSHIP IN RECREATION. Culminating experience in an approved agency under professional supervision. NOT FOR GRADUDATE CREDIT. Prerequisite: 389.

410—4 PROBLEMS IN RECREATION. Economic, political, sociological, psychological issues; case studies, problem solving.

420—3 PARKS AND RECREATION LAW. Local, state, federal statutes pertaining to public and quasi-public agencies. Emphasis on negligence, liability.

RUSSIAN

101—4 ELEMENTARY RUSSIAN. Reading, writing, listening comprehension, and speaking, within the context of Russian culture. Use of the language laboratory.

102—4 ELEMENTARY RUSSIAN. Continuation of 101. Use of the language laboratory. Prerequisite: 101.

103—4 ELEMENTARY RUSSIAN. Continuation of 102. Use of the language laboratory. Prerequisite: 102.

136—12 ELEMENTARY RUSSIAN. Intensive development of reading, writing, listening comprehension, and speaking within the context of Russian culture. Intensive course, generally taught in summer term, equivalent to credit which would be earned in 101, 102, and 103 if they were taken separately. Must be taken for full 12 hours credit. Use of the language laboratory. Check with department chairperson to determine if the course will be offered.

201—4 INTERMEDIATE RUSSIAN. Oral skills of understanding and speaking the language; reading modern prose selections, and writing simple compositions. Use of the language laboratory. Prerequisite: 103 or two years of high school Russian or consent of department chairperson.

202—4 INTERMEDIATE RUSSIAN. Continuation of 201. Use of the language laboratory. Prerequisite: 201.

203—4 INTERMEDIATE RUSSIAN. Continuation of 202. Use of the language laboratory. Prerequisite: 202.

220—4(2,2) INTERMEDIATE RUSSIAN CONVERSATION. (a) Practice in intermediate level conversation; proper pronunciation and fluency. (b) Additional practice in improving pronunciation and fluency. May be taken separately. Prerequisite: 136 or equivalent.

499—2 to 9 READINGS IN RUSSIAN. Selected areas of language, literature, and culture. Individual work or small groups supervised by one or more members of the Russian faculty. Prerequisites: 203, consent of department chairperson.

SCIENCE

401—3 to 6 BASIC CONCEPTS OF PHYSICS. Subject matter related to textbooks and other material available in secondary schools. Minimal use of mathematics. May be repeated to a maximum of 10 hours as long as no topic is repeated. Primarily for teachers of the physical sciences. Prerequisite: consent of instructor.

403—3 to 6 EXPERIMENTS AND TECHNIQUES OF SCIENCE. Experiments and consideration of equipment in science teaching; lectures on experimental techniques. May be repeated to a maximum of 10 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: consent of instructor.

409—2 to 8 HISTORY OF CHEMISTRY. Studies in the history of chemistry. The topic to be covered in announced by the department. May be repeated to a maximum of 8 hours so long as topics are not repeated. Prerequisite: consent of instructor.

416—2 to 5 INDEPENDENT STUDY IN SCIENCE EDUCATION. Supervised study of assigned material based on needs of the student. May be repeated to a maximum of 10 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: consent of instructor.

421—4 BASIC CONCEPTS OF CHEMISTRY. General background in chemistry with emphasis on the existence, structure, and bonding of atoms. Four lecture hours. Primarily for teachers of science. Prerequisite: consent of instructor.

429—1 to 2 TOPICS IN CHEMISTRY. Short courses focusing on a particular topic. For teachers of science and others wishing to remain current. May be repeated to a total of 10 hours so long as no topic is repeated.

480—1 to 6 SPECIAL TOPICS IN SCIENCE TEACHING. Topics of special interest in teaching of science. Lecture and/or laboratory format. May be repeated to a maximum of 10 hours as long as no topic is repeated. Primarily for teachers of science. Prerequisite: consent of instructor.

SECONDARY EDUCATION

215—4 INTRODUCTION TO SECONDARY EDUCATION. Field experiences and seminars which give students opportunity to explore teaching as a profession. Required of all students prior to admission to Secondary Education.

315—5 HIGH SCHOOL METHODS. Teaching skills including planning classroom management techniques, microteaching, motivation, strategies, testing and evaluation. Pre-clinical observation hours required. Prerequisites: Counselor Education 305, Foundations of Education 380.

352a-v—4 to 16 SECONDARY STUDENT TEACHING. Practice teaching in junior and senior high school subjects in student's area of concentration. Application of theory to practice in the secondary education classroom. These experiences to be arranged under the direction of a university supervisor in cooperation with a qualified and experienced public school teacher.

401—33(8,9,16) SECONDARY EDUCATION TEACHER TRAINING SYSTEM. Methods, procedures, application of teaching skills including planning classroom management techniques, microteaching, motivation strategies, testing, and evaluation. Field experience required. NOT FOR GRADUATE CREDIT. Prerequisites: 215, admission to secondary education.

407—4 THE MIDDLE AND JUNIOR HIGH SCHOOL. Theoretical background and latest trends in middle and junior high education; methodology, curriculum review, learning theories and methods of practice and management techniques.

440—4 TEACHING READING IN THE SECONDARY SCHOOL. Methodology for junior and senior high schools; developmental and corrective reading programs, appraisal of reading abilities; methods and materials of instruction.

481—4 DRUG USE AND ABUSE. Drug and alcohol education. Primary, secondary, tertiary approaches to prevention curriculum development, research in alcohol and drug education.

495—1 to 8 SELECTED TOPICS. Varied content, offered as need exists and as faculty interest and time permit. Prerequisite: consent of instructor.

SOCIAL WORK

200—4 INTRODUCTION TO SOCIAL WORK. Acquaints students with the profession of social work. Forty clock hours of supervised field experience in social service settings.

375—4 SOCIAL WELFARE AS A SOCIAL INSTITUTION. Social, cultural, political, and economic factors in the history and development of social welfare programs and the social work profession. Prerequisite: 200.

381—4 THE FIELD OF SOCIAL WORK. Client service needs and service delivery issues; organizational structures; objectives and dominant technologies of professional practice. Prerequisite: 200.

383—4 INTERPERSONAL SKILLS AND HELPING PROCESSES. Developing skills of engagement; relationship development; interviewing; problem definition. Personal values and professional ethics in practice. Video lab practice. Prerequisite: 200.

384—4 DEVELOPMENTAL PERSPECTIVES ON HUMAN BEHAVIOR. Socio-biological, psychological theories on human development through life cycle. Human diversity and social work practice implications. Prerequisite: 200.

385—8(4,4) HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT. Psychological, sociological perspectives on human functioning with application to individuals, families, groups and organizations. Systems theory, role theory and personality theories. Prerequisite: 200.

389—2 to 8 INDEPENDENT STUDY IN SOCIAL WORK. Independent readings, projects, or field experiences. Prerequisite: consent of instructor.

400—2 to 4 SPECIAL TOPICS. Specific area of professional practice such as medical, income maintenance, handicapped. Consult Schedule of Classes for topics offered in a particular quarter. May be repeated. NOT FOR GRADUATE CREDIT.

475—4 SOCIAL WELFARE POLICY ANALYSIS. Critical and analytical understanding of social welfare policy implementation and impact on service delivery. Analysis of local, state or federal Programs. Prerequisites: 375 and Political Science 342 or consent of instructor.

479—4 ADVANCED PRACTICE SKILLS. Interactional strategies to facilitate client involvement in problem solving; working with resistance, involuntary clients, excessive stress, dependency. Video lab component. NOT FOR GRADUATE CREDIT. Prerequisites: completion of 300-level social work courses with grade of C or better; admission to senior sequence, or consent of instructor and student's adviser.

480—4 SOCIAL WORK THEORY AND METHODS I. Initial phases in the planned change process; emphasis on engagement, assessment, and contracting with individuals, groups, families and communities. Prerequisites: completion of 300-level social work courses with grade of C or better; admission to senior sequence, or consent of instructor and student's adviser.

481—4 SOCIAL WORK THEORY AND METHODS II. Later phases in practice with individuals, families, groups, community. Intervention, evaluation of direct practice, termination, organizational and interorganizational factors. Prerequisite: 480.

482—16(8,8) FIELD INSTRUCTION. Two consecutive quarters of directed practicum. Weekly seminar on campus. 200 clock hours for 8 credit hours. Prerequisites: 479, 480 (with grade of C or better), 481 or concurrent registration, admission to senior sequence, consent of practicum director.

490—4 SOCIAL WORK THEORY AND METHOD III. Practice models at individual, group, family, organization and community levels; application to specific populations and problems. Prerequisites: 481, consent of instructor.

SOCIOLOGY

111—4 INTRODUCTION TO SOCIOLOGY. Changes, causes and consequences of group life. Scientific and humanistic study of social processes such as change and institutions including religion, education, inequality, health, family.

300—4 CONTEMPORARY SOCIAL PROBLEMS. Extent and causes of a number of current American social problems; how social conditions become problems. Some attention to methods of researching problems.

304—4 RACE AND ETHNIC RELATIONS. Racial and cultural interaction and conflict; causes of prejudice and discrimination; status and participation of minority groups; national and international aspects of majority-minority relations.

308—4 WOMEN AND SOCIETY. Changing position of women in American society; gender role socialization; women and intimacy, feminist and sociological theories and social change.

310—4 INTRODUCTORY SOCIAL STATISTICS. Descriptive and inferential; frequency distributions; central tendency and dispersion; normal curve; association; multivariate tables; estimation and hypotheses testing.

312—4 SOCIAL RESEARCH METHODS. Fundamentals of measurement, research design, and logic of determining cause-effect relationships. Includes experimental, survey, archival, and field research methods. Interrelationship between theory and research.

321—4 INDIVIDUAL AND SOCIETY. Integration of individual and society; role structure and orientation to society; habits; communication channels and meaning; emergence, presentation and defense of self.

331—4 PROFESSIONS IN MODERN SOCIETY. Professionalization of occupations, characteristics and regulation of professions, professional education, conflict within and between professional occupations, professional-client relations.

335—4 URBAN SOCIOLOGY. Rise, development, structure, culture, planning, and problems in early and modern cities. How sociologists study cities, metropolitan areas. Some attention to urban social segregation.

338—4 INDUSTRY AND SOCIETY. Development, nature, and social impact of industrial organization; formal and informal processes within economic organizations; factors affecting workers morale, satisfaction, and performance.

362—4 SOCIAL MOVEMENTS. Structural causes, characteristics and consequences of political, economic religious and cultural movements; precipitating events, ideologies, organization, tactics. Role and function in modern society.

372—CRIMINOLOGY. Survey of major theories and current research dealing with rape, murder, drug abuse, burglary, con games, corporate crime, embezzlement, prostitution, organized crime.

373—4 INTRODUCTION TO CRIMINAL JUSTICE. American criminal justice. Topics include justice policy, police organization and practices, prosecution decision making, sentencing and criminal punishment.

374—4 VICTIMS AND SOCIETY. War, crime, inequality, racism, sexism, and other victim-generating conditions and processes; strategies of prevention and amelioration.

381—4 POPULATION AND MIGRATION. National and world population growth, decline, and composition; birth and death rates; internal and international migration. World population growth and resources; consumption relative to supply.

390—4 SOCIOLOGICAL PERSPECTIVES. Topics not included in regular course offering. When offered, topic is specified in schedule of classes. May be repeated for up to 8 credit hours.

391—4 MARRIAGE. Marriage in American society: dating and mate selection; the man-woman crisis; sex, love, and intimacy; cohabitation; communication/conflict; work and marriage; parenthood; divorce; remarriage.

396—1 to 4 READINGS IN SOCIOLOGY. Supervised reading, projects, and field experience in selected subjects. Prerequisite: consent of chairperson.

409—4 URBAN SOCIAL PROBLEMS. Problems in American cities: housing, race relations, poverty, segregation, fiscal crises. Relates societal conditions to problems often seen as personal or characteristic of particular groups.

410—4 INTERMEDIATE SOCIAL STATISTICS. (Same as Political Science 410.) Descriptive and inferential statistical techniques with computer applications. Graphic presentation; central tendency and dispersion; association. Prerequisite: 310 or STAT 107 or equivalent, or consent of instructor.

411—4 ADVANCED SOCIAL STATISTICS. (Same as Political Science 411.) Multivariate techniques such as factor analysis; analysis of covariance; multiple regression; path analysis; and models. Prerequisite: 410 or consent of instructor.

430—4 SOCIAL ORGANIZATION. Nature and bases of social organization; diverse theoretical perspectives with emphasis on classical theories; major types of organization, system, and process.

431—4 COMPLEX ORGANIZATIONS. Theoretical analysis of formal and informal organization including historical contributions of Weber, Barnard, and Simon. Pressures toward equilibrium and change.

435—4 SOCIAL INEQUALITY. Structural characteristics and correlates of political, economic, and social inequality and equality. Consequences of inequality on individuals and societies.

440—4 THE FAMILY. Worldwide trends in family patterns; social change and the American family, influence of social class, race, ethnicity, and religion; family life cycle; families under stress.

441—4 HEALTH, ILLNESS AND SOCIETY. Social determinants of sickness and death; illness as social behavior; patient-practitioner relationships; hospitals, issues in the organization and delivery of health care.

444—4 SOCIOLOGY OF LAW. The legal institution. Social factors affecting arrest, prosecution and sentencing. Formation and implementation of law.

451—4 CLASSICICAL SOCIAL THEORY. Historical foundations of sociology in nineteenth and early twentieth century Europe and the United States.

456—4 CONTEMPORARY SOCIOLOGICAL THEORY. Overview and comparison of major schools of sociological thought such as functional analysis, conflict theory, interaction and negotiated order, social exchange.

461—4 SOCIAL CHANGE. Urbanization; industrialization; change agents including ideas, technologies, personalities, governments, and conflict.

470—4 SOCIOLOGY OF DEVIANCE. Behavior such as prostitution, drug use, murder, robbery, homosexuality, rape and insanity examined theoretically and empirically.

494—4 MARRIAGE COUNSELING. Survey and analysis; assessment of current practices and techniques; case studies and supervision.

SPANISH

101—4 ELEMENTARY SPANISH. Reading, writing, listening comprehension, and speaking in Spanish within the context of Hispanic culture. Use of the language laboratory.

102—4 ELEMENTARY SPANISH. Continuation of 101. Use of the language laboratory. Prerequisite: 101.

103—4 ELEMENTARY SPANISH. Continuation of 102. Use of the language laboratory. Prerequisite: 102.

140—12 ELEMENTARY SPANISH. Intensive development of reading, writing, listening comprehension, and speaking in Spanish within the context of Spanish culture. Intensive course, generally taught in summer term, equivalent to credit which would be earned in 101, 102, and 103 if they were taken separately. Must be taken for full 12 hours credit. Use of language laboratory. Check with department chairperson to determine if the course will be offered.

201—4 INTERMEDIATE SPANISH. Oral skills of understanding and speaking the language; reading modern prose selections, and writing simple compositions. Use of language laboratory. Prerequisite: 103 or two years of high school Spanish or consent of department chairperson.

202—4 INTERMEDIATE SPANISH. Continuation of 201. Use of language laboratory. Prerequisite: 201.

203—4 INTERMEDIATE SPANISH. Continuation of 202. Use of language laboratory. Prerequisite: 202.

220—4(2,2) INTERMEDIATE SPANISH CONVERSATION. (a) Practice in intermediate level conversation; proper pronunciation and fluency. (b) Additional practice in improving pronunciation and fluency. May be taken separately. Prerequisite: 140 or equivalent.

301—4 ADVANCED SPANISH GRAMMAR. Grammatical problems, development of correct usage, vocabulary building. Prerequisite: equivalent of two years college Spanish or consent of department chairperson.

302—4 ADVANCED CONVERSATIONAL SPANISH. Additional development of oral skills. Prerequisite: 203 or consent of department chairperson.

303—4 ADVANCED SPANISH COMPOSITION. Additional development of writing skills. Prerequisite: 203 or consent of department chairperson.

305—4 WRITTEN INTERPRETATION. Contrastive analysis. Prerequisite: 203 or consent of department chairperson.

306—4 CONTEMPORARY SPANISH PROFESSIONAL READINGS. Selections from publications related to professions and issues. Prerequisite: 203 or consent of department chairperson.

307—4 BUSINESS SPANISH. Oral and written business expression; specialized terminology and idioms. Prerequisite: 203 or consent of department chairperson.

311—4 CONTEMPORARY SPAIN. Significant aspects of Spanish culture. Major credit will be granted either for Spanish 311 or Spanish 312, but not for both. Prerequisite: 203 or consent of department chairperson.

312—4 CONTEMPORARY SPANISH AMERICA. Analysis of significant aspects of Spanish-American culture to improve intercultural understanding and develop language skills. Oral discussions, readings, oral and written reports. Major credit will be granted either for Spanish 311 or Spanish 312, but not for both. Prerequisite: 203 or consent of department chairperson.

351—4 SURVEY OF SPANISH LITERATURE (MIDDLE AGES THROUGH THE SEVENTEENTH CENTURY). Representative prose, poetry, drama; eleventh through seventeenth century. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF SPANISH LITERATURE (EIGHTEENTH CENTURY UNTIL THE PRESENT). Representative prose, poetry, drama. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF SPANISH-AMERICAN LITERATURE (FROM THE COLONIAL PERIOD UNTIL THE PRESENT). Representative prose, poetry, drama. Prerequisite: 203 or consent of department chairperson.

451—4 STUDIES IN SPANISH LITERATURE (BEGINNINGS THROUGH 16TH CENTURY). Literary analysis of prose, poetry, drama, eleventh through sixteenth century. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

452—4 STUDIES IN SPANISH LITERATURE (17TH THROUGH 18TH CENTURIES). Literary analysis of prose, poetry, drama, Golden Age through eighteenth century. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453—4 SEMINAR IN HISPANIC LITERATURE. Critical and analytical study of masterpieces. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Critical and analytical study of selected topics of literature or literary criticism. May be repeated to a maximum of 6 hours so long as no topic is repeated.

457—4 DON QUIXOTE. Critical and analytical study of Cervantes' masterpiece. Prerequisite: any 300-level Spanish course or consent of department chairperson.

461—4 SPANISH STYLISTICS. Writing style; application of stylistics to development of skill in written expression. Advanced work in principles of grammar and composition. Prerequisite: 9 hours of 300-level courses.

471—4 SPANISH-AMERICAN LITERATURE (SHORT STORY AND NOVEL). Critical and analytical study of representative post-1945 fiction. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

499—2 to 9 READINGS IN SPANISH. Selected areas of language, literature, and culture. Individual work or small groups supervised by one or more members of the Spanish faculty. Prerequisites: 203, consent of department chairperson.

SPECIAL EDUCATION

400—4 THE EXCEPTIONAL CHILD. Physical, emotional, and social traits. Effects of handicaps in learning situations, methods of differentiation, and techniques for rehabilitation.

410a—4 PROBLEMS AND CHARACTERISTICS OF BEHAVIOR DISORDERED CHILDREN. Screening, assessment, placement, programming, and behavior management related to education of children with behavior disorders. Prerequisite: 400 or concurrent enrollment.

410b—4 PROBLEMS AND CHARACTERISTICS OF THE MENTALLY RETARDED CHILD. Educationally significant characteristics including cognitive, emotional, and sociological considerations. Definition, screening, diagnosis, classification systems, and classroom management. Prerequisite: 400 or concurrent enrollment.

410c—4 PROBLEMS AND CHARACTERISTICS OF THE GIFTED CHILD. Designed to help teachers in the identification of, and programming for, gifted talented children.

410g—4 PROBLEMS AND CHARACTERISTICS OF THE LEARNING DISABLED CHILD. Children with wide discrepancies between ability and achievement, accompanied by serious educational maladjustment. Emphasis on definition, identification, diagnosis, individualized remedial programs, and placement. Prerequisite: 400 or concurrent enrollment.

410t—4 PROBLEMS AND CHARACTERISTICS OF THE TRAINABLE MENTALLY HANDICAPPED. Basic concepts of intelligence, psychological testing, educational assessment, causes of retardation as these concepts relate to educational and therapeutic consideration for the trainable mentally handicapped. Prerequisite: consent of instructor.

411—4 ASSESSMENT OF EXCEPTIONAL CHILDREN. Techniques, theories, methods, and instruments; introduction to use and application of techniques to case study practices. Prerequisite: 410g.

411t—4 ADVANCED ASSESSMENT OF SEVERELY/PROFOUNDLY HANDICAPPED. Assessment procedures with severely/profoundly handicapped. Retardation and autism. Standardized and criterion referenced tests used in relationship to formulating educational recommendations. Prerequisite: 410t.

413a—4 DIRECTED OBSERVATION OF EMOTIONALLY DISTURBED CHILDREN. Student observation and participation in group and individual work. Prerequisite: consent of department chairperson.

420a—4 METHODS AND MATERIALS FOR CHILDREN WITH LEARNING AND/OR BEHAVIORAL PROBLEMS. Teaching children with learning and/or behavioral problems in special education programs. Prerequisites: 410a, 411.

420b—4 METHODS AND MATERIALS IN THE EDUCATION OF THE EDUCABLE MENTALLY HANDICAPPED. Teaching educable mentally handicapped in special education programs. Prerequisite: 411.

420c—4 METHODS AND MATERIALS IN THE EDUCATION OF THE GIFTED. Teaching gifted children. Acceleration, enrichment and pull out programs discussed.

420g—4 METHODS AND MATERIALS FOR TEACHING CHILDREN WITH LEARNING DISABILITIES. Methods and materials applied in teaching children with learning disabilities. Prerequisites: 410g, 411.

420t—4 METHODS AND MATERIALS IN THE EDUCATION OF THE TMH CHILD. Educational and remediation processes in overall academic development of the trainable mentally handicapped child. Methods and materials, both commercially and teacher developed. Prerequisite: 411t.

427—4 PHYSICAL EDUCATION AND RECREATION FOR THE HANDICAPPED. (See Physical Education 427.)

430—4 BEHAVIOR MANAGEMENT IN SPECIAL EDUCATION. Biophysical, psychodynamic ecological, and learning theories. Prerequisite: 400.

440—4 PRESCHOOL EDUCATION FOR EXCEPTIONAL CHILDREN. Survey. Theories of child development as related to special education. Includes clinical experiences. Prerequisite: 410g.

441—4 PRESCRIPTIVE TEACHING-PRESCHOOL EXCEPTIONAL CHILDREN. Instruments in the assessment of academic, cognitive, and perceptual-motor development. Diagnosis and remediation. Includes clinical experience. Prerequisite: 440.

470—4 SECONDARY SCHOOL PROGRAMS FOR EXCEPTIONAL CHILDREN. Organizational, administrative, and curricular aspects. Adjustments needed because of intellectual, behavioral, physical, or learning disabilities. Stresses work-study programs. Prerequisite: 400.

480r—4 INTRODUCTION TO REHABILITATION. Philosophy, procedures and practices including history and legislation.

481—4 SEMINAR IN THE INSTRUCTION OF EXCEPTIONAL CHILDREN AND ADOLESCENTS. Concluding seminar for undergraduates. Applied aspects of assessment, prescriptive teaching, evaluation, individual and group behavioral management, instructional methodologies and instructional materials.

496—1 to 8 READINGS AND INDEPENDENT STUDY IN SPECIAL EDUCATION. Specific problems in the education of exceptional children. Topic and conditions of study approved via contract. Maximum of 8 hours applicable to degree. Prerequisite: consent of instructor.

498—8(4,4) SEMINAR: SELECTED TOPICS IN SPECIAL EDUCATION. Concepts, teaching strategies, and concerns of various educational personnel. May be repeated, with maximum of 8 hours applicable to degree if no topic is repeated. Prerequisite: consent of instructor.

499—32(16,8,8) SPECIAL EDUCATION STUDENT TEACHING. Teaching under immediate supervision of critic teacher and general supervision of a university instructor. The first teaching experience must be 16 quarter hours. Second and third student teachings are for 8 hours each. NOT FOR GRADUATE CREDIT.

SPEECH COMMUNICATION

103—4 INTERPERSONAL COMMUNICATION SKILLS. Principles and techniques of oral communication emphasizing

listening, message formation, perception of self and others, awareness of verbal and nonverbal factors, and managing conflict.

104—4 ORAL ARGUMENTATION SKILLS. Theories, strategies, and techniques for researching, analyzing, constructing and presenting oral arguments for and against selected contemporary topics and issues. Emphasis on in-class presentations.

105—4 PUBLIC SPEAKING. Practical experience; evaluating and providing helpful feedback to speakers; and transferring such skills to professional and academic contexts.

200—4 PERSUASIVE SPEAKING. Theory and practice of preparation and delivering.

210—4 INTRODUCTION TO SPEECH COMMUNICATION. Surveys academic and professional interests, careers, as well as issues related to freedom of speech and communication ethics. Practical experience in speechmaking and group discussion.

223—4 ADVANCED INTERPERSONAL COMMUNICATION. Personal growth potential inherent in everyday informal relationships. Interpersonal needs, values, perceptions, expressions of identity, emotions, evaluation, power, etc. Graded on a pass/no credit basis.

300—4 COMMUNICATION IN INTERVIEWING AND COUNSELING. Communication concepts and skills. Causes of failure in such situations. Practice with critiqued video playbacks.

301—4 PRINCIPLES OF SMALL GROUP COMMUNICATION. Principles and methods of group discussion. Current problems used as focus for exploring group behavior.

302—4 DEBATE THEORY AND PRACTICE. Emphasizes research and analysis skills, reasoning and use of evidence, affirmative and negative case building strategies, and refutation techniques.

303—4 COMMUNICATION IN BUSINESS AND ORGANIZATIONS. Oral business communication from managerial perspective. Organizational variables affecting communicating patterns: systems, channels, networks.

305—4 THE LISTENING EXPERIENCE. Centrality of listening in the communication process. Listening research, individualized assessment tests, and skill development exercises.

309—1 to 8 INDEPENDENT PROJECTS IN SPEECH COMMUNICATION. Projects in human communication field studies, independent readings, presentations, etc. Specific assignment to be developed by student in consultation with speech communication faculty member prior to enrollment. Credits variable; may be repeated up to maximum of 8 hours cumulative. Prerequisite: by permit only.

310—4 INTERRACIAL COMMUNICATION. Personal dimensions of intergroup communication, especially the interaction of black and white Americans.

313—4 INTRODUCTION TO PUBLIC RELATIONS. Contemporary practices emphasizing communication skills. Lectures, PR simulations, guest practitioners. Appropriate for majors in any academic area.

315—4 APPLIED PUBLIC RELATIONS. Advanced study and application of practices introduced in 313. Emphasis on developing communication materials for PR campaigns. Prerequisite: 313.

330—4 THEORIES OF COMMUNICATION. Contemporary and significant historical approaches to developing and testing theories and models of communication behavior.

331—4 THEORIES OF PERSUASION. Prominent literature on attitude change and varieties of social influence. Emphasis on theories supporting and generating relevant research.

403—4 ADVANCED STUDY OF COMMUNICATION IN BUSINESS. Diagnosing organizational and communication problems and implementing solutions. Research methods in organizational communication. Prerequisites: 303 and 330 or consent of instructor.

409—4 SENIOR SEMINAR IN SPEECH COMMUNICATION. Integrates undergraduate program in speech communication. Academic, social, and career settings for communication professionals. NOT FOR GRADUATE CREDIT. Prerequisites: 24 hours in speech communication, senior standing.

410—4 CRITICISM OF PUBLIC COMMUNICATION. Role of speech criticism as a force in society. Methodologies, viewpoints, and practical experience.

419—4 SPECIAL TOPICS IN SPEECH COMMUNICATION. Variable content course emphasizing pertinent contemporary communication issues. May be repeated for total of 12 hours as long as no topic is covered twice. Only 4 hours may be applied toward meeting major or minor requirements. Contact Speech Communication Department for current topic.

423—4 HONESTY AND DECEPTION IN COMMUNICATION RELATIONSHIPS. Theory and research in trust, honesty, deception, secrets, and excuses. Verbal and nonverbal cues to concealment, falsification, detection apprehension and deception guilt.

424—4 INNOVATIONS IN INTERPERSONAL COMMUNICATION. Critique of commercial courses, programs, and formats purporting to offer skill-building and/or increased awareness of self through intrapersonal or interpersonal communication.

431—4 PSYCHOLOGICAL ASPECTS OF SPEECH COMMUNICATION. Topics and sub-fields within psychology which

complement most closely the concerns of speech communication: psychology of behavior, personal growth, motivation and self-esteem.

432—4 SOCIOLOGICAL ASPECTS OF SPEECH COMMUNICATION. Topics and sub-fields within sociology which complement most closely the concerns of speech communication: structural-functionalism, conflict theory, symbolic interaction, and exchange theory.

433—4 LANGUAGE AND SPEECH COMMUNICATION. Role and impact of language in speech communication development, processes, and behavior. Communication conflict resulting from differences in language usage.

434—4 FUNCTIONAL DIMENSIONS OF NONVERBAL COMMUNICATION. Functional theories across varied contexts. Examined in terms of means of transmission and reception of cues and relationships to verbal communication.

435—4 ANIMAL COMMUNICATION BEHAVIOR. Nature of behavior in several social species. Role of communication in defining, regulating, and maintaining social systems. Prerequisite: consent of instructor.

460—4 ORAL COMMUNICATION IN THE ELEMENTARY SCHOOLS (K-6). Classroom activities designed to develop basic communication skills. Classroom as a verbal community. Recommended for elementary education concentrations and specialists.

461—4 STRATEGIES FOR TEACHING SPEECH COMMUNICATION. Philosophy of speech education and approaches for teaching speech in curricular and co-curricular settings. Meets for five hours. Prerequisite: 16 hours of speech or consent of instructor.

465—4 COMMUNICATION AND AGING. How human communication across the life-span is affected by the aging process. Research questions in human communication relating to gerontology. Prerequisite: consent of instructor.

489—1 to 12 INTERNSHIP IN SPEECH COMMUNICATION. Study, observation, and professional experience with business and organizations in the various areas of communication under joint supervision of the organizational representative and the speech communication faculty sponsor. May be repeated to a maximum of 12 hours, 4 of which may count toward a SPC major. NOT FOR GRADUATE CREDIT. Prerequisites: junior or senior, a major in speech communication, consent of faculty sponsor, and acceptance of organizational representative.

SPEECH PATHOLOGY AND AUDIOLOGY

201—4 HUMAN COMMUNICATION AND ITS DISORDERS. Survey of etiology, assessment, and management of communicative disorders. Emphasis on historical development and career opportunities.

231—4 PHONETICS. Introduction to phonology of general American speech. Description and transcription of speech.

303—4 INTRODUCTION TO SPEECH AND HEARING SCIENCES. Basic orientation to physiological, acoustical, linguistic, and psychological aspects of normal human communication. Prerequisite: 231 or consent of instructor.

312—4 NORMAL LANGUAGE AND SPEECH ACQUISITION. Normal development of linguistic code, including phonological, morphological, syntactic, and semantic attributes of human communication. Prerequisite: 231 or consent of instructor.

320—4 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND HEARING MECHANISMS. Structure and functioning of normal communication system. Prerequisite: 231 or consent of instructor.

360—4 HUMAN HEARING AND ITS DISORDERS. Orientation to parameters of sound, psychoacoustics, anatomy, and physiology of the ear and significant aural pathologies.

400-1 to 4 INDEPENDENT STUDY IN SPEECH PATHOLOGY AND AUDIOLOGY. Activities are investigative, creative, or clinical. May be repeated up to 8 hours credit. Prerequisite: consent of instructor.

441—4 DISORDERS OF ARTICULATION. Basic principles of diagnosis and therapy. Clinical demonstrations and observations. Prerequisites: 201, 320.

442—4 DISORDERS OF VOICE. Basic principles of diagnosis and therapy. Clinical demonstrations and observations. Prerequisites: 201, 320.

443—4 STUTTERING. Basic principles of diagnosis and therapy. Clinical demonstrations and observations. Prerequisites: 201, 320.

444—4 LANGUAGE DISORDERS OF CHILDREN. Basic principles of diagnosis and therapy for developmental problems. Prerequisites: 312, 320.

445—4 LANGUAGE DISORDERS OF ADULTS. Basic principles of diagnosis and therapy for acquired language disorders. Prerequisites: 312, 320.

449—1 to 4 CLINICAL PRACTICE IN SPEECH PATHOLOGY. Supervised clinical practice. Fifteen clock hours of clinical activity for each hour of credit. May be repeated for a total of 6 quarter hours credit. Graded on pass/no credit basis only. Students must maintain a 3.5 grade-point average in order to enroll. Prerequisites: consent of program director and clinical supervisor.

450—4 CLINICAL PROCEDURES IN THE SCHOOLS. Orientation to speech pathology in the schools; methods, materials and organization. Prerequisite: consent of instructor.

452—4 CLINICAL PROCEDURES IN SPEECH PATHOLOGY AND AUDIOLOGY. Principles underlying the clinical interview and client relationships. Therapy and procedures in obtaining, recording, and evaluating test results. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

461—4 BASIC AUDIOMETRY. Principles and techniques of pure tone and speech reception testing. Prerequisite: 360.

462—4 ADVANCED AUDIOMETRY. Special tests for site-of-lesion and non-organic problems. Prerequisite: 461.

469—1 to 4 CLINICAL PRACTICE IN AUDIOLOGY. Supervised clinical practice in diagnosis and therapy of hearing problems. Twenty clock hours of clinical activity for each hour of credit. May be repeated up to 6 hours credit. Graded on pass/no credit basis only. Prerequisites: consent of program director and clinical supervisor.

471—4 AURAL REHABILITATION. Management of the hearing impaired; auditory training, speech reading, speech conservation and counseling. Prerequisite: 360.

498—4 NON-ORAL COMMUNICATION SYSTEMS. Augmentative communication including manual systems, communication boards, electronic devices, and computer adaptations employing words, pictures, and other symbols. Evaluation, teaching strategies, and system modifications. Prerequisites: 441, 444, and 445 or consent of instructor.

STATISTICS

107—4 CONCEPTS AND CONTROVERSIES IN STATISTICS. Basic concepts of descriptive statistics, inferential statistics (estimating parameters and testing hypotheses), experimental design, correlation and regression. Prerequisite: two years of high school mathematics.

244—4 STATISTICS. Basic concepts: data collection and presentation, description of chance events, estimating parameters and testing hypotheses. Prerequisite: MATH 120.

380—4 STATISTICS FOR APPLICATION. Introduction to probability rules and probability distributions, treatment of data, inferences concerning means and proportions, regression, and analysis of variance. Prerequisite: MATH 260a or consent of instructor.

410—8(4,4) STATISTICAL ANALYSIS. Statistical methods not requiring the calculus. Includes (a) elements of probability, estimation, and testing hypotheses; (b) the general linear model (multiple linear regression, analysis of variance, analysis of covariance) and nonparametric statistics. May not be used to satisfy requirements for a mathematics concentration. Three lectures and two laboratory hours per week. Must be taken in sequence. Prerequisite: college algebra.

480—8(4,4) INTRODUCTION TO MATHEMATICAL STATISTICS. A mathematical development of statistical theory. Probability models, distributions of random variables, sampling distributions, generating and characteristic functions, central limit theorem and limiting distributions, estimation of parameters, statistical hypotheses, nonparametric methods, linear models. Must be taken in sequence. Prerequisite: MATH 260c.

481—4 APPLICATIONS OF STATISTICS. Application of statistical concepts presented in 480, proper definition of problems, literature search, selection of appropriate statistical models, planning statistical studies, analysis and interpretation of data, including use of packaged programs, and writing project reports. Prerequisite: 480 or concurrent enrollment.

482—8(4,4) LINEAR STATISTICAL MODELS FOR APPLICATION. Aspects of multivariate analysis, linear regression, analysis of variance and covariance, linear discriminant functions, factor analysis and design of experiments. Prerequisite: 480.

483—4 SAMPLE SURVEYS. Basic concepts of sampling: stratified, multistage systematic and cluster sampling; design of surveys, sampling from imperfect frames. Data quality, validity and efficiency of sampling plans, analysis of data and presentation of results. Prerequisite: 480 or consent of instructor.

484—4 RELIABILITY THEORY AND PRACTICE. Probability models and statistical techniques useful in study of reliability of products and their design, development, and production; special attention to data analysis for process controls. Prerequisite: 380 or 480 or consent of instructor.

485—4 AN INTRODUCTION TO STOCHASTIC PROCESSES. Applications of Markov chains, Markov processes with discrete states in continuous time, and examples of Markov processes in continuous time with continuous state space. Prerequisite: 480b or consent of instructor.

487—4 NONPARAMETRIC STATISTICS. Distribution-free tests and estimation procedures, randomization, sign test, signed-rank test, power, robustness, inferences concerning location and scale parameters for two independent samples, goodness-of-fit. Prerequisite: 480b or consent of instructor.

495—1 to 6 INDEPENDENT STUDY. Research and reading in a specified area of interest such as analysis of variance, design of experiments, estimation, testing hypotheses, linear models, robust procedures, and reliability. May be repeated to a total of 12 hours. Prerequisite: consent of adviser and instructor.

TELEVISION-RADIO

150—4 PROCESS AND EFFECTS OF MASS COMMUNICATION. History, organization, role and current status of

newspapers, magazines, broadcasting, film, cable, public relations, advertising and corporate communications.

200-4 SURVEY OF BROADCASTING. Lecture. History of broadcasting, network structure, medium as part of American business, Federal Communications Commission, related areas.

201—4 BROADCAST WRITING. Fundamentals of radio and television continuity writing including commercial copy, talks, interviews, music and feature programs. Prerequisites: typing skills, mass communications major.

202—4 BROADCAST PERFORMANCE. Skills course: one lecture, four hours laboratory. Provides extensive studio practice in all forms of broadcast talent. Students prepare their own material for studio presentation. Prerequisite: consent of instructor.

230—4 RADIO PRODUCTION. Skills content course. Production of programs for WSIE-FM and or participation in programs for other broadcast agencies. Intensive use of broadcasting tools. One lecture-critique session, four laboratory hours per week.

252—4 TELEVISION LABORATORY. Basic television equipment and principles of studio operation. Production of laboratory programs with students participating. Prerequisites: 201, 230 and/or consent of instructor.

301—5 TELEVISION PRODUCTION. Scenic design and set construction, properties, lighting, special effects, graphics, costuming, makeup; and acting for television. Three lecture-critique sessions, four to six hours laboratory per week. Prerequisites: 252 (with "B") and consent of instructor.

302a—4 RADIO NEWS. Principles, philosophy. Exercises in writing news copy for radio. Broadcast on WSIE. Style, format, delivery. Recording news events and writing. Prerequisites: 201 and/or Journalism 130.

302b—4 TELEVISION NEWS. Writing style, format, news program structuring, editing. Electronic news gathering; develops skills in taping, editing, writing. Students tape and edit news stories on assignment. Prerequisites: 252, 302a.

303—4 BROADCAST ADVERTISING. Radio and television as advertising media. Planning campaign, production techniques, agency relationships, cost factors. Extensive preparation of commercial materials. Merchandising, promotion, interpretation of research. Prerequisites: 201 and/or permission of instructor.

359—4 DRAMATIC WRITING. Structure of drama: writing scenes, analyzing dramatic works. Term project: play analysis or original short play. Students work in television, film, or radio. Prerequisites: 201 and/or consent of instructor.

400—4 SEMINAR IN MASS COMMUNICATIONS. Function, concepts, performance of press, radio, television; development, application of standards for evaluation. Visits to area media, discussion with media news management executives and journalists. Prerequisite: upper-class standing in mass communications or consent of instructor.

401—4 CRITICISM IN THE PUBLIC ARTS. Television, radio and film programs as art forms; social, moral, aesthetic and commercial evaluations; development of critical standards. Prerequisite: senior standing.

402—4 SEMINAR IN BROADCAST ADMINISTRATION. Management executives from stations are "guest faculty". Management responsibility, research goals, use of capital, advertising, public relations, etc. Research paper. Prerequisite: consent of instructor.

404—4 RESEARCH IN BROADCASTING. Application and evaluation of research techniques. Participation in research project designed by class. Prerequisites: senior standing and/or consent of instructor.

405—4 THE DOCUMENTARY FILM. Directed readings; viewing of representative films; criticism; discussion of documentary film movement.

406—4 SPECIAL EVENTS. Broadcasting on radio and television of special events. Remote broadcasting. Preparation, production of one-time and or occasional broadcasts. Live, audio, videotaped program preparation. Prerequisite: consent of instructor.

407a—4 INTERNATIONAL COMMUNICATION-MEDIA IN HIGHLY INDUSTRIALIZED DEMOCRACIES (EUROPEAN, ASIAN). History, growth of communications activities and institutions of Western and industrialized world, including USA, Western Europe, NATO countries and selected countries of Far East. Prerequisites: senior standing, consent of instructor.

407b—4 INTERNATIONAL COMMUNICATION-MEDIA IN COMMUNIST SYSTEMS (SOVIET, EUROPEAN). Basic aspects of media theory and practice. Prerequisite: senior standing or consent of instructor.

407c—4 INTERNATIONAL COMMUNICATION-MEDIA IN DEVELOPING COUNTRIES. Mass media; modernization and national development; mass communications by governments, religious groups and businesses seeking to communicate with people in other nations. Prerequisite: senior standing or consent of instructor.

408—4 TELEVISION AND RADIO REGULATIONS. Federal legislation. Communications Act of 1934, regulations of Federal Communications Commission, legal problems in program operations, censorship and editorial selections, copyright, and author producer relations. Prerequisite: 200 or consent of instructor.

410—5 INTERNSHIP IN BROADCASTING. Professional experience with local media in various phases of broadcasting

under joint supervision of members of broadcasting faculty and media. Prerequisites: mass communications major, senior standing and 3.5 average in mass communications courses.

466—4 ADVANCED PRACTICES. Advanced work in which student has completed all formal course work. Included is work in news, advertising, writing, announcing, and production-direction. May be repeated for total of 8 hours. Prerequisite: consent of instructor.

490—4 SPECIAL PROBLEMS IN MASS COMMUNICATIONS. Special projects, research, and independent study under the guidance of faculty supervisor. May not be repeated. Prerequisite: consent of instructor.

499—1 to 4 CONTEMPORARY READINGS IN TELEVISION/RADIO. Selected readings in-depth with member of faculty. Contemporary books and periodicals. May be repeated to maximum of 4 hours. Prerequisites: consent of adviser, senior standing.

THEATER

111—4 THE DRAMATIC EXPERIENCE: THEATER, SCRIPT, PERFORMANCE. Introductory course to give the general student an understanding of how essential components of theater work together to produce a formal dramatic experience. Topics organized under: Greek, Elizabethan, 19th Century Realism, 20th Century New Trends.

112a—4 INTRODUCTION TO ACTING. Fundamentals of acting combining improvisational exercises with method approach to developing a role; emphasis on relaxation, imagination, concentration, and objectives. Open to non-majors.

112b—4 CREATING A ROLE. Beginning work in scene study and monologues, emphasizing serious, internal realistic acting techniques applicable to both stage and TV/film. Prerequisite: 112a.

115—4 FUNDAMENTALS OF THEATER VOICE. Designed to lead students into an awareness of vocal potential. Exercise techniques, floor work, work on sonnets and monologues. Prerequisites: 112a,b, and consent of instructor.

130—2 or 4 REHEARSAL/PERFORMANCE. Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

150—4 BEGINNING DESIGN FOR THE THEATER. Art of stage design. Design techniques, sketching, model making. Problems and contemporary practices in theater design. Laboratory work on University Theater productions required.

170—4 BEGINNING LIGHTING. Stage lighting as it applies to modern theater practices. Theory, use and operation of equipment. Labortory work on University Theater productions required.

175—4 STAGECRAFT. Craft of scenery and properties construction. Basic skills, materials, techniques in theory and practice. Laboratory work on University Theater productions required.

190—2 or 4 or 6 SPECIAL PROJECTS. Individual work for underclass students in any of the many areas of theater. Prerequisite: consent of instructor.

195—2 or 4 or 6 THEATER PRACTICUM. Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, and make up. Work to be arranged for individual needs, interests. May be repeated up to 8 hours credit. Prerequisite: consent of instructor.

204—2 INTRODUCTION TO DRAMATIC LITERATURE. Dramatic structure, character development, theatrical atmosphere, realistic and non-realistic elements as seen by actors and directors. Major works read; analytical papers written.

210a—4 FUNDAMENTALS OF COMEDY AND CHARACTERIZATION. Exercises and scene work introducing external techniques for physical/vocal characterization and comedy. Prerequisites: 112a,b.

210b—4 INTRODUCTION TO STYLES OF ACTING. Development of specific acting skills through monologues and scene work in a variety of styles including Shakespeare, Restoration drama, Brecht, and others. Prerequisites: 112a,b.

212a—4 MOVEMENT FOR ACTORS. Basic principles and techniques of stage combat and physical characterization. Includes body awareness, conditioning, emotional connections. Promotes performer's capacity for centering, extended emotional range, self-confidence. Prerequisite: Dance 114 or consent of instructor.

212b—4 MOVEMENT FOR ACTORS. Improvisational movement exercises, period movement, introduction to show-dance and choreography. Designed to increase body/mind awareness, relationships through movement, basic skills and concepts. Prerequisite: 212a.

215—4 INTRODUCTION TO DIALECTS. Dialect familiarization to establish basis for further work in dialect representation. Major acoustical, physiological, psychological, features of eleven dialects studied. Dialect drill work, dialect tapings. Prerequisite: 115 or consent of instructor.

230—2 or 4 REHEARSAL/PERFORMANCE. Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

235—2 INTRODUCTION TO T'AI CHI CH'UAN. "Slow-motion" exercise that promotes relaxation, circulation, balance, and flexibility. Includes principles and postures from short form of Yang style T'ai Chi Ch'uan.

250—4 SCENE DESIGN I. Rendering techniques for scene design. Design concepts, design projects, critique sessions, and the study of past and contemporary scene designers. May be repeated 2 times. Prerequisite: 150 or consent of instructor.

260—4 COSTUME CONSTRUCTION. Basic costume construction techniques including sewing, flat pattern drafting, draping, and interpreting designs into constructed costumes. Laboratory work on University Theater productions required.

265—4 THEATER MAKEUP. Design and application techniques using pan cake, grease paint, prosthetics, and crepe hair. Projects include character, old age, ethnic and fantasy makeup. Prerequisite: consent of instructor.

270—4 ADVANCED STAGE LIGHTING. Lighting concepts and sensitivity to lighting environments. Lighting plans, light plots, schedules and section drawings. Laboratory work on University Theater productions required. Prerequisite: 170 or consent of instructor.

276—4 INTRODUCTION TO STAGE MANAGEMENT. Intricacies of theatrical company management, union relationships, touring. Coordination of technical components. Incorporation of computers to aid organization.

290—2 or 4 or 6 SPECIAL PROJECTS. Individual work in area of theater. May be repeated up to maximum of 8 hours credit. Prerequisite: consent of instructor.

295—2 or 4 or 6 THEATER PRACTICUM. Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, and makeup. Work to be arranged for individual needs, interests. May be repeated up to 8 hours credit. Prerequisite: consent of instructor.

304—4 MODERN THEATER IN SOCIETY: REALISM TO REVOLUTION. Modern theater within the context of social, political, scientific, philosophical developments of the nineteenth and twentieth centuries. Realism, reactions against realism, Russian experiments, Theater of the Absurd, and the radical sixties. Prerequisite: junior standing or consent of instructor.

305—4 THEATER BUSINESS MANAGEMENT. History and nature of business management organization and practice as applied to performing arts operations. Includes funding, staffing, budgeting, promoting and sustaining such operations. Prerequisite: advanced standing.

309a—4 MUSICAL THEATER LABORATORY. Performance of musical comedy choral, ensemble and solo numbers, including both song and dance. Audition techniques, dancing with props, singing with microphone. Prerequisite: consent of instructors.

309b—4 MUSICAL THEATER LABORATORY. Preparation of musical comedy scenes in a variety of styles. Includes acting, singing, and dancing. Elements of stage and musical direction and choreography. Prerequisite: 309a.

309c—4 MUSICAL THEATER PRODUCTION. Development, rehearsal, and performance of a full-length musical revue, including original arrangements, staging, and choreography. Prerequisites: 309a,b.

310a—4 ADVANCED STYLES OF ACTING. Intensive scene work in plays requiring exceptional facility with articulation, rhythms, and poetry, including Shakespeare, Shaw, and others. Prerequisites: 112a,b, 210a,b.

310b—4 ACTING AS A CAREER. Information and skills necessary to gain professional work as actor or acting teacher. Auditions, photographs, interviews, cold-readings, commercials, voice tapes, introduction to television acting. Prerequisites: 112a,b, 210a,b, 310a or consent of instructor.

320—4 DIRECTING FOR THE STAGE. Elements of director's craft: interpretation, composition and blocking, design and technical considerations, working with actors and directing a scene. Prerequisite: 112a.

330—2 or 4 REHEARSAL/PERFORMANCE. Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. Prerequisite: must be cast in theater production.

350—4 SCENE DESIGN II. Advanced study of rendering techniques. Design projects, critique sessions, and research techniques. Study and use of historical architectural and decorative detail. May be repeated two times. Prerequisite: 250 or consent of instructor.

355—4 SCENE PAINTING. Traditional and contemporary techniques including layout, cartooning, lining, textures, color. Studio work. Prerequisites: consent of instructor; 150, 250 and 350 recommended.

360—4 COSTUME DESIGN. Theory, rendering techniques, history of dress, and research for period silhouette and character presentation. Laboratory work on University Theater productions required.

375—4 SOUND FOR THE THEATER. Sound control, microphone amplification, acoustics, and sound effects. Practical operation with microphones, turntables, tapedecks, and loudspeakers.

376—4 PROJECTS IN STAGE MANAGEMENT. Practical experience serving as stage assistant director and/or stage manager for University or Student Experimental Theater pro-

ductions. May be taken for up to 12 hours. Prerequisites: 276 and approval of the director of the production.

390—2 or 4 or 6 SPECIAL PROJECTS. Individual work in theater. May be repeated up to a maximum of 8 hours credit. Prerequisite: consent of instructor.

395—2 or 4 or 6 THEATER PRACTICUM. Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, and makeup. Work to be arranged for individual needs and interests. May be repeated up to 8 hours credit. Prerequisite: consent of instructor.

399—1 THEATER AND DANCE SEMINAR. Journal articles, guest artist speakers, video and slides. May be repeated up to 4 hours.

401—12(4,4,4) HISTORY OF THE THEATER. Drama, performance, architecture, design, and cultural environment of (a) Primitive, Greek, Roman, Pre-Renaissance; (b) Renaissance, Neo-Classical; (c) Romantic and Modern.

402—4 HISTORY OF THE MUSICAL THEATER. Forms of musical entertainment from nineteenth-century extravaganza and burlesque to twentieth century musical comedy. NOT FOR GRADUATE CREDIT.

404—4 FORMS OF DRAMATIC ACTION. Principles of dramatic action as exemplified in selected plays. Relationships between theatrical process and dramatic form in tragedy and comedy. Prerequisites: advanced standing, consent of instructor.

405—2 or 4 BUSINESS MANAGEMENT. Practicum work in publicity, promotion, ticket distribution, and house control activity. Projects tailored to fit individual capabilities. May be repeated up to 8 hours. NOT FOR GRADUATE CREDIT. Prerequisite: 305.

410—2 or 4 ACTING FOR TELEVISION. Acting principles and techniques. Exercises, commercials, and scenes from television scripts will be video-taped and critiqued for on-camera effectiveness. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor; 112a,b recommended.

420—2 or 4 PROJECTS IN DIRECTING. Direction of plays staged for performance. Analysis of script, development of director's prompt book, rehearsal procedure, collaborative work with designers. Done under faculty supervision. May be repeated up to 8 hours. NOT FOR GRADUATE CREDIT. Prerequisite: 320.

430—2 or 4 REHEARSAL/PERFORMANCE. Acting practicum in stage productions developed for public performance. Role analysis, ensemble playing, rehearsal and performance discipline. May be repeated with consent of instructor. NOT FOR GRADUATE CREDIT. Prerequisite: must be cast in theater production.

450—2 or 4 or 6 SCENE DESIGN PROJECTS. Advanced practical work on studio or University Theater productions. May be repeated up to maximum of 12 hours credit. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor; 350 recommended.

460—2 or 4 or 6 COSTUME PROJECTS. Advanced practical work on studio or University Theater productions. May be repeated up to maximum of 12 hours credit. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor; 260 and 360 recommended.

470—2 or 4 or 6 ADVANCED LIGHTING PROJECTS. Advanced practical work on studio or University Theater productions. Normally limited to work as lighting designer, assistant lighting designer, or master electrician. May be repeated up to a maximum of 12 hours credit. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor; 170 and 270 recommended.

475—2 or 4 or 6 ADVANCED STAGECRAFT. Advanced practical work on studio or University Theater productions in area of technical theater. May be repeated up to a maximum of 12 hours credit. NOT FOR GRADUATE CREDIT. Prerequisites: consent of instructor; 175 recommended.

490—2 or 4 or 6 SPECIAL PROJECTS. Individual work in area of theater. May be repeated up to maximum of 8 credit hours. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

495—2 or 4 or 6 THEATER PRACTICUM. Practical work on University Theater productions. Backstage work in scenery, lighting, costumes, props, sound, makeup. Work to be arranged to fit individual needs and interests. May be repeated up to 8 hours credit. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

UNIVERSITY COLLEGE

400—4 to 8 SENIOR PROJECT IN LIBERAL STUDIES. Individually designed project to provide student with experience of a rigorous academic exercise. Experience could be in the nature of internships, an integrating research paper, a creative project, an in-depth course of study leading to a comprehensive examination, and other types of supervised study. Maximum of 8 credit hours. NOT AVAILABLE FOR GRADUATE CREDIT. Prerequisites: senior standing; consent of instructor, adviser and program director.

WOMEN'S STUDIES

200—4 ISSUES IN FEMINISM: AN INTRODUCTION TO WOMEN'S STUDIES. Beliefs, values, and commitments of the women's movement and their implications for lives of both women and men.

390—2 to 4 SELECTED TOPICS. Varying topics in the study of gender bearing directly upon women's experience. May be repeated to a maximum of 8 hours.

490—2 to 6 SPECIAL PROBLEMS. Varying topics in the study of gender and women's experience, treated in depth. May be repeated to a maximum of 16 hours so long as no topic is repeated. Prerequisite: consent of instructor.

495—2 to 4 INDEPENDENT READINGS IN WOMEN'S STUDIES. Individual research in women's experience or feminist theory. Content and format to be arranged with instructor. May be repeated up to 8 hours. Prerequisite: approval of director of women's studies.

499—4 PRACTICUM IN WOMEN'S STUDIES. Practical learning experience in women-oriented activities or organizations such as political campaigns, women's centers or women's programs. Ten hours a week with the organization plus an academic component (readings and/or paper). For students with considerable background. Prerequisite: approval of director of women's studies.

INDEX

-A-

Academic Calendar III
Academic Counseling and Advising 37
Academic Degrees and Programs 145
Academic Development 38
Academic Ethics and Plagiarism 4
Academic Load 49
Academic Recognition 53
Academic Services 37
Academic Services, Office of 37
Accountancy (major) 56
Accounting, Department of 56
Accounting, General (specialization) 56
Accreditation of the University 3
Adding Classes 36
Admission as a Freshman 5
Admission as a Non-degree Student 11
Admission as a Non-Traditional Freshman 6
Admission as a Transfer Student 7
Admission, Early, see Early Admission 7
Admission of International Students 8
Admission of Re-entry Students 10
Admission of Students Holding or Requiring F-1 Visas 9
Admission of Students Whose First Language is not English 9
Admission of Students with Foreign Academic Credentials 9
Admission Review Process 12
Admission, Special, for First Time Freshmen 6
Admission to University 5
Admission, Traditional, see Traditional Admission 5
Advanced General Education Course Requirements 14, 15, 20, 21
Advising, see Academic Counseling and Advising 37
Aerospace Studies 134
Affirmative Action, Office of 4
American Studies (minor) 131
Anthropology, Department of 121
Anthropology (major) 121
Appeal of Financial Aid Termination 32
Appeal of Residency Status 13
Application for Admission 7
Application for Graduation 51
Applying for Financial Assistance 26
Art and Design, Department of 83
Art and Design (major) 84
Art Education (specialization) 85
Art History, see History, Art (specialization) 84
Art (major) 84
Art Studio (specialization) 84
Athletics, Intercollegiate 44
Attendance, Class, see Class Attendance 49
Auditing of Courses 50

-B-

Bachelor of Liberal Studies 133
Biological Sciences, Department of 106
Biological Sciences (major) 106
Black American Studies (minor) 131
Board of Trustees 149
Bookstore 40
Bursar 43
Business Administration (major) 57
Business Economics (major) 59
Business Education (major) 60
Business, School of 54

-C-

Calendar, Academic, see Academic Calendar III
Campus Recreation 44
Career Decision Making 39
Career Planning and Placement Services 39
Center for Management Studies 142
Change of Major or Minor 37
Changes in Registration 36
Chemistry, Department of 110
Chemistry (major) 111
Child Developmant Program 138
Civil Engineering, Department of 77
Civil Engineering (major) 77
Class Attendance 49
Classes, Dropping, see Dropping Classes 36
Classical Studies (minor) 131
Classification of Students 49
College Board Advanced Placement 52
College Level Examination Program 53
Colloquium, Student, see Student Colloquium 136
Community Outreach Activities 142
Computer Science, Department of 113
Computer Science (major) 114
Conferences and Institutes 144
Constitution Requirement 16
Construction (major) 80
Continuing Education, Office of 41
Continuing SIUE Students 16
Counseling 38
Counseling and Advising, Academic, see Academic Counseling and Advising 37
Course Numbering System 18
Courses 165
Credit by Examination, Extension, and Correspondence 52
Curriculum and Instruction, Department of 63

-D-

Dance, see Theater and Dance 92
Dance (specialization) 93

Dean of Students 42
Dean's College 134
Dean's List 53
Declaration of Major 37
Deferment Policy, see Tuition and Fees Deferment Policy 29
Deferments 30
Degrees and Programs 145
Dental Clinics 142
Dental Medicine, School of 146
Design and Technical (specialization) 93
Directory Information 160
Disabled Parking 48
Disabled Persons Services 41
Driver Education 69
Dropping Classes 36

-E-

Early Admission 7
Early Childhood Center 45
Early Childhood Education (major) 65
Earth Science (major) 123
East St. Louis Campus 137
Ecology (specialization) 108
Economics, Department of 122
Economics (major) 122
Educard Program 12, 144
Educational Opportunity Centers 138
Education, School of 62
Elderhostel 143
Electrical Engineering, Department of 78
Electrical Engineering (major) 78
Elementary and Early Childhood Education, see Curriculum and Instruction, Department of 63
Elementary Education (major) 64
Eligibility for Financial Assistance 26
Emergency Short-term Loan 29
Engineering, School of 74
English Language and Literature, Department of 95
English (major) 95, 96
Entry Competency for General Education Courses 14
Environmental Resources Training Center 139
Equal Opportunity and Affirmative Action 4
Evening and Weekend Student Services 39
Extension and Correspondence 52

-F-

Faculty 3, 149
Fair Practice 4
Finance (specialization) 57
Financial Aid Deferment 29, 30
Financial Aid Satisfactory Academic Progress Policy 30
Financial Aid Termination, Appeal of, see Appeal of Financial Aid Termination 32
Financial Assistance, Applying for, see Applying for Financial Assistance 26
Financial Assistance, Eligibility for, see Eligibility for Financial Assistance 26
Financial Assistance, Types of, see Types of Financial Assistance 26
Fine Arts and Communications, School of 82
Food Service 47
Foreign Languages and Literature, Department of 97
Foreign Languages and Literature (major) 97
Foreign Language Requirement 49
Foreign Student Services 38
French (specialization) 97

-G-

General Business Administration (specialization) 58
General Education 14
General Education Advanced Course Requirements 20, 21
General Education Interdisciplinary Course Requirements 20
General Education Introductory Course Requirements 19
General Education Skills Course Requirements 19
General Science and Mathematics (major) 115
Geography and Earth Science, Department of 123
Geography (major) 124
German (specialization) 97
Gerontology Program 143
GI Bill Information 29
Grading System 50
Graduate School 148
Graduation 51
Graduation Appeals Committee 51
Grants 27
Grievance Policy and Procedure, see Student Academic Grievance Policy and Procedure 5

-H-

Handicapped Individuals, Services for, see Services for Disabled Persons 41
Hardship Deferments Policy 30
Head Start Program 138
Health Education (major) 68
Health, Recreation and Physical Education, Department of 67
Health Service 45
Historical Studies, Department of 125
History, Art (specialization) 84
History (major) 126
Honorary Organizations 43
Housing 46
Humanities Honors Program 99
Humanities, School of 94

-I-

Incomplete and Deferred Grades 50
Industrial Engineering (major) 79
Instructional Technology (minor) 70
Intercollegiate Athletics 44
Interdisciplinary Course Requirements 14, 15, 20
International Student Services,
see Foreign Student Services 38
Intramural Sports 44
Introductory General Education
Course Requirements 14, 15, 19

-J-

Jazz Performance (specialization) 88
Journalism (specialization) 86

-K-

Katherine Dunham Center for the Performing Arts 138

-L-

Late Penalty Fee 33
Legal Services, Student, see Student Legal Services 46
Liberal Studies (major) 133
Library, see Lovejoy Library 39
Loans 28
Location of Campus 2
Lovejoy Library 39

-M-

Major, Declaration of, see Declaration of Major 37
Major or Minor, Change of,
see Change of Major or Minor 37
Management, Department of 58
Management Information Systems, Department of 58
Management Information Systems (specialization) 58
Management (specialization) 58
Manpower and Industrial Relations (specialization) 58
Map of Campus I
Marketing, Department of 58
Marketing (specialization) 58
Mass Communications, Department of 85
Mass Communications (major) 86
Mathematical Sciences (specialization) 115
Mathematical Studies (major) 115
Mathematics and Statistics, Department of 114
Medical Sciences (specialization) 108
Medical Technology (specialization) 109
Microcomputer Laboratories 40
Military Experience Credit 53
Missouri Residents' Tuition and Fees 34
Musical Theater (specialization) 89
Music, Department of 86
Music Education (specialization) 88
Music (major) 87
Music Merchandizing (specialization) 87
Music Performance (specialization) 88
Music Theory and Composition (specialization) 87

-N-

New Student Life, see Orientation
and New Student Life 37
Nursing (major) 102
Nursing, School of 100

-O-

Off-Campus Courses, see Resident Centers
and Off-Campus Locations 139
Office Information Systems (specialization) 59
Officers of the University 149
Options in General Education 16
Orientation and New Student Life 37

-P-

Parking 48
Parking for Disabled Persons 48
Peace Studies (minor) 132
Performance (specialization) 88
Personnel Administration (specialization) 59
Philosophical Studies, Department of 98
Philosophy (major) 98
Physical Education, Department of, see Health, Recreation
and Physical Education, Department of 67
Physical Education (major) 68
Physical Science Education (major) 119
Physics, Department of 117
Physics (major) 118
Placement Program 11
Placement Services,
see Career Planning and Placement 39
Plagiarism, see Academic Ethics and Plagiarism 4
Political Science, Department of 126
Post Office 47
Pre-Engineering 75
Presidential Scholars Program 134
Probation 51
Production and Operations Management
(specialization) 59
Professional Experience Program 60
Proficiency Examinations 52
Psychology, Department of 70
Psychology (major) 71

-R-

Rape and Sexual Abuse Care Center 144
Recreation, Campus 44
Recreation, Department of, see Health, Recreation and Physical Education, Department of 67
Recreation (major) 66
Reentering Students 17
Refunds 36
Regional Research and Development Services 142
Registration 36
Registration, Changes in, see Changes in Registration ... 36
Religious Center 148
Repeated Courses 50
Residency 12
Residency Status, Appeal of, see Appeal of Residency Status 13
Resident Centers and Other Off-Campus Locations 139
Right to Privacy and Nondisclosure 4
ROTC, see Aerospace Studies 134

-S-

Sam M. Vadalabene Center for Health, Recreation and Physical Education 147
Satisfactory Academic Progress Policy, see Financial Aid 30
Scholarships 26
Science Awareness, see Upward Bound/Science Awareness 138
Sciences, School of 104
Scott Resident Center 139
Secondary Education, Department of, see Curriculum and Instruction, Department of 63, 65
September Option 137
Services for Disabled Persons 41
Services for Veterans 41
Skills General Education Course Requirements ... 14, 15, 19
Small Business Institute Program 142
Social Sciences, School of 120
Social Work (major) 129
Sociology and Social Work, Department of 128, 129
Sociology (major) 128
Southern Illinois University System 2, 149
Spanish (specialization) 97
Special Admission for First Time Freshmen 5
Special Education, Department of 71
Special Education (major) 72
Speech Communication, Department of 89
Speech Communication (major) 90
Speech Pathology and Audiology, Department of 91
Speech Pathology and Audiology (major) 92
Statistics (specialization) 116
Student Academic Grievance Policy and Procedure 5
Student Activities and Organizations 42
Student Colloquium 136
Student Government 45
Student Identification Cards 48
Student Legal Services 46
Student Organizations 42
Student Program Board 46
Student Rights and Conduct Code 5
Student Teaching 73
Studio, Art (specialization) 84
Substitutions in General Education 16
Summary of General Education Requirements and Courses 19, 20
Summer University 137
Suspension 51

-T-

Teaching Fields 67
Television/Radio (specialization) 86
Testing Services 39
Theater and Dance, Department of 92
Theater (major) 93
Traditional Admission 5
Transcript Evaluation 18
Transcripts 18
Transferring Students 17
Tuition and Fees 33
Tuition and Fees Deferment Policy 29
Tutorial Assistance 38
Types of Financial Assistance 26

-U-

University Book Services 40
University Center 47
University College 133
University Facilities 147
University, History of 1, 2
University Honors Programs 134
University Museums, Office of 47
University Policies 4
University Theater and Musical Events 48
Upward Bound/Science Awareness 138

-V-

Vadalabene Center for Health, Recreation and Physical Education 147
Veterans, Services for, see Services for Veterans 41
Visits to Campus II

-W-

Week End University 137
Withdrawing and Financial Assistance 37
Withdrawing from the University 36
Women's Studies (minor) 132

Southern Illinois University at Edwardsville
Campus Box 1015
Edwardsville, IL 62026-1015