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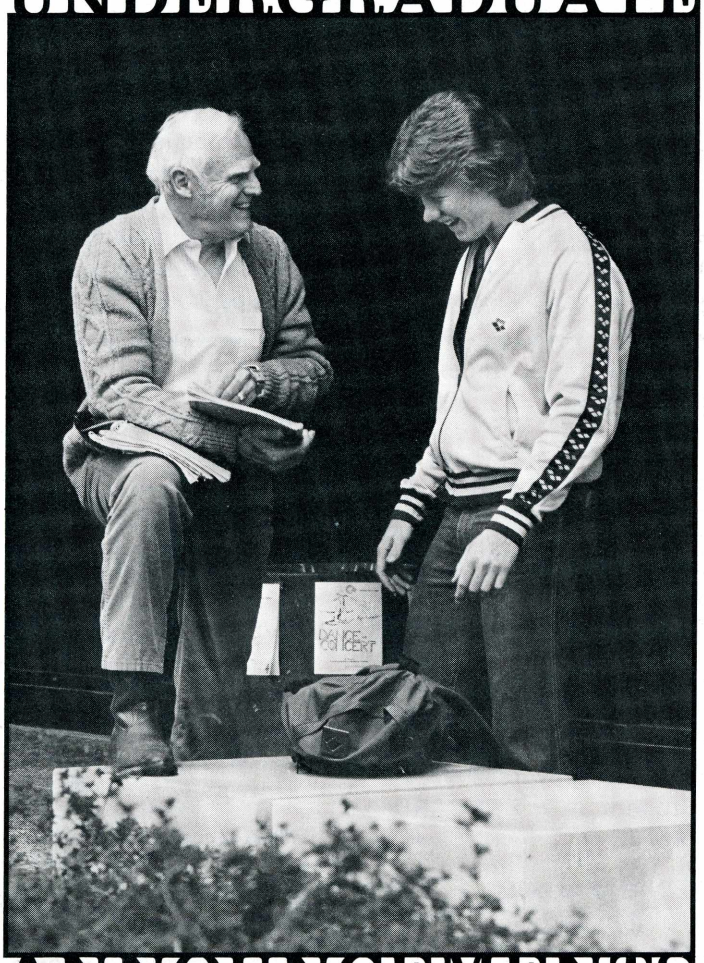
1982-1984

UNDERGRADUATE

ANNOUNCEMENTS

(USPS 935-420)

UNDERGRADUATE



ANNOUNCEMENTS

SIUE

Southern Illinois University at Edwardsville

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THIS ISSUE

of the Southern Illinois University *Announcements* covers in detail questions concerning the undergraduate program and applies to Southern Illinois University at Edwardsville. It supersedes Volume 11, Number 4 of the Southern Illinois University at Edwardsville *Announcements*.

The following issues of the Southern Illinois University *Announcements* may be obtained free from the Office of Admissions and Records, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1001.

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

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

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 students upon matriculation.

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 when circumstances warrant such action.

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

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. Such changes will be published and will become official in the Quarterly Schedule of Classes publications, and any changes noted therein will supersede any information contained in this issue.

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Statement of Fair Practice. Southern Illinois University at Edwardsville maintains reasonable and fair practices in all matters affecting students. This includes the delivery of educational programs, provision of adequate 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 Office of the Vice President and Provost.

UNIVERSITY CALENDAR

FALL 1982

September 27 (7:30 AM) - December 18
Thanksgiving — November 21-28
Final Exams — December 14-18

WINTER 1983

January 3 (4:30 PM) - March 19
Final Exams — March 15-19

SPRING 1983

March 28 (7:30 AM) - June 11
Final Exams — June 7-11

SUMMER 1983

June 20 (7:30 AM) - September 3
June 20 (7:30 AM) - August 13 (eight-week session)
Final Exams — August 30-September 3

FALL 1983

September 26 (7:30 AM) - December 17
Thanksgiving — November 20-27
Final Exams — December 13-17

WINTER 1984

January 3 (7:30 AM) - March 17
Final Exams — March 13-17

SPRING 1984

March 26 (7:30 AM) - June 9
Final Exams — June 5-9

SUMMER 1984

June 18 (7:30 AM) - September 1
June 18 (7:30 AM) August 11 (8-week session)
Final Exams — August 28 - September 1

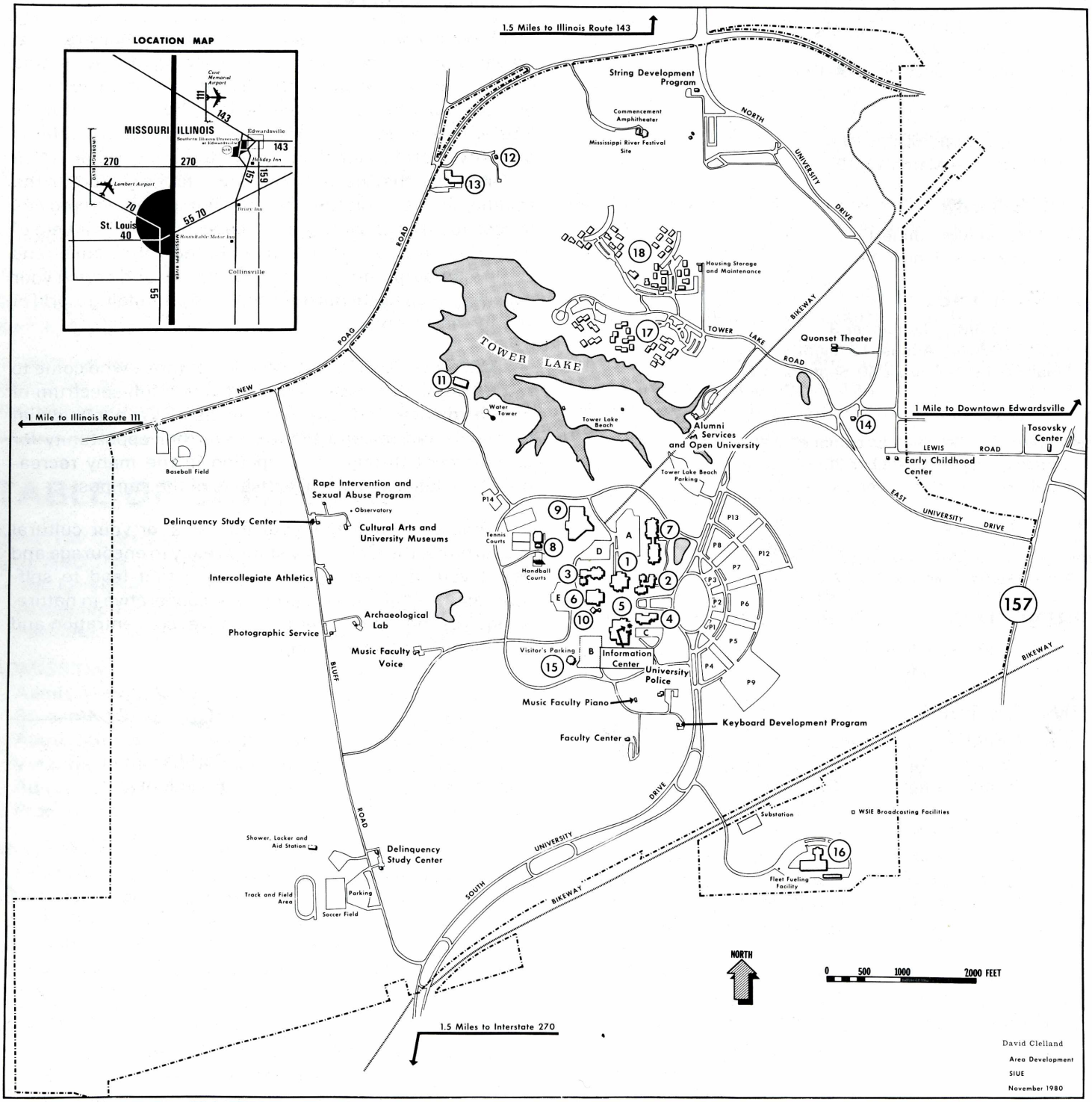
WELCOME FROM THE PRESIDENT

I welcome you to Southern Illinois University at Edwardsville, a community of teaching, learning and scholarship. The pages of this Bulletin are a guide to the educational opportunities available within the community. You will find that as a modern university, we offer a diversity of professional and preprofessional training. You will also note that we affirm the importance of study in the traditional liberal disciplines, which may serve to provide access to progressively greater concentration in a field of particular interest or as an enduring intellectual and cultural underpinning that will illuminate and enrich your lives as you go forth into a continuously unfolding world of change and surprise.

We recognize that the heritage of those who come to the University represents and reflects a full spectrum of hues as diverse and colorful as life itself. We applaud that pluralism and invite attention to further opportunity for development through participation in the many recreational, athletic, and social activities of the campus.

Whatever your age, your interests, or your cultural background, the University stands ready to encourage and assist you in widening the horizons that lead to self-realization. While this enterprise is cooperative in nature, it requires individual energy, initiative, concentration and determination. We will help.

Earl Lazerson
President



(1)	Lovejoy Library	(9)	Multi-Purpose Building	(17)	Tower Lake Apartments (401-431)
(2)	Peck Classroom Building	(10)	Proposed Theater Facility	(18)	Tower Lake Apartments (501-531)
(3)	Science Laboratory Building	(11)	Heating and Refrigeration Plant		
(4)	John S. Rendleman Office Building	(12)	Waste Treatment Plant		
(5)	University Center	(13)	Environmental Resources Training Center		
(6)	Communications Building	(14)	Chancellor's Office		
(7)	Classroom Buildings 2 and 3	(15)	Religious Center		
(8)	Bubble Gym	(16)	Physical Plant, Supporting Services		

PARKING LOTS

A	Special Registered Vehicles
B	University Center-Attended Pay Lot
C	John S. Rendleman Building-Metered Lot
D	Special Registered Vehicles
E	Special Registered Vehicles
P1, P2, P3	Registered Vehicles for Faculty and Staff
P4–P14	Registered Vehicles for Faculty, Staff and Students

SIUE AND THE SIU SYSTEM

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 S.I.U. opened two "residence centers" in Alton and East St. Louis. The University modestly expected to enroll 800 students. Nineteen hundred applied. By 1959 the number of students had doubled to 3800, severely 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 into 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, softened by a carefully designed garden landscape that attracts visitors by its physical beauty. The campus immediately garnered several awards in recognition of the successful blend of the aesthetic and functional in a setting that promotes and enhances growth and development.

Location

Southern Illinois University at Edwardsville serves the most populous region of downstate Illinois. The campus is centrally located for commuters in the eastern metropolitan St.Louis area, and 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 2,500,000 people.

St. Louis, fifteen miles southwest of the campus, is one of the oldest and richest cultural centers of the country, renowned for its symphony, new Opera Theatre, art museum, 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 major metropolitan area, students and faculty can experience the diversions of ethnic restaurants, mammoth retail centers, and Broadway plays. Or they can enjoy the pastoral setting of the campus and nearby state parks, small rural towns, and historic settlements.

Student Body

With an enrollment of 6785 full-time and 3420 part-time students, SIU at Edwardsville is large enough to provide for all the educational needs of its students, yet sufficiently small not to seem impersonal. Seventy percent of all students come from Madison and St.Clair counties in Illinois, six percent from Missouri. The remainder come from almost every county in Illinois, forty-five other states, and forty-nine foreign countries. Minority groups comprise seventeen percent of the total enrollment.

Many students are over twenty-five and have enrolled in the University after beginning their families and careers. One-fourth of all students are married. Some return to complete an interrupted education, others to retrain for better jobs, many for the sheer excitement of learning. More than a third of all students attend only part-time; many of them work while taking classes. For them the commuter campus is especially convenient. For students who live in Missouri and take no more than 9 credit hours each quarter, the University offers the same tuition rates that it does for Illinois residents. Many departments at the University offer evening classes for working students.

Other services and programs are designed for a variety of groups in the communities surrounding the University. For entering freshmen there are traditional degree programs. For students whose schedules will not permit traditional classroom instruction there is Open University. Individuals not enrolled in the University for credit may attend classes under the EDUCARD program.

For students who wish to live on campus the University has limited housing. Approximately 1,250 people live in 496 apartments near the recreational facilities at Tower Lake.

Off-campus programs are offered at resident centers at Scott Air Force Base in Belleville, at Greenville College, and at Litchfield, Illinois. Faculty travel there to teach courses in degree programs identical to those offered on campus. The East St. Louis Center operates special programs and courses in a variety of disciplines. The University is committed to adult continuing education programs and to serving all the residents of Metro-East for whom educational opportunities did not exist before SIUE was founded.

Academic Programs

SIUE offers undergraduate degrees in seven Schools with forty-four degree programs, many with specializations, and ten additional minor programs. Students who plan to teach in grades K-12 are certified through the School of Education. Students may choose to seek majors in:

Accountancy
Aerospace Studies[1]
American Studies
Anthropology
Art
Art and Design
Biological Sciences
Black American Studies[1]
Business Administration
Business Economics
Business Education
Chemistry
Civil Engineering
Classical Studies[1]
Coaching[1]
Construction
Early Childhood Education
Earth Science
Economics
Electrical Engineering
Elementary Education
English
Environmental Science[1]
Foreign Languages and Literature
General Science and Mathematics
Geography
Government
Health Education
History
Human Services
Industrial Engineering
Instructional Technology[1]
Italian[1]
Latin American Studies[1]
Liberal Studies
Mass Communications
Mass Communications in a Democratic Society[1]
Mathematical Studies
Music
Nursing
Peace Studies[1]
Philosophy
Physical Education
Physical Science Education
Physics
Psychology
Recreation
Russian[1]
Social Work
Sociology
Special Education
Speech Communication
Speech Pathology and Audiology
Theater
Women's Studies[1]

[1]Minor only

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 Instructional Process. Graduates may also apply to the School of Dental Medicine, operated by SIUE at the Alton Campus.

The University is accredited by the North Central Association of Colleges and Schools, and many of its departments are accredited by other agencies:

American Assembly of Collegiate Schools of Business
American Chemical Society

American Council on Education for Journalism
American Dental Association
American Planning Association
American Speech-Language-Hearing Association
Council of Social Work Education
Engineers' Council for Professional Development
National Association of Schools of Music
National Council for Accreditation of Teacher Education
National League for Nursing
North Central Regional Accrediting Committee on Continuing Education of the American Nurses' Association

Faculty

Approximately 600 faculty members provide instruction, research, and public service at SIUE. Seventy-five percent of the faculty possess the doctoral degree, earned at major universities in the United States and abroad. Many of the faculty have distinguished themselves by research and publications. In 1981 six received Fulbright awards to teach abroad. The University emphasizes the instructional responsibilities of its faculty. Faculty teach courses to undergraduates as well as graduate students, and are available to students during scheduled office hours.

Buildings and Facilities

The buildings on the central campus of SIUE, arranged around a large circular mall, are convenient to reach between classes and during inclement weather. Designed as an integral unit, all have common architectural features—courts, terraces, balconies—but each is planned for specific instructional uses.

Lovejoy Library

Named for Elijah P. Lovejoy, the martyr for a free press from Alton, Illinois, the Library contains over 700,000 volumes; 400,000 United States, Illinois, and international organization government documents; 110,000 maps; 20,000 phonograph records; and a number of special research collections which are particularly strong in materials relating to the region and in music. About 20,000 volumes are added annually and there are 4,500 periodical subscriptions. The East St. Louis Campus Library contains over 20,000 volumes. These resources are augmented by computer-based interlibrary loan networks and a statewide interlibrary delivery system.

In the basement of the Library are located Audio Visual Services, including the Self-Instruction Laboratory, the Textbook Service, and the University Archives.

Peck Classroom Building

The first building opened on campus, the Peck Building is home for the Schools of Humanities, Social Sciences, the Office of Continuing Education, the Anthropology Teaching Museum, the Writing Clinic, and laboratories for foreign language instruction. Two of the wings, opening from a center court, are used for classrooms, the remaining one for faculty offices.

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.

Science Laboratory Building

The sciences laboratories for research and instruction in biology, chemistry, physics, the engineering laboratories, and the mathematics and computer facilities are centrally located in the Science Laboratory Building.

University Center

The University Center is home for the Student Activities Office and the Center Board which are responsible for many nonacademic programs on campus. It provides food service for students, faculty, and guests, recreational facilities including a sixteen-lane bowling alley, table tennis facilities, billiards room, and a card and game lounge. Other amenities include the bookstore, barbershop, television room, music listening 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, Dean of Students, Admissions and Records, Academic Advisement, Academic Counseling, and Bursar. Student services, such as Tutoring, Veterans Affairs, Health Service, Placement Services, and Evening Student Services, are also housed here.

Classroom Buildings II and III

The newest buildings on campus are adjacent to the mall and to the north of Peck Building. The two buildings form a single complex connected by tunnel and skywalk. Faculty offices for the Schools of Business, Nursing, and Education share the buildings with lecture halls, instructional laboratories, and conference rooms.

The Multi-Purpose Building

Under construction is the University's first permanent athletic facility for campus-wide recreation and sports. While it is being built, other on- and off-campus facilities are available for students. The University sponsors an extensive intramural program and a varsity athletic program including soccer, basketball, baseball, track, cross country, wrestling, tennis, and golf. The Cougars, as the athletic teams are called, have received national and international recognition in several sports.

Other Facilities

Near the academic core a visually arresting geodesic dome structure houses the interdenominational Religious Center, which was constructed through private donations. Additional buildings, such as the Supporting Services Building and the Wagner Complex of fine arts studios, are located at various points away from the center of the campus area.

SOUTHERN ILLINOIS UNIVERSITY SYSTEM

SIU at Edwardsville is one of two institutions comprising the SIU System. On the Edwardsville and Carbondale campuses, the System serves 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, and this initiative led to the eventual development of a separate, distinctive institution in Edwardsville.

The mission and scope of the Southern Illinois University System is highly complex and 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, not only from the region, but from throughout the State of Illinois and the nation and from overseas as well.

A truly modern and comprehensive post-secondary educational institution, the Southern Illinois University System has a broad range of academic programs at the associate, baccalaureate, 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.

ADMISSION

Southern Illinois University at Edwardsville provides opportunities for study to a large and diverse student population: freshmen entering from high school; students transferring from other colleges and universities; adults who have postponed or interrupted their education and returned 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.

ADMISSION AS A FRESHMAN

CRITERIA

High school students who rank in the upper half of their graduating class or who achieve a score greater than the 50th percentile on a college entrance examination may be admitted unconditionally to any quarter of the academic year (fall, winter, spring, or summer). Those who rank in the lower half of their graduating class and who score below the 50th percentile on a college entrance exam will be permitted to enter conditionally for the summer, winter, or spring terms.

Students may be considered for admission after completing the sixth semester of high school. A prospective student must submit high school records and furnish ACT scores prior to enrolling in the University. Admissions granted to students who are still in high school are subject to the completion of high school and maintenance of the rank in class upon which they were admitted.

ADMISSION BY ACT/APP PROGRAM

High school students in the last semester of their junior or first semester of their senior year may apply for admission through the ACT/APP Program. Students select SIUE to receive their test scores. Students are then sent an ACT/APP form that is both an application for admission and an authorization for release of information directly from their high schools. This information enables the University to determine students' admission status. Applicants must return the form before they can be admitted, at which time the University creates an admission file. An early return will also enable applicants to receive mailings about the programs and services of SIUE.

TRADITIONAL ADMISSION

Students who have already completed high school or who did not send their ACT scores to SIUE should:

1. Submit an application for undergraduate admission at least 30 days prior to the beginning of the quarter for which application is being made. Applications may be obtained from either the Office of Admissions and Records or the high school counselor's office.
2. Request that one copy of their high school transcript be sent directly to the Office of Admissions and Records from the high school. (All transcripts become the official property of the University and will not be returned or issued to another institution.)
3. Take a college entrance exam and have official scores sent directly to the Office of Admissions and Records from the testing program. ACT is the preferred admission test; however, SAT scores are acceptable.

EARLY ADMISSION

Exceptionally capable high school students who (a) have completed their junior year, (b) are recommended by their high school principals, and (c) are approved by the Director of Admissions of the University will be permitted to enroll for University courses to be taken concurrently with their senior year of high school work. 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 the secondary school. Enrollment for students participating in this early admission program is limited to 8 quarter hours.

It is expected that high school principals will judge each case on its individual merits, and that in making their selections and recommendations they will consider:

(1) the rank held by students in their high school classes;
(2) the results of any standardized test which students may have taken;
(3) the opinions of teachers regarding students' aptitude for college level work; and
(4) the opinions of teachers about students' ability to adjust to the university environment.

ADMISSION AS A TRANSFER STUDENT

CRITERIA

For academic purposes an undergraduate applicant for admission to the University is considered to be a transfer student when 24 quarter hours or more of work are presented for consideration; otherwise, the student is considered for admission on the same basis as an entering freshman.

The admissibility of transfer students shall be based on their cumulative grade average from all institutions previously attended. This transfer average shall be used only to determine the applicant's eligibility for admission. (All transfer work, including credit hours and grades earned, will continue to be reflected on the SIUE record, but the only grade average calculated will be for work at SIUE.)

Students applying for admission from two-year and

four-year institutions are admissible in good standing, provided they have maintained a 3.00 (C) grade-point average at the previous school(s) attended. Those who do not have a 3.00 average, but who are eligible to return to their previous school, may be admitted on scholastic probation. Students who have been dismissed for poor scholarship from other schools may be considered for admission on academic probation, provided there has been an interruption in schooling of at least two quarters and there is tangible evidence that students can successfully complete their education.

TRANSFER OF CREDIT HOURS

Students graduating with an associate degree in a baccalaureate-oriented program (Associate in Arts or Associate in Science degree) from a public two-year college in Illinois will enter the University with junior standing and completion of the General Studies requirements. Graduates of other accredited two-year institutions may be granted similar consideration. Students who have taken additional work will be considered from the same standpoint as that of students transferring from four-year institutions.

Other students who transfer from an accredited university, college, or junior college have their work evaluated for purposes of meeting the general degree requirements, including General Studies. The number of D hours accepted from each institution is equal to one-third the A, B, and C hours. In general, equivalent work in appropriate areas is applied to meet the requirements. Other courses may be accepted for general credit and may apply toward concentration or other requirements.

All applicants, including A.A. and A.S. degree recipients, who present credit by examination (CLEP or AP) on a college transcript and wish to have that credit accepted by the University must have the results of such tests sent directly to the Office of Admissions and Records. Granting of credit for such is governed by current University policy. (See sections on Advanced Placement Program and College Level Examination Program.)

Semester hours transferred are computed on the basis of 1.5 quarter hours credit for each 1 semester hour accepted. A student transferring a course carrying 3 semester hours credit, for example, will receive 4.5 quarter hours credit.

APPLICATION PROCEDURES

The admission process is initiated by calling or writing the Office of Admissions and Records and requesting admission materials. A student applying for admission as a transfer student must submit: 1. An application for undergraduate admission at least 30 days prior to the quarter he or she wishes to enroll. 2. An official transcript from each institution previously attended. (All transcripts become the official property of the University and will not be returned or issued to another institution.) 3. An official high school transcript and ACT scores, if fewer than 24 quarter hours (16 semester hours) have been completed.

ADMISSION OF INTERNATIONAL STUDENTS

CRITERIA

Southern Illinois University at Edwardsville is authorized under Federal law to enroll non-immigrant alien students. Applicants are expected to satisfy minimum academic requirements, demonstrate English language proficiency, and provide acceptable evidence of adequate financial resources.

Prospective applicants should have completed their secondary school courses in a university-preparatory program with an above-average result. All previous college-or university-level work must have been completed with at least the equivalent of a "C" average, and will be considered for the transfer of credit where appropriate.

English language proficiency for non-native speakers is measured by the applicant's performance on the Test of English as a Foreign Language (TOEFL). Students enrolled in English-as-a-second-language programs are also required to complete their language course with a level of proficiency adequate to earn the director's favorable recommendation. Applicants who have earned a passing grade on the ordinary level University of London General Certificate of Education Examination in English Language (or a recognized equivalent examination) are excused from the TOEFL requirement. Graduates of United States high schools, as well as students holding AA, AS, or bachelor's degrees from accredited United States colleges and universities, are also considered to be proficient in English.

Proof of adequate financial resources should be submitted to the Director of International Education and Foreign Student Adviser in the Office of International Education. A financial certificate and instructions for its completion are included in the application packet. Questions regarding financial matters should be directed to the Office of International Education.

APPLICATION INFORMATION

The foreign undergraduate application package, including a detailed explanation of procedures and required credentials, is available in the Undergraduate Admissions Office and will be mailed upon request. In brief, the following items are necessary:

1. Official marks sheets, certificates, or transcripts of all secondary and post-secondary study are required. Photocopies of original marks sheets and certificates are acceptable only if they are certified true and complete by the authority issuing the original. All official transcripts must be submitted directly to this office by the principal or registrar of each school attended. Credentials not available in English must be accompanied with an original and attested translation.
2. Non-native speakers required to demonstrate English language proficiency should submit either an

official TOEFL score report or a certified copy of their GCE O/L certificate.

3. The financial certificate and supporting documents should be returned directly to the Office of International Education.

All credentials submitted become the property of the University and are not returnable. Students who observe the following deadlines for submitting applications and supporting credentials can expect to have their files reviewed in a timely manner.

Entrance	Credentials Due
Fall quarter	July 1
Winter quarter	October 1
Spring quarter	January 1
Summer quarter	April 1

ADMISSION OF FORMER STUDENTS

Students who have registered and paid fees for any of the four quarters immediately prior to the one they wish to attend are considered continuing students and need not re-apply for admission.

Continuing students may obtain information concerning registration by contacting the Enrollment Center, John S. Rendleman Building, Room 1308.

Former students who have been out of school more than four quarters must complete a re-entry application before advisement or registration. Students who have been academically suspended must follow the listed procedures for reinstatement before applying for readmission. (See Academic Regulations.)

ADMISSION OF VETERANS

Veterans seeking admission or re-admission to the University are admitted in good standing regardless of their previous academic record provided that either (a) no additional education has been attempted or (b) such additional education has been of C quality or better. Prior academic work of an admitted re-entering veteran is counted together with all subsequent work after admission. Veterans are required to submit all required admission credentials before their applications can be processed. This includes high school transcripts or GED scores and official transcripts from each college or university previously attended.

ADMISSION TO OPEN UNIVERSITY

The procedure for admission to the Open University is substantially the same as for admission to the conventional program. Prospective students should call the Open University at (618) 692-2125 or write to obtain the admission packet.

The prospective student should then submit to the Office of Admissions and Records:

1. The completed admission application form, or the standard admission application form with "Open University" plainly written in the upper right-hand corner.

2. An official transcript from each institution previously attended.

ADMISSION AS A NON-DEGREE STUDENT

Students who desire to take classes at the University for their own interest, knowledge, or job upgrading, but who are not interested in pursuing a degree, may be admitted as nondegree students. Students in this category may enroll in any undergraduate course for which they have met the prerequisite. However, they are not eligible for VA educational benefits and/or most forms of financial assistance.

The only document required for admission as a non-degree student is the Non-Degree application. If students admitted into this category desire to enter a degree program at a later date, it will be necessary for them to go through the prescribed admission procedure. In the case of students interested in graduate degrees it should be clearly understood that no credit earned as a nondegree student will be applicable toward such a degree. The decision regarding acceptance of credit earned as a nondegree student toward a baccalaureate degree is at the discretion of the major department. All nondegree student applications for admission are processed in the Office of Admissions and Records.

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; no official University records are kept of EDUCARD students. Textbooks are available from Textbook Rental upon payment of the EDUCARD registration fee.

FINANCIAL REGULATIONS AND FINANCIAL AID

FINANCIAL REGULATIONS

TUITION AND FEES

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.

Student fees and charges are payable by the Friday of the first week of classes or each quarter without penalty. Payment of student fees and charges is permitted through Friday of the second week of classes of each quarter with the additional payment of a $10.00 late fee. Payment is not permitted after Friday of the second week of classes.

EDWARDSVILLE CAMPUS

Tuition and Fees	0-5 Hours	6-11 Hours	12 and Over
Undergrad Resident	$ 89.00	$ 177.00	$ 266.00
Undergrad Non-resident*	(266.00)	(532.00)	(798.00)
Graduate Resident	$ 95.00	$ 191.00	$ 286.00
Graduate Non-resident*	(286.00)	(572.00)	(858.00)
Textbook Rental (Undergrad)	7.00	13.00	18.00
SWAF	11.60	20.05	20.05
UC Fee	32.00	35.50	39.00
Athletic Fee	8.35	14.35	20.35
STS	1.50	1.50	1.50
Total UG Resident	$ 149.45	$ 261.40	$ 364.90
Total UG Non-resident	(326.45)	(616.40)	(896.90)
Total Grad Resident	$ 148.45	$ 262.40	$ 366.90
Total Grad Non-resident	(339.45)	(643.40)	(938.90)

*Excludes residents of the State of Missouri

MISSOURI RESIDENTS' RATES

The following tuition schedule has been established for students who are legal residents of the State of Missouri:

	0 to 5 Hours	6 to 9 Hours	10 to 11 Hours	12 and Over
Undergraduate*	$89.00	$177.00	$532.00	$798.00
Graduate*	$95.00	$191.00	$572.00	$858.00

*Fees to be added are the same for all students

The Textbook Rental Service provides for the quarterly rental of most of the basic instructional texts used in undergraduate classes. Textbooks are also available for sale at discount prices. For some classes, students may be required to purchase additional texts not available at Textbook Services.

Each student paying fees for on-campus courses, whether a scholarship holder or not, is assessed $1.50 toward the establishment of a Student-to-Student Grant Fund. Those wishing a refund of this fee may receive it during the first ten days of the quarter by applying to the Student Work and Financial Assistance Office in the John S. Rendleman Building.

OPEN UNIVERSITY

Tuition and Fees	0-5 Hours	6-11 Hours	12 and Over
Tuition Illinois Undergrad	N/A	$ 177.00	$ 266.00
Tuition Out-of-State Undergrad*	N/A	532.00	798.00
University Center Fee	N/A	35.50	39.00
Textbook Rental	N/A	13.00	18.00
Program Fee	N/A	19.50	28.00
Total Illinois Undergrad		$ 245.00	$ 351.00
Total Out-of-State Undergrad		$ 600.00	$ 883.00

*Does not apply to Missouri Residents

Tuition and Fees	0-5 Hours	6-9 Hours	10-11 Hours	12 and Over
Mo. Residents	N/A	$ 245.00	$ 600.00	$ 883.00

RESIDENT CENTERS

Resident Center students are required to pay tuition and fees according to the following schedule. Textbooks are available at the Resident Centers.

Tuition and Fees	0-5 Hours	6-11 Hours	12 and Over
Tuition Illinois Undergrad	$ 89.00	$ 177.00	$ 266.00
Tuition Out-of-State Undergrad*	266.00	532.00	798.00
Resident Center Fee	14.00	25.50	36.00
University Center Fee	32.00	35.50	39.00
Textbook Rental	7.00	13.00	18.00
Total Illinois Undergrad	$ 142.00	$ 251.00	$ 359.00
Total Out-of-State Undergrad	$ 319.00	$ 606.00	$ 891.00
Tuition Illinois Graduate	$ 95.00	$ 191.00	$ 286.00
Tuition Out-of-State Graduate*	286.00	572.00	858.00
Resident Center Fee	14.00	25.50	36.00
University Center Fee	32.00	35.50	39.00
Total Illinois Graduate	$ 141.00	$ 252.00	$ 361.00
Total Out-of-State Graduate	332.00	633.00	933.00

*Does not apply to Missouri Residents

Tuition and Fees	0-5 Hours	6-9 Hours	10-11 Hours	12 and Over
Mo. Residents Undergrad	$ 142.00	$ 251.00	$ 606.00	$ 891.00
Mo. Residents Graduate	$ 141.00	$ 252.00	$ 633.00	$ 933.00

DETERMINATION OF LEGAL RESIDENCY

Ordinarily, determination of residence status is made by the Office of Admissions and Records from evidence furnished on the student's application to the University. When such evidence is not sufficient or where records establish that the person does 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

An adult, to be considered a resident, must have been a bona fide resident of the State of Illinois for a period of at least three consecutive months immediately preceding the beginning of any term registered for at the University and must continue to maintain a bona fide residence in the State. Also, an adult student who has a parent or both parents maintaining a bona fide residence in the State and who resides in the parental home or elsewhere in the State is regarded as a resident student.

A minor is considered to be a person under eighteen years of age. The residence of a minor shall be considered to be and to change with that of the parent(s) or legal or natural guardian. No parent or legal or natural guardian will be considered a resident of the State unless that person maintains a bona fide and permanent place of abode within the State.

If a minor is emancipated, is completely self-supporting, and actually resides in the State, that individual shall be considered a resident even though the parents or guardian 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 an individual intends 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.

A nonresident student married to a resident of the State may be classified as a resident while residing in the State. The spouse through whom a student claims residence must demonstrate residence status in compliance with the requirements applicable to all students seeking residence status.

A student who is not a citizen of the United States of America, to be considered a resident, must either be married to a resident or must have permanent resident status with the United States Immigration and Naturalization Service, and must also meet and comply with all of the other applicable requirements of these regulations to establish resident status.

A person who is actively serving in one of the Armed Forces of the United States, who is stationed and present in the State in connection with that service, and who submits evidence of such service and station, shall be treated as a resident while stationed and present in Illinois. If the spouse or dependent children of such member of the Armed Forces also live in the State, similar treatment shall be granted to them.

A person who is actively serving outside the State in one of the Armed Forces of the United States is considered a resident only on the basis of having been a resident of the State at the time of entry into military service. One separated from active military service is considered a resident of Illinois immediately upon separation on the basis of (1) having been a resident of the State at the time of entry into military service, or (2) having been treated as a resident 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.

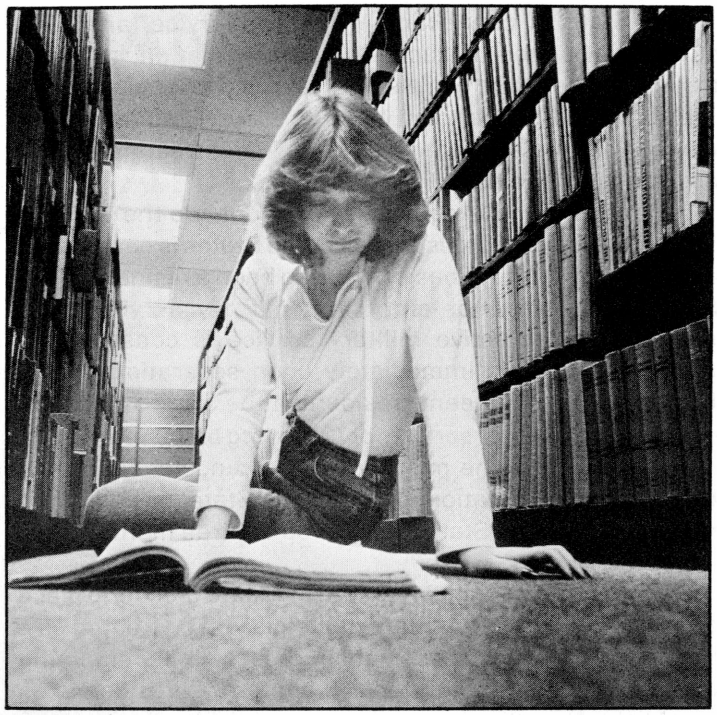
A person who is incarcerated in a state or federal place of detention within the State of Illinois will be treated as a resident for tuition assessment purposes while remaining in that place of detention. If bona fide residence is established in Illinois upon release from detention, the duration of residence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

The spouses and dependent children of all staff members (academic, administrative, nonacademic) on appointment with the University are considered resident students for purposes of tuition assessment.

APPEAL OF RESIDENCY STATUS

Students who take exception to 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 residence 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 as that upon which instruction begins for the academic period for which the tuition is payable, whichever is later, or the student loses all rights to a change of status and adjustment of the tuition assessed for the quarter in question. If the student is dissatisfied with the ruling in response to the written claim, the ruling may be appealed to the Legal Counsel by filing a written request within twenty days of the notice of the first ruling.

A student may be reclassified at any time by the University on the basis of additional or changed information. However, if the University has erroneously classified a student as a resident, the change in tuition shall be applicable to the quarter in which the reclassification occurs provided the student has filed a written request for review in accordance with procedures. If the University has classified a student as a resident on the basis of false or falsified documents furnished by the student, the reclassification to nonresident status shall be retroactive to the first quarter during which residence status was based on the false or falsified documents.



EXEMPTIONS

Students holding valid scholarships are exempt from tuition and fees to the extent provided by the terms of the scholarship.

AUDITED COURSES

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

WITHDRAWALS AND REFUNDS

A student who finds it necessary to withdraw from school during any quarter must report to the Counseling and Testing Center, Rendleman Building, Room 2228, to initiate official withdrawal action. The Center is open Monday through Friday from 8 a.m. to 5 p.m. Evening students may contact the Office of Evening Student Services, Rendleman Building, Room 1208, from 5:00 p.m. to 9:00 p.m. Monday through Friday and from 9:00 a.m. to 12 noon on Saturday. No withdrawal will be permitted after the eighth week of school. A refund of tuition and fees is permitted only if the withdrawal and refund requests are officially completed within the first two weeks of the quarter. Students who withdraw from the University within the first ten days of a term receive 100% refund of tuition and refundable fees; no refund is made after that deadline.

Refund of the Student-to-Student Grant Fund is a process entirely separate from the withdrawal procedure, and late registration fees are not refundable.

Consult the Registration Calendar in the quarterly class schedule for the specific dates concerning withdrawal and refunding of fees. Any textbooks or library materials on loan must be returned before a withdrawal is effective.

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

DEFERMENT OF TUITION AND FEES

CRITERIA

Students may wish to defer paying tuition and fees because they anticipate financial aid (excluding College Work Study and student work). They should apply for a deferment at the Office of Student Work and Financial Assistance.

Deferments will be issued only at time of registration as published in the Registration Calendar. Students must have proof of financial aid when they apply for a deferment. Students must also present their fee receipt card and fee assessment card and sign a promissory note.

Tuition and fee deferments will not be issued to students with accounts receivable with the University. However, deferments may be issued to students with accounts receivable if they have a verified financial assistance package through Student Work and Financial Assistance in amounts equal to or greater than their total debt to the University, plus the amount of tuition and fees they request to be deferred.

Veterans who are awaiting results of Illinois Veterans Scholarship or V.A. benefits should contact the Office of Counseling and Testing to obtain a deferment.

Foreign students should contact the Foreign Student Adviser to arrange a deferment.

Students attending the East St. Louis Center should contact the Student Development Services Office at the East St. Louis Center.

HARDSHIP DEFERMENTS

Students with extreme personal or financial hardship who do not qualify for any financial aid may contact the Office of Student Work and Financial Assistance to apply for a hardship deferment. Such students must:

1. Have no accounts receivable with the University, or pay those accounts before seeking a hardship deferment and present proof of payment;
2. Have no deferments from the past that have not been paid;
3. Be in good academic standing, not on probation;
4. Be prepared to submit written documentation to support the request. Further, a $25.00 penalty will be charged to hardship deferments not paid by the established deadline.

REFUNDS AND PENALTIES

Students holding deferments are governed by University policy on withdrawals and refunds. No refund is

granted if students withdraw after the second week of the quarter.

A $25 late penalty is charged to students who fail to pay deferred fees by Wednesday of the sixth week of the quarter, as stated in the promissory note.

FINANCIAL AID

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 each student's particular needs.

A student's financial need is determined by subtracting from the standard budget any resources available to the student. Such resources include expected parental contributions, student assets, summer earnings, or other student benefits, such as Social Security or G.I. Bill. The analysis of need may vary slightly between federal, state, and institutional programs, but generally it is based on the assumption that the primary responsibility for the cost of a student's education rests with the parents. The ability or inability of parents to contribute toward the educational costs is measured by need analysis systems, such as the Pell Grant Program, Illinois State Scholarship Commission Monetary Awards (ISSC), or the American College Testing Family Financial Statement (ACT-FFS).

HOW TO APPLY FOR FINANCIAL ASSISTANCE

Students applying for financial aid based upon need 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. To receive maximum consideration for financial assistance, applications and financial statements must be received by the May 1, 1982, preference filing date. Applications received after May 1st will be considered only if funds are still available.

Before priority consideration will be given for financial aid based on need, students are required to file the American College Testing Family Financial Statement (ACT-FFS). NOTE: The Financial Statement should be mailed at least four weeks prior to the preferential filing date. It must be filed each year the student reapplies for financial aid. In addition, the SIUE Financial Aid Application must be submitted indicating the types of financial aid the student desires. All undergraduate students applying for financial aid must also apply to the Pell Grant Program. Undergraduate residents of Illinois who are applying for other forms of financial aid based on need are also required to apply for the Illinois State Scholarship Commission Monetary Award (ISSC). Students may use the ACT-FFS to apply for the Pell Grant by answering "yes" to item 74, and to apply for ISSC by answering "yes" to item 75A. Item 75B gives permission for information to be forwarded to the educational institution which the student lists in item 77.

Requests for applications and information about any of the programs briefly described herein can be obtained by contacting the Office of Student Work and Financial Assistance.

Federal and state regulations require that recipients of student financial aid must maintain satisfactory academic progress. The policy in effect for SIUE appears later in this section.

For all financial aid loan and grant programs, the authorized quarterly payment is prorated according to the following schedule:

	Current Hours		Proration
Undergraduates	12 hrs.	(full award)	100%
	9-11 hrs.	(three-quarter award)	75%
	6-8 hrs.	(half-time award)	50%
	0-5 hrs.	not eligible for financial aid	
Graduates	8 hrs.	(full award)	100%
	6 or 7 hrs.	(half-time award)	50%
	0-5 hrs.	not eligible for financial aid	

WITHDRAWALS AND REFUNDS

Financial aid recipients who officially withdraw or otherwise leave the University may be required to apply any refund of tuition and fees toward repayment of financial aid funds. Students on financial aid who leave the University after the tuition refund deadline are required to refund immediately any overpayments of aid, as determined by the week of withdrawal, their college cost budget, and the aid received.

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. Also, 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 any Veterans Administration Office or the University's Veterans Certification Section which is located in the Enrollment Center, Room 1308, John S. 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 depend-

ents, i.e., marriage certificate and/or birth certificates of children, should be returned 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. If there are any changes in dependent status after the veteran is receiving benefits, he/she should notify the Veterans Administration in Chicago immediately.

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

Academic Load	No Dependents	1 Dependent	2 Dependents	Each Additional Dependent
12 or more hours	$342	$407	$464	$29
9 - 11 hours	257	305	348	22
6 - 8 hours	171	204	232	15

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.

TYPES OF FINANCIAL AID

FEDERAL PROGRAMS

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 scholarship, grant, or loan.

NATIONAL DIRECT STUDENT LOAN

Students who demonstrate financial need are eligible to apply for a National Direct Student Loan (NDSL). The amount borrowed accrues no interest as long as the borrower remains at least a half-time student at any institution of higher education. Repayment begins seven months from the date the borrower ceases to attend school on at least a half-time basis. Interest at the rate of 5 percent begins to accrue at the time of repayment. A ten-year period in which to repay the loan may be available. Cancellation of the loan for full-time teaching is also available to qualified students. Payment can be deferred under certain circumstances.

Eligible undergraduate students may receive $1,200 per academic year. Total amount of all undergraduate loans may not exceed $6,000. Eligible graduate students may receive $2,250 per academic year. Total amount of all loans, undergraduate and graduate, may not exceed $12,000.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS

The basic purpose of the Supplemental Educational Opportunity Grant (SEOG) program is to assist students with demonstrated financial need who are from low to moderate income families and who would be unable to enter or remain in school without this financial aid. The grant does not require repayment. There is an expected self-help concept. This means students must also normally accept either work or loan.

NURSING STUDENT LOANS

The Nursing Student Loan Program assists students with financial need to pursue nursing careers by providing financial assistance in the form of a long-term-low-interest loan. Only students who are officially admitted to the School of Nursing are eligible for participation.

Under the Nursing Student Loan Program a student may borrow up to $2,500 per academic year with a total loan not exceeding $10,000.

Interest at the rate of 6 percent begins to accrue at the time of repayment. A ten-year period in which to repay the loan may be available with repayment beginning nine months after leaving school. Cancellation provisions for working as full-time nurse have been repealed for loans made on or after September 29, 1979. Repayment may be deferred up to five years during periods spent as a full-time student pursuing advanced professional training.

PELL GRANT (BASIC GRANT)

This federally-sponsored program is designed to aid eligible undergraduate students in meeting educational expenses and to fill in 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 every undergraduate student.

Students are considered for this award if they are enrolled for at least half-time attendance. Awards for full-time students (12 hours or more) range up to $1,800 per academic year. Most students utilize their full entitlement for Pell Grant 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. Contact the Pell Grant Coordinator for more information.

STATE PROGRAMS

ILLINOIS STATE SCHOLARSHIP COMMISSION MONETARY AWARD

The Illinois State Scholarship Commission (ISSC) provides Monetary Awards for partial or full payment of tuition and fees to full-time or half-time undergraduate students. The award is available to residents of the State of Illinois who demonstrate financial need. Every undergraduate student who is requesting financial aid based upon need is required to also apply for this award.

ISSC ACADEMIC SCHOLARSHIP AWARD PROGRAM

Legislation passed in 1979 provides for the identification of 2,000 high school seniors to be the recipients of $1,000 renewable Academic Scholarship Awards. Financial need is not a selection criterion.

There are two methods by which students may be winners: through the open competition as participants in the State Scholar Program or designated by the high school. After award recipients are identified through the open competition, each high school will be given the opportunity to designate from one to three award recipients based upon class size.

Awards are renewable for a total of eight semesters or twelve quarters of full-time undergraduate enrollment within a six-year period from the date of the initial award. Awards may be used only at ISSC approved institutions of post-secondary education. Initial enrollment at an out-of-state or unapproved institution permanently disqualifies the award recipient.

Repayment will be made to the institution each term after certification by the institution of full-time enrollment. Awards are not limited to payment of tuition and fees but may be applied to any educational expense. Awards are contingent upon annual appropriation of funds by the Illinois General Assembly. NOTE: This Program was not funded in 1981-82.

GUARANTEED STUDENT LOAN PROGRAMS

The Illinois Guaranteed Loan Program (IGLP) is designed to make it possible for students who are enrolled at least half-time to borrow from private lenders, such as banks, savings and loan associations, credit unions, etc. All Guaranteed Student Loan applicants are required to complete a "Needs Test" form which is available in the Office of Student Work and Financial Assistance. This is necessary to comply with new federal guidelines effective October 1, 1981. Evaluation of the "Needs Test" will determine a student's eligibility for the Guaranteed Student Loan. For any first time student borrower obtaining a loan under IGLP which applies to periods of instruction beginning after January 1, 1981, the interest rate shall be 9 percent. Student borrowers with outstanding 7 percent loans will still be limited to a maximum interest rate of 7 percent on additional loans. Students having loans at the 7 percent rate will continue to have available to them a 9-month grace period. Students having loans at a 9 percent rate will be eligible for a 6-month grace period. Eligible dependent and independent undergraduates may borrow $2,500 per academic year. Total amount of all undergraduate loans may not exceed $12,500.

Eligible graduate students may borrow $5,000 per academic year. The program maximum is $25,000 (this total includes all undergraduate and graduate loans).

Guaranteed Student Loans are also available for students who are not residents of Illinois. Eligibility requirements are the same as for the Illinois Guaranteed Loan.

PLUS (AUXILIARY) LOAN PROGRAM

PLUS loans are meant to provide additional funds for educational expenses. *The interest rate for these loans is 14 percent.* Like GSL's they are made by a *lender such as a bank, credit union, or savings and loan association.* 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. The same deferment conditions available to GSL borrowers are also available to PLUS borrowers. Thus, borrowers who are full-time students or on active duty in the military, for example, are entitled to a deferment of principal payments. Parent borrowers are not granted deferments based on the status of the student for whom the parent borrowed. All borrowers must begin paying the interest within 60 days, unless the lender has agreed to allow the interest to accrue until the deferment ends.

ILLINOIS VETERANS SCHOLARSHIP

This scholarship is available to students with at least one year of active military service if discharged after August 11, 1967; or who have any length of active service if discharged prior to August 11, 1967; or who have *one year of active service if currently* in the Armed Forces. Students must have been a resident of the State of Illinois at the time of entering the service or a resident six months prior to entering service; or if not an Illinois resident, a student at an Illinois State Controlled College or University. Other eligibility requirements are: the student must have been honorably discharged; returned to the State of Illinois within six months after separation from the service and served on or before May 7, 1975.

The award pays tuition, activity fee, and graduation fee for four years of equivalent full-time enrollment. The scholarship holder has a twelve-year period in which to utilize the entitlement described above. Contact the Office of Student Work and Financial Assistance 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 activity fee.

To initiate a scholarship, contact your General Assembly representative directly.

INSTITUTIONAL PROGRAMS

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 fields, there are many challenging positions which develop administrative, research, or technical skills of the employee.

Students normally begin at the federal minimum wage and progress with longevity increases. Students normally work 15-20 hours per week as their class schedule permits.

Students apply in person and are referred by the Office of Student Work and Financial Assistance to employing departments on campus for interviews.

Through the Job Locator Program the office maintains a list of vacancies available in area business, industry, and service agencies. Information on full- and part-time summer jobs nationwide is also available.

TUITION SCHOLARSHIP AWARD

The University provides a limited number of tuition scholarship awards to full-time students which provide the recipient with remission of tuition but not fees. These awards are based primarily on need, scholarship record, and participation in student activities. All tuition scholarships are authorized by the Office of Student Work and Financial Assistance. NOTE: Illinois residents are required to first apply for the Illinois State Scholarship Commission Monetary Award.

STUDENT-TO-STUDENT GRANT

The Student-to-Student Grant Program (STS) provides cash grants to students attending the University. The Program was established through a $1.50 per student fee assessment each quarter. Grants of varying amounts are made to students who demonstrate financial need and are enrolled at least half-time.

EMERGENCY SHORT-TERM LOAN

Funds are available through the Office of Student Work and Financial Assistance for small, thirty-day emergency loans to full-time students. Such funds are not available for the purpose of meeting routine educational costs such as tuition and fees, room and board, or other normal expenses that can be anticipated. Short-term loans are available for emergency situations only. The maximum loan is normally $100 and proof of the emergency must be demonstrated. When money is needed specifically for tuition and fees, applicants should inquire about the availability of other programs for meeting such costs.

OTHER FINANCIAL AID

The SIUE Foundation has established several programs of loans and grants to assist students in meeting educational expenses. Applicants for SIUE Foundation loan and grant funds must demonstrate financial need. Demonstrated academic achievement may also be required. Applications and information regarding specific requirements can be obtained by contacting the Office of Student Work and Financial Assistance.

FINANCIAL AID SATISFACTORY ACADEMIC PROGRESS POLICY

This policy has been adopted to comply with state and federal regulations governing student financial aid programs. Regulations concerning State of Illinois aid programs were established by the Illinois State Scholarship Commission. Requirements concerning federal aid programs were established by the Department of Education pursuant to the Education Amendments of 1976. (P.L. 94-482).

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, "financial aid" is defined as any of the Title IV federal programs and institutional programs, including: National Direct Student Loan, Supplemental Educational Opportunity Grant, Basic Grant, College Work Study, Nursing Loan, Nursing Scholarship, Illinois Guaranteed Loan, Federally Insured or Guaranteed Student Loan, Foundation Grant, SIUE Tuition Waiver or Scholarship, or Student-to-Student Grant. As new federal, state, and institutional programs are implemented in the future, they will also be covered by this policy.

The following policy model will be used to determine the minimum hours which students should have at the end of each three quarters of attendance for full-time students. Students who have not earned the cumulative hours required for their length of attendance will not be eligible for further financial aid until they earn the minimum credit hours required.

The following grades issued for coursework at SIUE (and for transfer students the corresponding grades issued for coursework at the institution(s) the student previously attended), shall constitute satisfactory completion of courses for the purposes of this policy: A, B, C, D, E, S (Satisfactory), and PASS. The following grades issued for coursework at SIUE (and for transfer students the corresponding grades issued for coursework at the institution(s) the student previously attended), shall not constitute satisfactory completion of courses for the purposes of this policy: W (Withdrawal), INC (Incomplete), DEF (Deferred), U (Unsatisfactory), AU (Audit), and NC (No Credit).

Students who receive a grade of PR (Progress) as a result of their participation in a special academic program (such as the Academic Resource Center) will have their academic progress reviewed individually by the Director of Financial Aid and the Director of that academic program. Specific criteria will be developed by the Vice President

and Provost to determine whether such PR grades constitute academic progress at SIUE.

Years in Attendance at SIUE	Total Terms Receiving Financial Aid	Required Cumulative Credit Hours
1	3	24
2	6	54
3	9	90
4	12	126
5	15	168
6	17	196

Students must also comply with all institutional policies regarding academic standards. Students who are on academic suspension are not eligible for further financial aid until reinstated by the Office of Admissions and Records.

APPEALS

Students who desire to appeal termination of their financial aid must make a written appeal to the Director of Financial Aid within 10 days of their notice of termination.

An appeals committee appointed by the Vice President and Provost or his or her delegate will consider such appeals in a timely manner. The appeals committee will include student representatives. The appeals committee will normally review only the written evidence and not conduct hearings unless very unusual circumstances would require it. The student is encouraged to submit third party written documentation to support the appeal.

The appeals committee may recommend continuation of financial aid and as a condition of resumption may require a student to obtain counseling, attend developmental skills sessions or related academic services, and may utilize academic performance agreements. The effective date of this policy was October 15, 1980, and applies to all students currently enrolled.

ACADEMIC REGULATIONS

ORIENTATION/NEW STUDENT LIFE

New Student Life is a unique approach to orientation. The program is designed to help all 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 all the required procedures that new students must complete before they are permitted to attend classes. This includes academic advisement for both General Studies and departmental requirements, class scheduling, registration information, vehicle registration, I.D.'s, and information about special services provided for all students by the University (tutoring, health service, student work and financial assistance, etc.).

In order to assure all new students the opportunity of attending New Student Life Orientation, regularly scheduled orientation workshops are offered every quarter. Students planning to enter for winter, spring, or summer quarters are invited to attend a one-day workshop. Students planning to enter in the fall can participate in a two-day, on-campus workshop. All workshops are conducted prior to the quarter of matriculation. Every undergraduate student admitted to the University is automatically invited and strongly encouraged to participate in an orientation workshop.

ADVISEMENT

The University maintains an advisement system which is available to all students. All new freshmen and transfer students entering fall quarter, 1981, and any quarter thereafter, are required to be advised each quarter until they officially declare a major. These students will be allowed to register only after they have been advised.

After declaring a major concentration, students are assigned to an adviser in the major area. Students are required to declare a major prior to their senior year. Probationary students are also required to receive advisement prior to registration.

Detailed information about the dates and procedures for advisement and registration appears in the quarterly class schedule available from the Office of Admissions and Records.

REGISTRATION

An early registration is conducted prior to the beginning of each quarter in the Meridian Ballroom of the University Center.

The first two days of early registration are conducted on a priority basis, and priorities are announced by the Enrollment Center. Normally, open registration begins on the third day of early registration. To obtain specific information regarding priority registration, contact the Enrollment Center.

Since students will find a broader selection of courses available during the earlier registration times, they are encouraged to register during the early period.

Only those students who have completed the admissions process are allowed to register. To determine your eligibility, please refer to admissions procedures printed elsewhere in this catalog. Any registration may be declared invalid for scholastic, disciplinary, or financial reasons attested to by the Director of Admissions and Records, Dean of Students, or Bursar.

Changes in Registration

Any change in a student's schedule must be made in the Enrollment Center, Room 1308, John S. 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 fee receipt card, and fill out the program change form. NO CHANGE IS OFFICIAL UNTIL THE PRECEDING PROCEDURE IS COMPLETED. The fee receipt card and ID card are needed to make program changes. Changes for Resident Center students are made at the centers, following the same procedure.

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 and department chairperson.

Week 2: Students must have a "Class Permit Card" for any class they wish to add.

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

Dropping Classes

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

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

Weeks 6 - 8: Students may drop after consultation with their instructors and advisers, but a grade of WP or WE must be assigned by instructors; WE will be computed as an E for GPA.

After Week 8: Students may not drop classes.

Students who drop all classes are considered to be withdrawing from school for that term, and the transaction should be initiated according to the instructions on Withdrawal from School included in the section titled, "Financial Regulations."

Mere attendance does not constitute registration in a class nor will attendance in a class for which the student is

not registered be a basis for asking that a program change be approved.

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 a student attends for fifty minutes each week; laboratory courses may require more than fifty minutes for one quarter hour.

COURSE NUMBERING SYSTEM

The first digit of a course number indicates the level of instruction.

100/200	Freshman, sophomore
300	Junior, senior
400	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.

ACADEMIC LOAD

The normal academic load for a student is 16 hours. The maximum is 18 hours. Students with a 4.25 grade-point average or above for the preceding quarter may be allowed by the dean of their academic unit to take as many as 21 hours.

Students on scholastic probation may not take more than 14 hours without approval of the dean of their school. A student 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, a student attending the University under a scholarship, loan, or other type of program requiring full-time enrollment should check to make certain that requirements of the specific program are being met.

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. Student did not complete all work required for the course during the term, and has 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. Hours count toward graduation.
NO CREDIT—Used for courses taken under Pass/No Credit option. 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 restricted to courses in the skills area of General Studies. No credit hours earned.

All complete grades are included in determining student grade-point averages for academic retention purposes.

Incomplete and Deferred Grades

Unless the instructor has specified a shorter period of time, an incomplete grade which is not completed within one year will automatically be changed to an E (graduation notwithstanding). If an instructor specifies a shorter period of time, he or she must communicate that stipulation in writing—with copies to the Admissions and Records Office and the instructor's department chairperson—to students at the time the incomplete is granted. Any students who feel that mitigating circumstances should allow an extension of the time limit beyond one year for completion of an incomplete grade may petition the faculty member who granted the grade. If the faculty member agrees to grant the extension, he or she shall inform the student and also the faculty member's department chairperson and shall then notify 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 would revert 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 this option students receive a Pass for grades A, B, C and a No Credit for grades D or E. Students, at the time of declaring Pass/No Credit, 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 Studies 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.

A decision 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.

Audit Courses

A student may register for courses in an "audit" status. He or she receives no letter grade and no credit for such courses. The student pays the same fees as though registering for credit. If an auditing student does not attend regularly, the instructor may determine that the student should not have the audited course placed on his or her record card maintained in the Office of Admissions and Records. A student 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. A student may register for audit credit only through the program change procedure.

Repeated Courses

Students may repeat a course taken at SIUE, or enroll in a course at SIUE identical to one taken earlier at another school. Both grades appear on the transcript, but only the most recent one is used to compute GPA. Only the most recent course hours will count toward graduation. Students who repeat SIUE courses at other schools and subsequently have that credit transferred back to SIUE will not have both grades counted; only the SIUE grade will be counted in the GPA. However, the hours for both will be counted.

Probation

1. When students' cumulative grade-point averages fall below 3.00, they are given a 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 are below 3.00, they will be placed on Scholastic Probation and are subject to the restrictions imposed on probationary students.

3. Students on Scholastic Probation will remain in this category until:

   a. They complete three successive quarters of C average or better work, 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 dean or director of their unit for possible reinstatement.

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; or it may consist of presenting oral or written coursework prepared by another as one's own.

Normally, a student who plagiarizes shall receive a grade of E in the course in which the act occurs. The offense shall also be reported to the Vice President and Provost. A student who is reported a second time shall be suspended from the University for a period of not less than one quarter. If a student who has been suspended for plagiarism is readmitted and is again found guilty of the offense, he or she shall be permanently expelled from the University.

Administrative responsibility for handling complaints, allegations, or grievances against students concerning plagiarism is a function of the Office of the Dean of Students.

TRANSCRIPTS

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

A minimum of two weeks should be allowed in order to obtain a transcript of a student's academic record from the Office of Admissions and Records.

The request must be in writing. Telephone requests for transcripts cannot be honored.

COURSE ALTERNATIVES

Extension and Correspondence

A maximum of one-half the number of hours required for the bachelor's degree, or 96 hours, may be taken by extension and correspondence courses combined. Of this total, not more than 48 hours may be taken in correspondence.

While Southern Illinois University at Edwardsville does not maintain a correspondence school, courses taken by correspondence from institutions which are accredited by appropriate regional accreditation association are regularly accepted if the grade earned is C or above.

Proficiency Examinations

Students may earn course credits by demonstrating their proficiency in certain subjects. A listing is maintained in the Office of Academic Advisement (Room 1310, Rendleman Building) of those courses for which proficiency examinations are regularly available. Information regarding time and place of testing and other detailed instructions are included in this listing. Tests are given by the departments themselves, by the testing service of the Office of Academic Advisement, and by the Office of Counseling and Testing.

The Proficiency Examination Program (including non-General Studies courses, as well as General Studies courses) is administered by the Director of the Office of Academic Advisement.

A student who desires to take a proficiency examination in any course should initiate the procedure with the Office of Academic Advisement. In many cases course guides and reading lists are available for academic departments.

Any student may take any available proficiency examination subject to the approval of the department and/or the following limitations: (1) A maximum of 48 hours, including credit earned through the College Entrance Examination Board's Advanced Placement Program, may be gained through proficiency examination. (2) Students may not take a proficiency examination for a specific course more than once, nor may they take a proficiency examination in a course in which they have previously received a grade.

After a student has 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" and 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, a notation "credit granted by proficiency examination"; and 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, no credit is received; the record shows nothing regarding the proficiency examination. However, the proficiency examination grade report form is filed in the student's folder for reference.

"In-Class" Proficiency

Proficiency examinations are also available for some General Studies classes in which students are currently enrolled. The examinations are administered to interested students of the class early in the quarter. The examinations are graded in sufficient time for those who pass the test to add another course as a replacement on their schedule. 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 Level Examination Program

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

1. A maximum of 48 hours can be earned through CLEP via 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. Credit, therefore, will be allowed for the tests individually.

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 a student previously has received credit in comparable courses. For example, credit via the English Test of the General Examinations will not be allowed when credit in English Composition has been established previously. In addition, test credit will not be granted when a student is currently enrolled in a comparable course.

5. Students will be permitted to take examinations for which comparable credit has not been established previously regardless of the total amount of credit earned to date.

6. An individual may take the tests prior to enrollment in this University and still receive credit. Final recording of credit upon the Permanent Record Card, however, is contingent upon matriculation at Southern Illinois University at Edwardsville.

7. The following amount of credit is offered for the corresponding General Examination:

English Composition — 8 hours
Humanities — 4 hours
Science — 8 hours
Mathematics — 4 hours
Social Science — 4 hours

8. When approved, credit will 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 official CLEP Testing Center in the Office of Academic Advisement on the third Saturday of each month.

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

College Board Advanced Placement

A high school student who is qualified through registration in an advanced placement course in high school or through other special educational experience 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 specific subjects, such as English composition, a foreign language, history, biology, chemistry, mathematics, or physics. A national examination is given in each subject administered through the Educational Testing Service which is intended to measure the achievement of the student and determine at what point the student 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 1, fail. The marked papers are sent to the university which the student has indicated will be attended. To receive credit a person must normally earn a grade of 5, 4, or 3, except in chemistry where a score of 3 does not provide credit at SIUE.

Ordinarily, the maximum credit granted through Advanced Placement Examinations is 16 hours and is not used in computing the student's grade-point average. Credit granted at another accredited college or university under this plan is transferable to this University up to a maximum of 16 hours. Students may appeal to their academic dean to be granted more than 16 hours.

(1) Physics: 206a—5, 206b—5, 206c—5.
(2) Chemistry: Chemistry 105—5; 125a—5; 125b—5; GSM 120—4.
(3) Biology: Biology 200—4, GSM 130—4, 131—2, 230—4.
(4) History: European: GSS 101—4, 102—4; American: GSS 200—4, 201—4, 202—4.
(5) English: GSK 101—4, 102—4.
(6) 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.
(7) Mathematics: 150a—4, 150b—4.
(8) Music: GHA 230—4.

Results should be sent to the 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, 3 for health education, and 3 for aerospace studies. Applications for credit for military service may be made through the Office of Admissions and Records, as well as for academic credit for work done in service schools.

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.

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 Southern Illinois University at Edwardsville, as well as a 3.00 overall grade-point average.

Each candidate for the degree must also complete a minimum of 192 hours of credit in approved courses. A student transferring from an accredited two-year institution must earn at Southern Illinois University at Edwardsville, or at any other approved four-year institution, at least 96 quarter hours required for the degree. Each candidate for the degree must also complete a minimum of 48 quarter hours in residence at Southern Illinois University at Edwardsville, as well as meeting all degree program requirements. Any exceptions must be applied for by the student and submitted to the Graduation Appeals Committee.

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

CONSTITUTION REQUIREMENT

No student may be graduated from the University who has not satisfied the State of Illinois legal requirement 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 the 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.) This stipulation may be satisfied by examination administered by Counseling and Testing Center or by satisfactorily completing one of the following courses: Government 203, GSS 200, 201, 202, 220, History 426. Students seeking teacher certification must complete one of the required courses.

B.A. FOREIGN LANGUAGE REQUIREMENT

In addition to the University's general requirements for a bachelor's degree, a person 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 a year's work for their degrees.

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). Application forms are also available in the Office of Admissions and Records.

After the completed applications have been returned to the Office of Admissions and Records, graduation checks will be mailed to the students. The Office of Admissions and Records evaluates the General Studies and University degree requirements while the major and minor departments determine their own requisites.

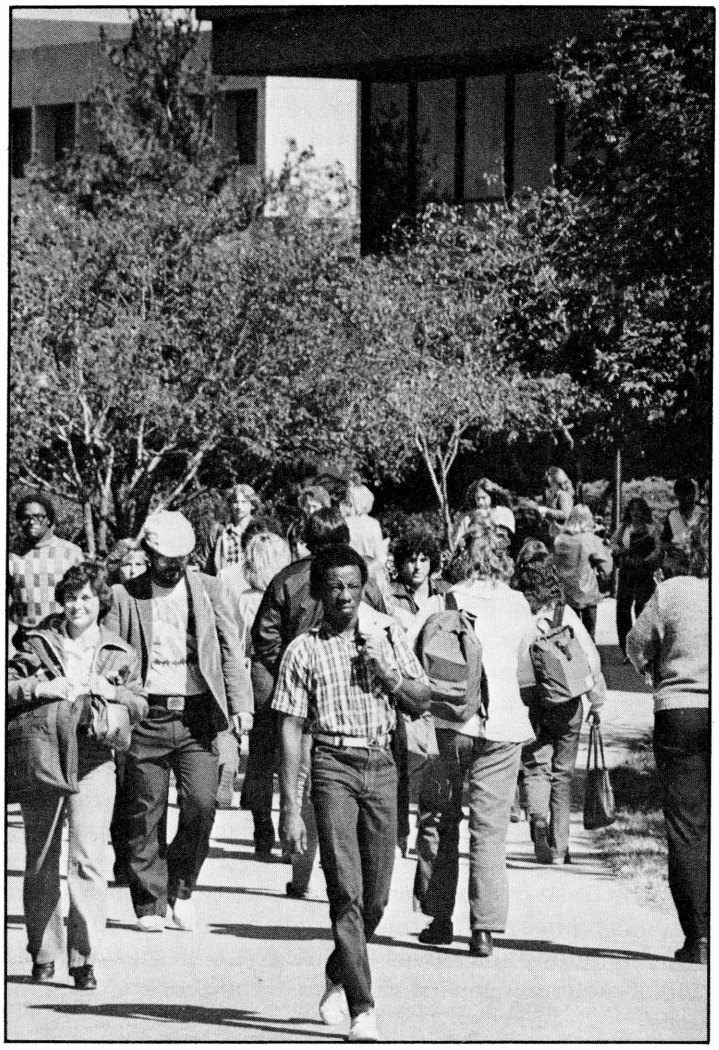
In addition to completing the steps for graduation, it is the responsibility of students that they meet all University requirements and have no outstanding financial obligations to the school.

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.

Commencement ceremonies are held each year in June at the end of the spring quarter. Attendance at the exercises is not compulsory.

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

A fee of $10.00 is established for all persons receiving degrees. The fee 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 Store in the University Center. Questions regarding the cap and gown, as well as invitations, should be referred to the University Store.



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 matter at issue is of an unusual nature and that it has resulted due to conditions beyond control of the student. Appeals are initiated through the Office of Admissions and Records. The committee meets quarterly.

STUDENT SERVICES

Southern Illinois University at Edwardsville recognizes that strong academic programs must be balanced with rich cultural and social opportunities and recreational facilities. 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 for many a once-in-a-lifetime opportunity to meet and exchange points of view with people of many nationalities, ages, and cultural and socio-economic backgrounds. The University provides both structured and casual programs that make campus life as busy or as casual as students desire to spend their free time.

DEAN OF STUDENTS

The Dean of Students has immediate administrative responsibility for various student support services. The Dean serves as ombudsman, a person to whom students may appeal 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 as they relate to citizenship in the University community and serves as chief officer in the adjudication of matters involving violation of the Student Conduct Code.

COUNSELING AND TESTING CENTER

The Counseling and Testing Center furnishes a variety of professional services to the University's students, faculty, and staff free of charge. Psychological counseling is offered to help students understand themselves, get along with others more effectively, and make decisions about lifestyles and careers. Educational counseling is provided for students who are entering or returning to the University, selecting or changing their major course of study, or experiencing difficulties with their academic work. Career counseling is available for those interested in relating their personal and educational experiences to occupational planning. Marital and couples counseling is available to those who want to enhance their relationships or resolve conflicts. Crisis counseling is provided for persons whose concerns or problems are immediate and severe. The Center also conducts a variety of workshops and serves as a resource for career, self-help, and referral information.

Several testing programs that may be of interest to University students are administered by the Center. These include: American College Testing Program (ACT); American College Testing-Proficiency Examination Program (ACT-PEP); Graduate Record Examination (GRE); Miller Analogies Test (MAT); and Medical College Admissions Test (MCAT). The Center also administers proficiency examinations for cooperating academic departments.

Counseling appointments and testing information can be obtained in person or by telephone. The Center is open from 8 a.m. to 5 p.m. Monday through Friday. In accord with professional ethics, University policy, and the law, confidentiality is maintained with regard to clients' identities and records.

If students wish to initiate withdrawal from the University, they should also report to the Counseling and Testing Center. Additional detailed information concerning withdrawal from the University may be found under the section Withdrawal from the University.

STUDENT ACTIVITIES AND ORGANIZATIONS

The Student Activities Office is available to all campus groups and individuals for assistance in planning, conducting, and evaluating activities and programs. Participation in any group or organization is open to all students; and students interested in a particular group should contact the Student Activities Office.

Besides honorary organizations which stimulate and recognize academic achievement, other groups exist which appeal to the educational, religious, social, recreational, and political interests of students. Through the use of Student Activities funds, certain campus-wide organizations are able to sponsor a variety of programs for the entire campus community. Participation in these organizations and programs enables students to add a new dimension to their lives while at the University.

A wide variety of activities are available throughout the year to SIUE students and community guests. Examples include: Welcome Back Week, Homecoming, and Springfest involving three to five days of films, entertainment, games, and other activities for enjoyment and relaxation; quarterly film series emphasizing the popular, as well as serious and educational aspects of film; guest lecturers; constantly changing art exhibits in campus galleries; travel programs, craft classes, and a host of recreational and leisure time activities. Available also is a Student Development/Leadership Training Program which is aimed at setting a climate whereby the student can be prepared to accept and successfully meet the challenges of life in our society. The focus of student development is directed mainly toward the student as an individual and as a member of groups and organizations. For students who desire to be actively involved in campus affairs, approximately 100 positions exist in campus committees and governance councils dealing with such matters as curriculum, allocation of activity fees, parking and transportation, student rights and grievances, minority and affirmative action concerns, and other topics that affect the daily lives and welfare of students and the University. Campus publications provide yet another alternative for student involvement.

ALL-UNIVERSITY ORGANIZATIONS

Alestle
Cheerleaders
Cougar Guard (Campus Mascot)
Fraternity-Sorority Conference
Student Government
Tower Lake Area Council
University Center Board

FRATERNITIES

Alpha Phi Alpha
Epsilon Beta Gamma, Frasority
Iota Phi Theta
Kappa Alpha Psi
Omega Psi Phi
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

SPECIAL INTEREST GROUPS

African Students Organization
Afrikan History and Cultural Society
Arab Student Organization
Black Student Association
BSA Gospel Choir
Chess Club
Chinese Student Association
Cougar Squares
Illinois Public Interest Research Group (IPIRG)
International Student Council
Iranian Student Association
Moslem Student Association
National Town Meeting
Recreation Club
Student Action Proeducation (SAFE)
University Ambassadors
Wagner Potters Association
Women for Women
XGI Club

RELIGIOUS ORGANIZATIONS

Baptist Student Union
Christian Student Fellowship
Inter-Varsity Christian Fellowship
Wesley Student Fellowship

DEPARTMENTAL ORGANIZATIONS

Accounting Club
Aerospace Club
Chem Club
Data Processing Management Association
Graduate Association of Sociology Students
Graduate Association of Students in Psychology
History Club
La Sociedad Hispanica (Spanish)
Marketing Club
Math Club
Philosophy Club (Neo-Thalesian Society)
Physics Club
Quonset Experimental Theater
Student Nurses Association
Student Social Workers Association

PROFESSIONAL AND HONORARY ORGANIZATIONS

Activities Honor Society
Administrative Management Society
American Society of Civil Engineers
American Society of Personnel Administrators (ASPA)
Arnold Air Society
Beta Gamma Sigma (Business)
Biology Honors Society
Delta Sigma Pi (Business)
Eta Kappa Nu (Electrical Engineering)
Gamma Theta Upsilon (Geography)
Honor Society of Nursing
Institute of Electrical and Electronics Engineering
Kappa Delta Pi (Education)
Lambda Alpha (Anthropology)
Mu Phi Epsilon (Music)
National Art Education Association
National Association of Jazz Educators
National Student Speech and Hearing Association
Pi Nu Epsilon (Mathematics)
Pi Omega Pi
Preprofessional Honors Society
Society of Professional Journalists (Sigma Delta Chi)
Student Council for Exceptional Children
Student Planning Association

In addition to those organizations listed, there are twenty social fraternities and sororities at SIUE. Each contributes in its own way to enrich student life. All, with the exception of one, are nationally recognized. Some are service-oriented in nature; some are purely social.

UNIVERSITY THEATER

The University Theater offers all students the opportunity to work with SIUE's well-known drama 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 Quonset Theater is totally a student-operated enterprise open to all student applicants. An executive committee screens plays, including new experimental works, and produces several each year. Students interested in dance train under excellent chore-

ographers and appear in the Dance in Concert series and Mainstage Productions.

MUSICAL EVENTS

More than ninety concerts and recitals are given each year at SIUE. Each quarter the Department of Music and Student Activities Office sponsor a band concert, an orchestra concert, choral concerts, 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 who are not enrolled in music courses may join one of several ensembles open only to nonmajors.

UNIVERSITY MUSEUM

The Office of Cultural Arts and University Museums is responsible for all art collections at the University. Works purchased by the University and some acquired from the Illinois Arts Council grants program range from Rembrandt to Calder. The collections include pottery, prints and drawings, architectural ornaments from buildings by Louis Sullivan, musical instruments, and anthropological artifacts. Works by Master of Fine Arts students in the art and design department of the University form another collection. The University Museum is located in the University Center; but its collections are displayed throughout the campus, enhancing the architectural grace and beauty of the buildings.

UNIVERSITY CENTER

The University Center is a focal point for campus programs and services. A central lounge, the Goshen, 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, TV lounge, video lounge, bank service, ticket office, craft shop, meeting rooms or hair stylists. 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 and pinball wizards compete in the basement game area. The Univerity Center provides space and activities for the entire University community and many off-campus groups.

UNIVERSITY CENTER BOARD

Students on the University Center Board are involved in leadership development. The Governing Council serves as an advisory body to Building management on matters of policies and services. The UCB Program Council's various committees for films, performing arts, visual arts, leisure activities and speakers coordinate the events that keep the Center bustling with attractions. Membership on the University Center Board is open to all students.

BOOKSTORE

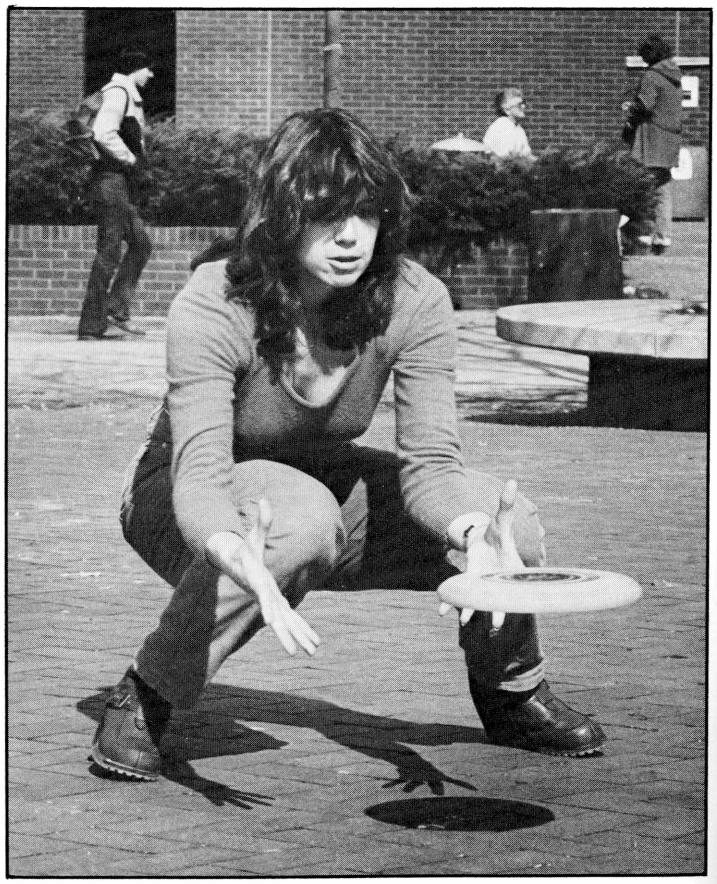
The Bookstore, located on the first floor of the University Center, provides textbooks that must be purchased as supplements in many courses, as well as other supplies, clothing, gifts and sundries. It offers an extensive selection of over 10,000 titles in hardback and paperback, and around 200 magazines. The store has evening as well as day hours for students' convenience.

FOOD SERVICES

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 is a fast food service across from the Cafeteria, offering hamburgers, french fries, shakes and other snack items when there's a rush. The Upper Deck Restaurant, located on the second floor, offers complete table service in a relaxed atmosphere with a variety of menus at modest prices.

RECREATION AREA

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



CRAFT SHOP

University Center Craft Shop facilities and workshops are available to all students, faculty, staff and surrounding community groups. The Craft Shop offers six-week, non-credit 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.

TICKET AND TRAVEL CENTER

The Union Station 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.

RECREATION/ATHLETICS

Campus Recreation provides the necessary facilities, equipment, and programs that create a wide variety of opportunities for both formal and informal recreation activities.

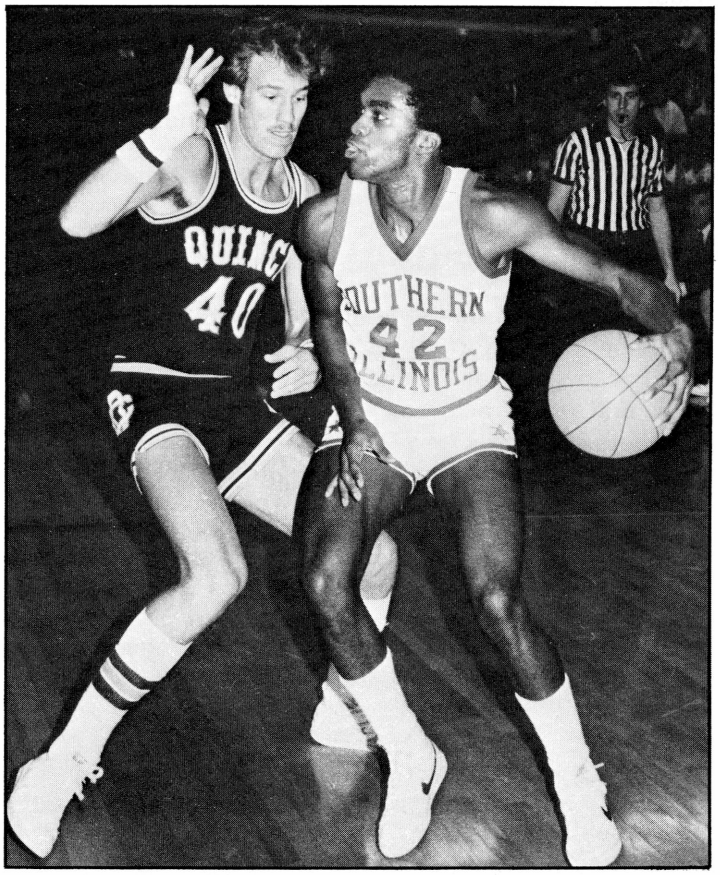
Recreational programming is initiated from the Intramural Facility or from the Tower Lake Recreation Area. Together the two facilities provide a wide variety of activities and programs throughout the year.

The Intramural Facility provides for indoor activities, such as basketball, volleyball, hoc-soc, and weight training. Outdoor facilities located in this area include eight handball courts, four softball diamonds, football and soccer fields, and six tennis courts. The tennis courts are lighted and are available until 10 p.m. daily. In addition to these facilities, which are used on a free-time, spontaneous basis, the recreation staff coordinates an extensive program of intramural activities for those seeking recreation on a more formal and competitive level.

The Tower Lake Recreation Area Facility includes a marina with canoes, sailboats, and rowboats, available for a small rental fee, and a sand beach area with shower and locker facilities and a concession stand. A sheltered picnic pavilion, picnic tables, barbeque pits, and other outdoor recreational equipment are also available. At the entrance to the Recreation Area is the Information Center which also serves as a bicycle and camping equipment check-out point. This equipment is used by students, faculty, and staff whenever they are involved in Campus Recreation sponsored activities, such as overnight camping, float trips and bicycle tours. The equipment is also available for individual use for a small rental fee.

MEN'S INTERCOLLEGIATE ATHLETICS

The men's intercollegiate athletic program at Southern Illinois University at Edwardsville consists of eight varsity sports: soccer, cross country, basketball, wrestling, baseball, track, golf, and tennis. Several of the sports operate some form of a junior varsity program to provide learning experience for those who need added preparation to become a varsity player.



As a member of the National Collegiate Athletic Association, SIUE is classified as a Division II School for legislative and competitive purposes. However, the soccer team competes in the Division I classification. A scholarship program is available to Cougar athletes which enables all teams to be competitive in their classifications. Cougar athletic teams have received national and international recognition in several sports, the most noteworthy being soccer, tennis, and wrestling.

The soccer team captured the first NCAA College Division Soccer Championship conducted in 1972, and it was the only major soccer school to go undefeated that year. In 1973 and 1974, they were strong contenders for the national championship in Division I. In 1975 they were Division I finalists, and in 1979 they were NCAA national champions. A number of soccer players have been selected as United States Olympic Team players. Many soccer alumni play in the professional leagues.

In 1978, 1979, 1980, 1981, and 1982 the tennis team captured the NCAA National Championship of Division II schools.

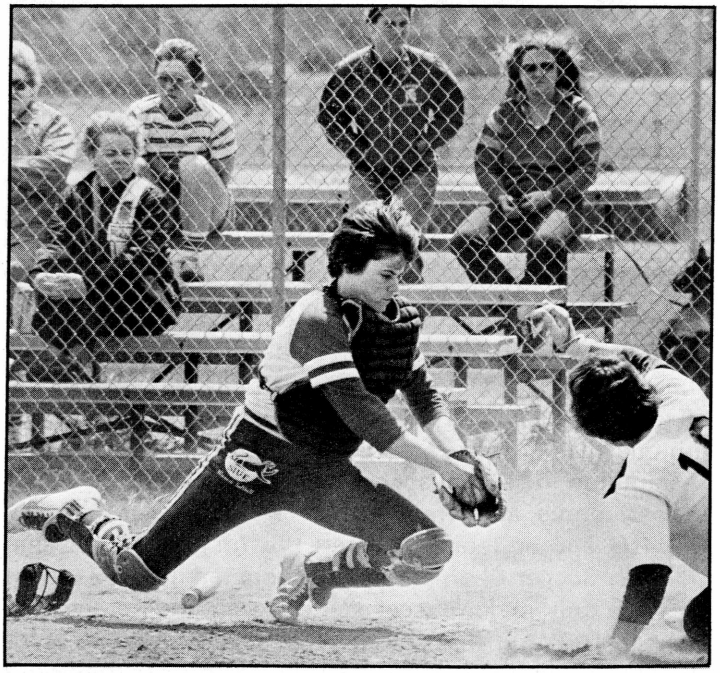
SIUE wrestlers earned third place and second place team honors in Division II tournament championship competition in 1974 and 1975, respectively.

SIUE baseball teams have reached the final round of the Division II Baseball Championship, and are perennial contenders for this crown. A number of baseball alumni play in the professional leagues.

Facilities for home contests include a 4,000 seat field enclosed for soccer, a 1,500 seating capacity enclosed for baseball contests, a cross country course, and a quarter-mile track. The wrestling team holds its home meets in the ballroom of the University Center. Twelve tennis courts serve as the site for home tennis matches. The golf team utilizes area courses for its home matches. The SIUE basketball team plays home games at Edwardsville High School.

WOMEN'S INTERCOLLEGIATE ATHLETICS

SIUE's six women's varsity teams offer a wide variety of competitive opportunities in basketball, cross country, field hockey, softball, tennis (spring and fall seasons) and track and field (including a winter indoor season). As members of AIAW's new Division II, SIUE expects to be in excellent position to continue its highly successful individual and team performances in a well balanced program. Its strategic location, with availability to amateur clubs, as well as professional teams, offers good opportunities for varsity participants.



An expanded support program for athletic grants to student athletes has been made available and will permit the program to grow in both size and quality. Facilities for softball and field hockey are second to none in the entire Midwest. The women's tennis, basketball, track and field and cross country teams share facilities used by the men's teams. Equipment and uniforms are of excellent quality.

HOUSING

ON-CAMPUS TOWER LAKE HOUSING

The University's housing facilities, Tower Lake Apartments, provide housing for approximately 1,200 single students and 168 families. The units are furnished two- and three-bedroom co-op apartments designed for three or four single students which emphasize individual responsibility, academic and personal growth and development, and community involvement through social and service projects and programs. Family students 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, lounge area, social facilities, snack bar, and maintenance and administrative offices. A Programs Committee, which any Tower Lake resident may join, arranges activities, film screenings, float trips, etc., for residents.

There is a shortage of available on-campus housing facilities. Students should apply at least eight months in advance.

Students living outside a specified radius of campus will be given priority for on-campus facilities. However, this does not guarantee on-campus housing.

RATES

Rates for family students per month are $230-$299, for single students $89-$149 per month.

CHILD CARE CENTER

The University provides at Tower Lake a Child Care Center, which operates eight hours a day under a trained, licensed staff person. Students may leave their dependent children for as long as a half-day for a nominal rate. Tower Lake residents are given preference in use of the facility.

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.

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 in the Bursar's Office in the Rendleman Building. Small motorcycle decals are available on request.

All violations by a registered vehicle are the responsibility of the person in whose name the decal is issued. Tickets issued on a nonregistered vehicle belonging to members of the student's immediate family will be the responsibility of the student. Tickets may be paid and appeals filed at Vehicle Registration.

Night students have the option of purchasing night (green) decals which are issued on a quarterly basis for the fee of $5. These decals permit parking in the green lots only after 4 p.m.

PARKING FOR THE HANDICAPPED

Certain areas have been set aside as designated parking areas for the handicapped. Specific license tag markings identify the automobiles of legitimate users of these spaces in the pay parking lots; specific decals featuring the international handicapped symbol are required to use the restricted areas in decal lots. Use of these spaces by the nonhandicapped is considered a violation of University parking regulations, and citations are issued. Information on obtaining special decals is available from the Vehicle Registration Office.

STUDENT I.D. 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 Bursar's Office in the Rendleman Building.

A certificate of registration, issued each quarter at the time of registration, certifies payment of tuition and various fees. The identification card is used with the certificate of registration for the current quarter to identify students who have paid the student activity fee and are eligible to use the University facilities.

The identification card and the certificate of registration are legal documents. A student who loans, borrows, or alters these cards is 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 positive student identification is required. In special cases, the identification card, the certificate of registration, and other corroborating evidence may be requested to verify identification.

UNIVERSITY PLACEMENT SERVICES

The SIUE Placement Services counsels students about the opportunities and the preparation necessary for certain careers. The office maintains up-to-date information on current job trends, current job openings, and a resource library on careers with business, industry, government, and teaching. It also provides weekly job bulletins as well as informational materials compiled from various employers and research in the job market. This information is located in the reception area of the office. Employers from business, industry, government, schools, and colleges visit the Placement Services Office to interview students and alumni interested in employment with their organizations.

Placement Services also assists those interested in teaching. It provides fact sheets about current teaching positions, and updates the openings weekly. Student teaching evaluations become a part of the prospective teacher's file. Other services available are career counseling, resume development, letter writing (various types), skills analysis, and interviewing tactics.

Students desiring to use Placement Services to locate a career position should register with the office at least three quarters before their departure from the campus.

Workshops regarding job hunting procedures are available each quarter. All of the above services are available to students, alumni and the general public.

HEALTH SERVICE

The SIUE Health Service is staffed by physicians, nurses, and technicians to provide on a limited basis emergency treatment, general outpatient care, laboratory diagnostic tests, and a pharmacy. There is close cooperation between this office, Counseling and Testing Center, and Rap Room. Additionally, Health Service staff work closely with local and St. Louis metropolitan area health care providers.

A Medical History Form must be completed by each person utilizing Health Service at the time of or before the first visit. Physical examination requirements of specific University departments are handled in Health Service.

POST OFFICE

The SIUE Branch Post Office is open daily from 7:00 a.m. to 4:00 p.m. (Monday through Friday). Mail is dispatched at 7:00 a.m., 11:00 a.m., and 4:00 p.m. daily except Friday, when there is no afternoon delivery. 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; alien address cards; income tax forms (Federal, Illinois, Missouri); and rental of postal lock boxes.

RELIGIOUS CENTER

Occupying one of the most architecturally distinctive structures on campus, the Religious Center was designed by R. Buckminster Fuller. Dominated by a geodesic dome with a superimposed world map, the Center is located in the campus core near the University Center.

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

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

SPECIAL SERVICES

SERVICES FOR VETERANS

The Office of Veterans Affairs is located in room 1310, Rendleman Building. The office is staffed by veterans and offers comprehensive services to veterans including employment referrals, tutorial assistance, peer counseling, general information regarding veterans' benefits and legislation, admissions and financial aid referral.

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

Administered by the Academic Resource Center, Veterans Upward Bound, in accordance with U.S. Office of Education guidelines, is designed specifically to provide academic instruction to educationally disadvantaged veterans who may or may not possess a G.E.D. or high school diploma. The program offers remedial and/or refresher courses for the purpose of elevating the basic educational skills of veterans so that they may compete with other students at the post-secondary level. No college credit is given since the program is totally developmental, and veterans enrolled in the program are eligible for monthly VA benefits. For more information, contact either Veterans Upward Bound or the Office of Veterans Affairs.

SERVICES FOR FOREIGN STUDENTS

The Office of International Education, including the Foreign Student Adviser's Office, provides guidance and counseling from the time a prospective foreign student applies for admission throughout the period of attendance at SIUE. Prior to the student's arrival, financial evaluation and advice are sent by mail, and information to familiarize the student with the area is provided upon admission. After arrival, orientation sessions, either group or personal, are conducted and counseling concerning any personal, cultural, financial, or academic problem is available.

Every effort is made to assure that the student maintains proper immigration status by explaining and implementing regulations, changes, and requirements; checking and verifying forms prior to forwarding to Immigration and Naturalization Service; and maintaining files on each student. Assistance is given in locating temporary housing, arranging transportation, and making the transition into a new culture. Initial and on-going academic advisement is provided as necessary, along with a liaison relationship with academic schools, departments and faculty to insure that students maintain satisfactory academic progress. Throughout the year events are programmed in cooperation with this office and the International Students Council. Coordination with the International Hospitality Program is provided for foreign students desiring host family relationships.

Study Abroad facilities for American students and scholars are maintained in this office.

SERVICES FOR THE HANDICAPPED

The Coordinator of Handicapped Services in the Central Affirmative Action Office is responsible for implementation and coordination of many of the programs, activities, and services affecting handicapped individuals at SIUE. All persons are invited to visit the CAAO at their earliest convenience to meet the Coordinator and discuss programming which is available to the handicapped individual.

The Coordinator offers guidance and counseling to handicapped students at SIUE, as well as referrals to related offices and departments. Assistance is given in obtaining specialized equipment and supplies, meeting individualized needs, and the general transition for the handicapped to the campus.

SERVICES FOR THE ELDERLY

The University, through the Student Activities Office and the Gerontology Program, participates in Elderhostel, a one-week series of workshops in the summer during which senior citizens live on campus. It also sponsors an annual one-day Senior Fair that brings to campus government 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 also serves the elderly by maintaining a list of student volunteers for special services, and the UCB provides space for group recreation and reduced rates for bowling, table tennis, and other activities.

OTHER SERVICES

The Rape and Sexual Abuse Care Center provides trained personnel who cooperate with area police agencies and hospitals in providing counseling and advice to rape victims or to victims of sexual abuse.

UNIVERSITY COLLEGE

University College serves as the academic home base for all undergraduate students entering the University and for all undergraduates with "undeclared" majors. The primary aim of the College is to provide effective academic support services for students. The Office of Academic Advisement and the Academic Resource Center comprise the College's support services. The College also serves as the administrative home for the Air Force ROTC detachment, the Bachelor of Liberal Studies degree, Dean's College, General Studies Program, the Open University Project, the Presidential Scholars Program, and Student Colloquium.

GENERAL STUDIES

General Studies courses are organized into five comprehensive areas, each of which has a special contribution to make toward the development of students. The University believes that anyone who is truly educated should have some familiarity with each of these areas.

GSK - Skills - Basic courses in written expression, oral communication, and problem-solving train students to think critically, analyze problems rationally, and communicate their insights and observations clearly and effectively to others.

GHA - Humanities and Fine Arts - Amid all the changes in history, people in many basic ways have remained the same. Human beings today experience the same basic desires and hopes, the same fears and failures they did in ancient times. And it is with these human constants that Humanities and Fine Arts is most concerned. Of course, it is also concerned with the changing ways in which these unchanging elements have been considered, with the unique ways man has expressed himself about them, but underneath is the permanency of the human experience itself. GHA courses encourage students to develop their own sense of values. For example, courses in philosophy and in design reveal fundamental connections among various kinds of human experience. In literature and philosophy courses students confront various problems of good and evil and may be stimulated to clarify their own values. In the study of the various arts one comes to a better appreciation of the creativity of others and even shares directly in this experience. All told, it is hoped that this kind of study contributes to what in an earlier time of history was spoken of as "wisdom."

GSM - Natural Sciences and Mathematics - includes the subjects generally called "science." The General Studies science courses aim to provide the student with an understanding of the structure of the sciences, the conceptual schemes they employ, the forms of reasoning used to reach their conclusions, and the procedures used to verify their validity. Improved understanding should lead to interest in the sciences and appreciation of the role of the sciences in human experience. The student who approaches the study of science with an appropriate attitude should find that discovery is a delightful intellectual experience.

GSS - Social Sciences - Courses in this area help students develop an awareness of their role in society, an ability to think intelligently about their environment, and an alertness to the complexities of the modern world. Students should come to appreciate some of the differences and similarities among human societies in different historical eras and in different parts of the world. They should also learn something of how the methods used by science are applied in the study of human individuals and society.

GIS - Interdisciplinary Studies - Problems "of life" usually are not confined to a subject which is found entirely within the boundaries of any one discipline. In recognition of this fact the General Studies Program includes the area of Interdisciplinary Studies in which are located courses whose subject matter crosses the lines of traditional disciplines. Those courses are taught by faculty from at least two of the broad areas of the Program or from two different Schools of the University.

GENERAL STUDIES REQUIREMENTS

Students are required to complete courses in each of the five areas:

GHA HUMANITIES AND FINE ARTS 16
The student selects any courses listed in the GHA Area to total 16 hours.

GIS INTERDISCIPLINARY STUDIES 4
The student selects any one course listed in the GIS Area.

GSK SKILLS 16
The student is required to take 8 hours of written communication (GSK 101 and 102) 8
The student must take 4 hours of oral communication (GSK 123) 4
The student must take 4 hours of reasoning or problem solving (GSK 152 or 162) 4

GSM NATURAL SCIENCE AND MATHEMATICS 16
The student selects any courses listed in the GSM Area to total 16 hours.

GSS SOCIAL SCIENCE 16
The student selects any courses listed in the GSS Area to total 16 hours.

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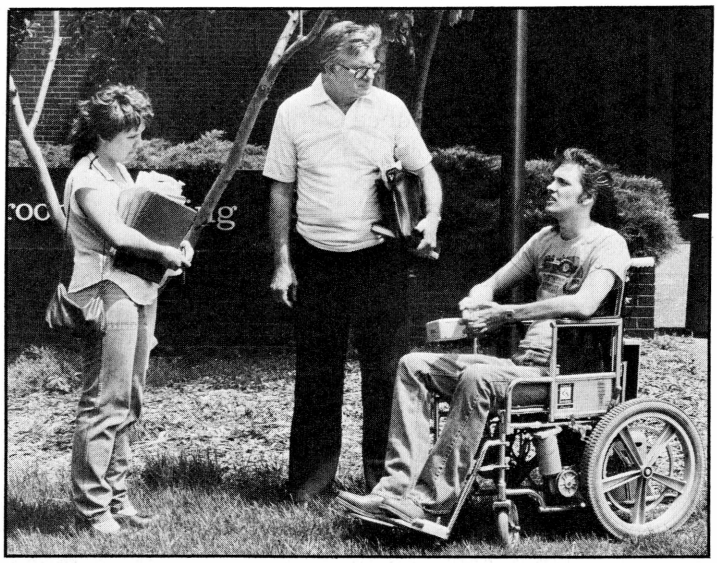
The student is automatically excused from 8 hours in the one Area among GHA, GSM, and GSS most closely related to the area of concentration. However, the 8 hours remaining to be taken in that Area must be in courses offered by departments other than that of the major. The list of approved waivers appears later in this section. -8

GENERAL STUDIES REQUIREMENTS 60



EXEMPTIONS

The total requirements of General Studies may be partially satisfied, reduced, or modified by several circumstances.

TRANSFER STUDENTS

A transfer student who has received an associate degree in a baccalaureate-oriented program (Associate in Arts or Associate in Science degree) from an accredited two-year institution may enter the University with junior class standing and be considered to have met the requirements of the General Studies Program. Other students who transfer from an accredited university, college, or junior college have their work evaluated for purposes of meeting the general degree requirements, including General Studies.

WAIVERS

Students are entitled to waive 8 hours in the Area (GHA, GSM, GSS) most closely related to the area in which they will concentrate their work. The following waivers have been approved:

Area GHA — American studies, art, English, foreign languages, mass communications, music, philosophy, speech communication, speech pathology and audiology, theater.

AREA GSM — Biology, chemistry, construction, earth science, engineering, general science and mathematics, health education, mathematics, nursing, physical education, physical science, physics, recreation.

Area GSS — Accountancy, American studies (GHA or GSS), anthropology, business administration, business education, economics, geography, government, history, human services, psychology, social work, sociology.

SUBSTITUTIONS

Students are permitted to substitute certain courses in other areas for the General Studies courses. Courses taught by the faculty of a student's own major cannot be used to fulfill the requirements in the General Studies area of waiver. The following courses have been approved as substitutes:

GSM 120-4	Chem 110-4 or Chem 125-4
GSM 130-4	Biol 100-4, 101-4, or 200-4
GSM 230-4	Biol 302a-5 or Biol 302c-5
GSM 244-4	Math 125-4 or Math 410a-5
GSM 101-4	Phys 206a-5 or Phys 211a-4
GSS 260-4	Psyc 300a-4

Engineering majors only:

GSS 150-4	Econ 201-4

ADVANCED STANDING

It is possible for a student to gain advanced standing (that is, to bypass certain requirements without credit in the corresponding courses) in some areas. Eligibility for advanced standing is determined on the basis of high school preparation in the area and scores on the ACT test. Students should consult their academic adviser about specific possibilities for advanced standing. Following are the current criteria or qualifications for advanced standing for certain General Studies courses in each area. (The ACT scores used are standard scores.)

GSK Area

123—4 Oral Communication of Ideas (speech)
A course in speech in high school and 23 or above on ACT English.

GSM Area

101—4 Introduction to Physical Science
One year of high school physics and 13 or above on ACT mathematics, and 28 or above on ACT natural science.

110—4 Earth and Its Geographic Environment
One course of earth science in high school and 28 or above on ACT natural science.

111—4 Earth and Its Geologic Environment
One year of earth science in high school and 28 or above on ACT natural science.

120—4 Contemporary Chemistry
One semester of high school chemistry and 13 or above on ACT mathematics, and 28 or above on ACT natural science.

130—4 Contemporary Biology
One year of high school biology and 28 or above on ACT natural science.

131—2 Life: Ecology and Diversity
or
203—4 Man and His Diseases
Two years of high school biology with a minimum grade of B and 28 or above on ACT natural science.

144—5 Basic Concepts of Algebra
Six semesters of college preparatory mathematics (equivalent to two years of algebra, one year of plane geometry) with a C average and no failing grade and 24 or higher on ACT mathematics.

	GSS Area
101—4, 102—4	Introduction to the History of Western Civilization One year of world, western or European history in high school and 27 or above on ACT social science.
130—4	Sociology A course in sociology in high school and 27 or above on ACT social science.
150—4	Economics A course in economics in high school and 27 or above on ACT social science.
200—4, 201—4, 202—4	U.S. History and Constitution One year of U.S. History in high school with a grade of B and 27 or above on ACT social science.
220—4	U.S. Constitution A course in American government or civics in high school and 27 or above on ACT social science.
240—4	Geography for Modern Man A course in geography in high school and 27 or above on ACT social science and 29 or above on ACT natural science.
260—4	Modern Challenges for Psychology A course in psychology in high school with a grade of B and 26 or above on ACT social science and 28 or above on ACT natural science.

COURSES

SKILLS (GSK)

100a—1 STUDY SKILLS. An introduction to academic survival skills. This course is designed to acquaint students with the following: note taking techniques, test taking strategies, various study systems and time management, goal setting, communication and problem solving skills.

100b—1 DEVELOPMENTAL READING. Designed to assist student with nonorganic reading difficulties and also those who simply want to improve their reading rate and efficiency.

100c—2 CAREER PLANNING AND DEVELOPMENT. The necessary factors an individual must consider in order to select and implement a career choice through a systematic analysis of self awareness, decision-making strategy, and career information.

101—4 ENGLISH COMPOSITION. Practical and efficient training in the shorter written forms: the sentence, the paragraph, the short essay.

102—4 ENGLISH COMPOSITION. Advanced practical training in college-level writing, including fundamentals of research and writing the term paper. Prerequisite: GSK101.

123—4 ORAL COMMUNICATION OF IDEAS. The basic principles and techniques of oral communication as applied to everyday speech activities.

152—4 CRITICAL THINKING. Study and practice of critical thinking and correct problem-solving methods, with emphasis on organizing information, analyzing meaning, producing correct arguments, detecting fallacies and using rational methods of investigation.

162—4 REASONING AND PROBLEM SOLVING. Aids student in enhancing and developing basic skills in reasoning and problem solving. Application occurs throughout course.

HUMANITIES AND FINE ARTS (GHA)

101—4 INTRODUCTION TO LITERATURE. Masterpieces of literature (drama, fiction, poetry) are read and discussed to teach how to read the three genres with enjoyment and understanding. Should have completed GSK 101.

110—4 INTRODUCTION TO ART. Basic introduction to the visual arts, particularly painting, sculpture, and architecture. The primary objective is to cultivate skill and discrimination in seeing and understanding works of art from many periods.

120—4 RELIGION, REASON, AND HUMANITY. A philosophical examination of selected views on the question of a religious dimension in human experience, with emphasis on the factors involved in belief and nonbelief.

136—4 INTRODUCTION TO MUSIC HISTORY/LITERATURE. An introduction to the elements of music, and to the important composers, periods, styles, and forms of music.

140—4 AN INTRODUCTION TO MODERN FOREIGN LANGUAGE. A comparative introduction to the modern Romance, Germanic, and Slavic languages, beginning with a consideration of the hypothetical Indo-European parent-speech and its development into the "Family" including the Germanic Group, the Italian Group, and the Balto-Slavic Group.

141—4 BUILDING VOCABULARY THROUGH LATIN AND GREEK WORD ELEMENTS. Through practical exercises, learning to expand vocabularies through the system of prefix-root-suffix word building which English has borrowed from Latin and Greek.

150—4 THE DRAMATIC MEDIA: THEATER, CINEMA, AND TV. Designed to familiarize the general student with the nature and function of contemporary live theater. Emphasis on the workings of theater as they are designed to elicit specific responses from audiences. Lecture/discussions, readings, viewing of plays and films. Objective examinations and optional research activity.

168—4 THE FINE ARTS. An introduction to five of the forms in which art can occur: the visual arts, music, dance, theater, and the media of mass communications; their differences and their similarities. Discussion not through survey but through careful examination of individual works.

202—4 THE AMERICAN CHARACTER. An attempt to define what is meant by the character of the image of Americans. Through extensive readings in the bibliography of the area offered by historians, literary figures, philosophers, anthropologists, sociologists, psychologists, etc., and through a discussion of the important themes in American history, some understanding of national consciousness can be gained.

203—4 LITERARY MASTERPIECES OF ANTIQUITY. Reading (in translation) and discussion of selected literary texts from the Greek, Roman, and Judeo-Christian traditions.

204—4 STUDIES IN SHORT FICTION. A study of the modern short story as an artistic expression, its techniques, and its versatility.

205—4 AFRO-AMERICAN LITERATURE. Reading and discussion of selected literary texts from the earliest black American writers in the 1700s to the present.

206—4 INTRODUCTION TO THE NOVEL. A study of the novel, emphasizing the technique of the novelist and his concern with continuing human problems.

207—4 CHANGE AND THE ENGLISH LANGUAGE. A survey for the general student of changes in vocabulary, meaning, and sentence patterns which have taken place in the English language. The course begins in the present and works back to early written records such as the first translation of the Bible.

209—4 CLASSICAL MYTHOLOGY AND ITS INFLUENCE. The major myths; their origin, nature, interpretations, influence, relevance, and use in the modern world.

224—4 PHILOSOPHICAL MASTERPIECES. Reading and discussion of selected philosophic masterpieces of western civilization.

230—4 MUSIC HISTORY/LITERATURE. Development of choral and instrumental music from the Renaissance to the present. Prerequisite: 136 or equivalent.

282—4 ISSUES IN FEMINISM. (Same as GSS 282.) Critical examination of the beliefs, values, and commitments of the women's movement.

303—4 FOLKLORE. The types of folklore, based on the culture-reflection approach, with extensive readings in American folklore and an introduction to European folklore; practice in collecting, classifying, and coding, and in the use of Thompson's Index.

305—4 STUDIES IN BIOGRAPHY. Reading, discussion, and evaluating various forms of biographical work in historical and literary context. Opportunity for individual work in the student's area of concentration.

306—4 INTRODUCTION TO THE BIBLE. Reading and discussion of the Old and New Testaments in English translation, informed by attention to their literary, historical, and theological contexts.

307—4 INTRODUCTION TO SHAKESPEARE. Designed to acquaint the general student with Shakespeare's life, the theater of his time, and representative plays and poems.

308—4 DETECTIVE FICTION. The development of detective fiction, from its nineteenth century beginnings to the present.

310—4 MODERN ART A: THE NINETEENTH CENTURY. A survey of important artists and movements from 1789 to 1900 with special attention to their social contexts and intellectual milieux. David, Delacroix, Ingres, Courbet, Manet, Degas, Monet, Renoir, Rodin, and others.

311—4 MODERN ART B: THE EARLY TWENTIETH CENTURY. A survey of important artists and movements from the 1880s through the 1930s with special attention to the social context and intellectual milieu. Cezanne, Seurat, Van Gogh, Matisse, Rouault, Picasso, Braque, Gabo, Mondrian, and others.

312—4 MODERN ART C: THE MID-TWENTIETH CENTURY. A survey of important artists and movements from the 1800s to the present, emphasizing the later developments. Attention to the social contexts and intellectual milieux, German expressionism, surrealism, the Bauhaus, modern architecture, and contemporary American painting and sculpture.

315—4 AMERICAN ART I. A study of the visual arts in the United States. While the emphasis is upon architecture, painting, and sculpture in the context of American social and cultural evolution, the minor arts also are placed in perspective. 315, 316, 317 may be taken in any sequence.

316—4 AMERICAN ART II. A continuation of American Art I dealing with art of the nineteenth century. 315, 316, 317 may be taken in any sequence.

317—4 AMERICAN ART III. A continuation of American Art II with emphasis on the art of the twentieth century. 315, 316, 317 may be taken in any sequence.

320—4 EXISTENTIALISM. A survey of typical existentialist writers such as Kierkegaard, Nietzsche, Jaspers, Sartre, Camus, and Marcel, focusing on such issues as liberty, the meaning of the self, finitude and death, and the meaning of religious experience.

321—4 PRAGMATISM. A critical examination of pragmatism as a contemporary perspective on life, reality, and American culture.

322—4 ETHICS. An investigation of the basic problems related to deciding how men ought to act and of modern discussions of individuals and social morality.

330—4 TWENTIETH-CENTURY MUSIC: THE CLASSICAL TRADITION. Major composers and musical works of the fine art tradition in the twentieth century, seen in relationship to other important cultural events of the time. Prerequisite:136 and 230.

338—4 JAZZ. Jazz forms and styles: development, illustrations, performances.

354a—4 GREAT AGES OF THEATER: FROM THE GREEKS TO THE NEOCLASSICISTS. An introduction to the theatrical practices of the great ages of western theater. The Greek, Roman, medieval, Italian and English Renaissance, French neoclassical, and eighteenth century English theaters. Special attention to selected plays from each period or movement and to the ways in which these works were staged.

354b—4 GREAT AGES OF THEATER: FROM ROMANTICISM TO THE PRESENT. An introduction to the theatrical practices of the great ages of western theater. The major movements of the nineteenth and twentieth centuries: romanticism, realism, naturalism, symbolism, expressionism, absurdist, and post-absurdist. Special attention to selected plays from each period or movement and to the ways in which these works were staged.

NATURAL SCIENCE AND MATHEMATICS (GSM)

101—4 INTRODUCTION OF PHYSICAL SCIENCE. A non-mathematical study of motion, matter, electricity, magnetism, and the atom.

110—4 EARTH AND ITS GEOGRAPHIC ENVIRONMENT. An introduction to the earth's place in the solar system, the earth-sun relationships, and the earth's atmospheric activities.

111—4 EARTH AND ITS GEOLOGIC ENVIRONMENT. An introduction to deformation of the earth's crust, mountain uplift, continental drift, earthquakes, rocks and minerals, and glaciation.

120—4 CONTEMPORARY CHEMISTRY. A study of selected fundamental principles of chemistry, especially the atomic and molecular nature of matter and of the pervasive role of chemical knowledge and technology in the contemporary world.

130—4 CONTEMPORARY BIOLOGY. An examination of the major contributions of biology to an understanding of ourselves and our world. The development, nature, and human implications of the cell theory, heredity, the modern synthetic theory of evolution, population dynamics, and ecology and environmental problems. No credit will be given to students who have had Biology 200 or the equivalent.

131—2 LIFE: ECOLOGY AND DIVERSITY. A study of living organisms and the environmental factors and evolutionary mechanisms influencing their diversity and distribution. No credit will be given to students who have had Biology 200 or the equivalent.

140—8 (4,4) SURVEY OF ELEMENTARY MATHEMATICS. An introduction to some fundamental concepts in mathematics. (a) Sets, logic, systems of numeration, integers, rational numbers, real numbers. (b) Sentences in one variable, nonmetric geometry, metric geometry, probability, statistics. Prerequisites: (a) one year high school mathematics and satisfactory score on A.C.T., or consent of instructor; (b) 140a or consent of instructor.

144—5 COLLEGE ALGEBRA. A concept-oriented course intended to provide insights into basic principles and properties of elementary mathematical and algebraic structures. Designed with the needs and interests of the general student in mind. Prerequisite: one and one-half years high school algebra and one year high school geometry, or equivalent.

210—4 FOSSIL ORIGINS OF MAN. The origin, evolution, and morphology of the major invertebrate phyla and vertebrate classes that occur as fossils. The relationship of man to evolution and his paleontologic history.

212—4 CONSERVATION OF NATURAL RESOURCES. The correct use of the natural resource base of our nation.

213—4 WEATHER. A general survey of the influences of weather and climate on man's occupations and his recreation and on industries, soils, vegetation, food production, and on animals.

221—4 ENVIRONMENTAL POLLUTION. General aspects of the various types of pollution including sources, magnitude, harmful effects, and methods of controlling. Prerequisite: high school or college chemistry.

230—4 HUMAN DISEASES. A study of the various types of human diseases and of the various defense mechanisms that are available to combat these. The metabolic and cellular bases of diseases are stressed. Viral, bacterial, and parasitic diseases, cancer, inherited disorders, congenital defects, diseases of action of antibiotics and antimicrobial agents. No credit will be given to students who have had Biology 200 or the equivalent. Prerequisite:130.

231—4 HUMAN HEREDITY AND SOCIETY. Principles of human heredity as applied to individuals, kindreds, and populations. Genetic aspects of contemporary biological social problems. No credit will be given to students who have had Biology 200 or the equivalent. Prerequisite: one year high school biology.

232—4 PLANTS AND CIVILIZATIONS. An examination of the role of plants in man's social and economic history and of the role of man in the modification and distribution of plants. Prerequisite: one year high school biology.

233—4 HUMAN SEXUALITY AND REPRODUCTION. A discussion of sexual anatomy and physiology, normal and abnormal embryonic and fetal development; pregnancy and birth; birth control; sexual relationships, attitudes, and behavior; sexual diseases and disorders; sex and the law. Prerequisite: one year high school biology.

234—4 ECOLOGICAL ASPECTS OF POLLUTION. A study of pollution from the viewpoint of an ecologist with emphasis on the general concept that man and nature must live in balance.

236—4 INTRODUCTORY HORTICULTURE. General principles of vegetable and fruit growing. Plant propagation, floriculture and ornamental plants. Three lectures, one three-hour laboratory per week.

244—4 STATISTICS. Insight into the basic concepts of statistics. Methods of gathering and presenting statistical data, descriptions of chance events, drawing inferences from statistical data, testing data for correlation. Designed with the needs and interests of the general student in mind. Prerequisite: GSM 144.

250—4 TECHNOLOGY AND SOCIETY. The interaction of technology and society with emphasis on: impact of technology on the social structure; whether technology is good, evil, or neutral (ethical and/or moral aspects); history of technology in relation to social development; present status in highly industrialized society, in emerging nations; technology assessment; forecasting.

283—4 THE NATURE AND IMPACT OF PHYSICAL SCIENCE. An investigation into the nature of physical science and its importance for individuals and society.

300—4 THE ENERGY CRISIS AND THE ENVIRONMENT. A study of the problems and prospects of meeting the national and

worldwide energy demand. The present and future roles of fossil fuel, nuclear, solar, and geothermal energy along with the environmental impact of these and other energy technologies. The scientific information necessary to acquire a critical attitude toward the controversies surrounding the energy crisis.

301—4 PHYSICS OF MUSIC AND ACOUSTICS. Nature, sources, propagation, and receptors of sound; analysis and synthesis of sound waves; objective and subjective properties of musical sounds; musical intervals; physics of musical instruments; ears and hearing; physiology and psychology of sound; sound reproduction.

302—4 THE SCIENCE OF HI-FIDELITY. An investigation of modern sound reproduction equipment with emphasis on the basic scientific principles of operation, and understanding manufacturer's specifications. Includes speakers, microphones, amplifiers, tuners, tape decks, and turntables of stereo and quadrophonic systems. Three lecture hours, two laboratory hours alternate weeks.

305—4 LIGHT AND COLOR. Nature, propagation, sources and receptors of light, spectra, pigments, dyes, and filters. The eye, sight, optical instruments, lasers, holography, topical aberrations, and illusions. Applications to art, photography, the media, and psychological phenomena.

306—4 ASTRONOMY. The solar system, nebulae, cluster, galaxies, theories of stellar evolution, and cosmology. Evening observations in addition to lecture.

340—4 MATHEMATICS AND CIVILIZATION. Designed for the non-mathematical major. A study of the sources of elementary mathematical concepts and their relationships to the cultures in which they developed. Prerequisites: one year high school algebra, at least one history course other than U.S. history.

365—4 HUMAN ORIGINS. A consideration of the fossil record and basic principles of human evolution.

SOCIAL SCIENCES (GSS)

101—4 INTRODUCTION TO THE HISTORY OF WESTERN CIVILIZATION. Europe from the decay of Rome through the birth of the modern State; a study of religion, politics, and society in the Middle Ages, Renaissance, and Reformation.

102—4 INTRODUCTION TO THE HISTORY OF WESTERN CIVILIZATION. Europe from the Enlightenment to World War I; a study of political, social, economic and intellectual change during the 18th and 19th centuries. Topics include the Enlightenment, French Revolution and Napoleon, the Industrial Revolution and its social consequences, and international relations to World War I.

103—4 INTRODUCTION TO THE HISTORY OF WESTERN CIVILIZATION. The Western World in the twentieth century: Russian communism, Italian fascism, German national socialism, the Second World War, the Cold War, the emergence of the non-European World.

105—4 HISTORY OF BLACK AMERICA. A survey sequence to develop interest, understanding, and appreciation of black American culture and its African antecedents. Some factors leading to the current black social protest.

120—4 PUBLIC ISSUES AND POLICIES TODAY. A study of a number of current domestic issues in the United States. For each issue the following are investigated: the nature of the problem; the status of current policy; roles played by individuals, groups, and government in shaping the policies and implementing them. Such issues as abortion, drugs, energy, environment, welfare and health, inflation and taxation are examined.

130—4 SOCIOLOGY. An introduction to the ideas of sociologists, to the way sociologists look at the world, and to such major concepts as social structure, role behavior, and social institutions. Those concepts which are part of the shared vocabulary of sociologists.

136—4 SOCIOCULTURAL FACTORS IN CONTEMPORARY BLACK AMERICAN LIFE. An examination of the sociocultural context of contemporary black American life, including those factors which have led to black social protest.

150—4 INTRODUCTION TO ECONOMICS. Introduction to economic concepts, institutions, and current issues, such as unemployment, inflation, monopoly, and taxation.

200—4 UNITED STATES HISTORY AND CONSTITUTION: 1492-1815. A general survey of the political, social, economic, and constitutional development of the United States from 1492 to 1815. Satisfies Constitution requirement.

201—4 UNITED STATES HISTORY AND CONSTITUTION: 1815-1900. A general survey of the political, social, economic, and constitutional development of the United States from 1815 to 1900. Satisfies Constitution requirement.

202—4 UNITED STATES HISTORY AND CONSTITUTION: 1900 TO PRESENT. A general survey of the political, social, economic, and constitutional development of the United States from 1900 to present. Satisfies Constitution requirement.

210—4 ANTHROPOLOGY. Development of humans as biological and social beings; origins and development of culture from earliest times to the formation of great world traditions; comparative diversity in economy, social organization, language, ecology, political behavior, religion, and the arts; relationship between culture and personality; developing societies and the industrial world.

220—4 U.S. CONSTITUTION. An examination of the fundamental principles embodied in the United States Constitution, and the manner in which they affect and are affected by American political life. Particular attention to current political/constitutional issues. Fulfills constitutional requirement.

240—4 GEOGRAPHY FOR MODERN MAN. A general survey of selected elements of the geographic landscape of the earth. An examination of the world distribution of population, resources, and economic activities and a detailed analysis of selected geographic regions with particular emphasis on the interrelationship between man and his physical and cultural environment.

245—4 URBAN ENVIRONMENTAL PROBLEMS. Analysis and discussion of related urban environmental problems pertaining to urban development, location factors, classification, land use, recreation needs, and other up-to-date urban problems.

260—4 MODERN CHALLENGES FOR PSYCHOLOGY. A study of contributions psychologists can make to a variety of contemporary problems—mental health, behavioral control, intelligence testing, and others. Traditional human values as well as the scientific merits of given psychological methods.

261—4 PSYCHOLOGY: MAJOR IDEAS AND ISSUES. Examination of some of the major issues and ideas that are central to the study of psychology. An historical approach is used to introduce the major ideas of psychology, with an emphasis upon their relationships to developments in other disciplines.

280—4 DECISION MAKING FOR CONSUMERS. An introduction to consumer problems and measures to cope with such problems. The application of problem-solving in such areas as consumer credit, insurance, housing, and citizen-consumer responsibilities. Sources for consumer assistance and methods for initiating consumer action.

282—4 ISSUES IN FEMINISM. (See GHA 282.)

283—4 THE NATURE AND IMPACT OF SOCIAL SCIENCE. An investigation into the nature of social science and its importance for individuals and their society.

313—4 WOMEN IN CROSS-CULTURAL PERSPECTIVE. An investigation of the positions and roles of women in cultures from a variety of socio-economic levels and geographical areas of the world. Cross-cultural and other anthropological data in conjunction with the issues of feminism and the contributions anthropology can make to women's studies.

315—4 THE CULTURAL BACKGROUND OF DEVELOPING AFRICA. An introduction to the many diverse cultures of Africa from the Egyptian civilization to the Bushman hunters.

319—4 GROWTH OF OLD WORLD CIVILIZATION. Cultural origins and dispersals from paleolithic to protohistoric times with particular attention to the complex environmental and cultural factors that led to the rise of early Old World civilizations.

330—4 MARRIAGE. An examination of marriage in various societies with an emphasis on the origins, changes, and present status of dating, courtship, and marriage in the United States.

370—4 EDUCATION AS A SOCIAL INSTITUTION IN THE UNITED STATES. A critical study of education as a major social enterprise in a pluralistic society. The formative influences upon educational institutions in the United States; their basic characteristics, difficulties, and prospects are explored through the social scientific foundations of education. Designed for students irrespective of major discipline or professional pursuit; provides for a more informed and critical participation in the social institutions of this society.

388—4 COMMUNISM. A critical examination of modern theories of communism, including those of Marx, Engels, Lenin, Stalin, and Mao. Prerequisite: junior standing.

INTERDISCIPLINARY STUDIES (GIS)

101—4 COMPUTERS AND SOCIETY. Develops rudimentary computer literacy and addresses potentials of this technology for society at large and for student as individual. Self-sufficient for those who find no further interest or need in this direction for careers they plan. Underlying philosophy is that the greatest asset of a democracy is an informed electorate.

240—4 INTRODUCTION TO MODERN LATIN AMERICA. A study of the political, economic, social, intellectual, and religious currents shaping modern Latin America. Combines perspectives from the humanities and social sciences to achieve an understanding of the past traditions and present conditions of this vital world area.

241—4 INTERCULTURAL RELATIONS. Intercultural Relations will focus on social problems, such as prejudice, stereotyping, discrimination, segregation, communication breakdowns, and tensions between racial, ethnic and other groups. Methods utilized in the analysis and alleviation of these problems will include enhancement of interpersonal communication skills, increased awareness of cultural similarities, diversities and shared learning experiences.

242—4 PEOPLE AND CULTURE OF THE EAST. Introduction to the culture of selected East Asian nations, e.g., China, Japan, Korea and Vietnam. Key organization principles, religious and philosophical norms, social customs, and aesthetic tastes are examined to illustrate characteristic themes in traditional thought and practice, and modern East Asia is examined to illustrate continuity and transformation of these themes.

260—4 GLOBAL PROBLEMS AND HUMAN SURVIVAL. A team taught interdisciplinary course addressed to the issue of the survival of the human race in the face of complex interrelated global problems such as war, underdevelopment, population, pollution, resource-depletion, and misuse of the ocean.

280—4 SONG AND POETRY: FROM BYRD TO THE BEATLES. A non-technical survey of the creative relationship between the composer and the poet, with emphasis on examples taken from Renaissance court music, the folk song, the art song, oratorio, opera, and contemporary serious and popular songs. Considerable class listening and discussion.

300—4 TECHNOLOGY AND SOCIAL SHOCK. Social and cultural perspectives on technology. The sources of technological development, and various human problems related to the development and use of technology. Included in the concept of technology are the usual mechanical inventions plus techniques of social cultural engineering.

302—4 DYNAMICS OF SPORTS. Study of scientific principles applicable to sports such as laws of translational and rotational motions and aerodynamics. Practical applications include baseball, golf, tennis, basketball, soccer, football, and gymnastics.

321—4 THE ORIGINS OF LIFE. A study of the scientific finds and traditional concepts related to the origin of life.

340—4 THE PROBLEM OF WAR AND PEACE. A consideration of the problem of war and ways of securing peace, drawing

information from various disciplines including anthropology, economics, government, history, philosophy, psychology, and sociology.

341—4 THE EUROPEAN IMMIGRANT IN AMERICA. An interdisciplinary (American History and American Literature) examination of the impact of immigrant groups on American social, political, and cultural patterns. Subjects to be considered will be assimilation, stereotyping, generational conflict, and nativism.

342—4 DEATH AND DYING. An interdisciplinary analysis of the problem of death and dying. Considers topics such as conceptions of death and dying, cultural and social/psychological aspects of death and dying, suicide, immortality, and euthanasia.

380—4 THE ARTS SEMINAR: AN INTRODUCTION TO THE AESTHETIC EXPERIENCE. Cross-disciplinary undergraduate seminar organized around a series of theater productions, concerts, exhibitions, and readings. These events will be followed by workshops and lecture and discussion periods emphasizing classic, romantic, and phenomenological descriptions of the aesthetic experience. Prerequisite: sophomore standing.

UNIVERSITY COLLEGE HONORS PROGRAMS

DEAN'S COLLEGE

The Dean's College was created to help outstanding students develop academic programs relevant to their needs. It enables talented students to delve into one or two academic areas quite deeply and to learn more than the average student does about a number of disciplines. It serves academically capable 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 time 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. 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 faculty advisers' 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 Southern Illinois University at Edwardsville and who have a grade-point average of 4.5 (or higher) are eligible to apply. Letters of recommendation from five faculty members who are familiar with the student's academic work are required. High-ranking high school seniors are encouraged upon graduation to apply for admission to the Dean's College. 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 for admission to the Dean's College.

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 plan to take.

COURSES

101, 201, 301, 401—16 (1 to 4) DEAN'S COLLEGE. Special and pertinent activity, designed and supervised by carefully selected faculty members, suited to advance the educational development of a Dean's College student (e.g., work on a specific project, progress through a set of assigned readings, preparation of a major paper, etc.).

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. By contributing to the scholarly climate and to the intellectual and cultural life of the University, the Program benefits all students who wish to take full advantage of the educational opportunities present.

Persons selected as Presidential Scholars will:

Receive scholarships for up to four academic years covering all tuition and fees for undergraduate programs.

Be assigned a Presidential Scholar Mentor, a faculty member who by reason of scholarship, interest, and sensitivity is highly qualified to serve as a personal adviser and teacher.

Become members of the Dean's College and, thus, be allowed with the assistance of a Mentor to design a unique educational program which provides him or her with great flexibility in meeting the general education requirements of the University.

Have opportunities to participate in honors programs and interdisciplinary programs suited to their needs and interests.

Be encouraged to 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 previous academic work and special talents and abilities of the candidates. The Program is open to high school students and high school graduates who have never attended college. To be considered for the scholarship, the following information should be submitted: high school transcript, ACT or SAT scores, evidence of special talents

or abilities and recommendations from teachers and counselors and application for admission.

The yearly application deadline is February 1. Usually those selected as Presidential Scholars will begin their study in the fall quarter.

HONORS DAY

In recognition of high scholarship, an Honors Day convocation is held each spring. Those who received bachelor's degrees the previous August, December, or March and had an SIUE grade-point average of 4.50 or higher or who are candidates for a bachelor's degree in June and have an SIUE grade-point average of 4.50 or higher are honored. All others must be registered for the spring quarter and have the following SIUE grade-point average: Seniors — 4.50 or higher; Juniors — 4.50 or higher; Sophomores — 4.25 or higher; Freshmen — 4.25 or higher. In addition, all students in order to be eligible for Honors Day must have completed 24 hours passed and calculated at Southern Illinois University at Edwardsville. Graduating seniors are also recognized at Commencement on the graduation program, and their diplomas designate honors on the basis of Highest Honors (4.90 or higher), High Honors (4.75-4.89), and Honors (4.50-4.74).

DEAN'S LIST

The Dean's List is published at the end of each quarter. A student must have a minimum of 12 quarter hours calculated and earn a minimum grade average of 4.50 in order to be included on the Dean's List.

OTHER UNIVERSITY COLLEGE PROGRAMS AND SERVICES

THE OFFICE OF ACADEMIC ADVISEMENT

The Office of Academic Advisement is responsible for the advisement of all undergraduate students who have not officially declared a major concentration. All new freshmen and transfer students are required to be advised each quarter prior to their registration. Appointments for such advisement should be made well in advance of the registration period for the quarter which the student plans to attend. If group orientation and advisement are being provided, new freshmen need not make individual appointments.

If a student has made a tentative selection of educational goals, the adviser can assist the student in selecting courses in the area of special interest. The adviser may refer a student to other sources for assistance, such as major and minor advisers, if more detailed information about specific programs is needed. Questions related to the specific applications of the General Studies requirements should be clarified with an academic adviser while the student is in University College.

Declaration of Major

Students are classified in University College until they officially declare a major, which they are required to do at any time prior to their senior year. Students initiate the declaration-of-major process in person in the Office of Academic Advisement, 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 initiate a new declaration.

COURSES

GSK 100a, Study Skills, designed to assist the student in developing more effective study habits. Specific attention is given to motivation for study, budgeting of time, effective listening, taking concise but adequate notes, active reading, critical thinking, and preparation for examinations.

GSK 100b, Developmental Reading, a one-hour elective course designed to assist both students with nonorganic reading deficits and those who simply want to improve their reading rate and efficiency.

GSK 100c, Career Development and Planning, emphasizes the necessary factors an individual must consider in making career decisions. The facts to be considered involve a systematic analysis of self-awareness, decision-making strategy, and career information.

Vocational and Educational Information and Counseling

As an outgrowth of student needs for career information and guidance, certain materials are maintained including reading files for careers, college and proprietory school catalogs, and curriculum guides for most of the undergraduate concentrations offered at this University. Also, counselors and advisers routinely work with students in the area of educational and career counseling, and frequently refer students to departments, major advisers, and area counseling services for additional assistance.

Guidance Services for Mature Students

Counseling and educational planning are offered to mature students and prospective students. The Office also participates in Catalyst, a nationwide network which provides career information and resume services for college women.

Probationary Students

Academic advisement and counseling is available to those students who are on probation. It is especially important that probationary students work closely with their adviser and understand the rules relating to scholastic standing.

THE ACADEMIC RESOURCE CENTER

The Academic Resource Center of Southern Illinois University at Edwardsville provides academic support to all students enrolled in the University, implements a comprehensive testing program, assesses entering student competencies in such skills as reading, writing, and calculating, and teaches a wide range of credit and non-credit academic courses designed to increase the opportunities for success. In order to meet these goals and to provide the best possible academic support services, the Academic Resource Center has three basic components: Curriculum and Research, Student Development and Research, and Tutoring and Projects.

CURRICULUM AND RESEARCH COMPONENT

All students who enter SIUE with an English, mathematics, or composite ACT of 18 or less or no ACT scores are tested by the Academic Resource Center. Upon evaluation of the test results, recommendations are made regarding specific academic courses which the student should take to improve his basic skills. These academic courses include English, Reading Improvement, Mathematics, and Introductory Chemistry, and are taught by instructors from the Curriculum and Research Component unit. Prime importance is placed upon the student's needs and abilities; usually the student will complete ARC course work in one to three quarters. In addition to these courses, the ARC also offers various mini-workshops and courses such as Speed Reading to aid the student in the further sharpening of skills essential for success at the University.

STUDENT DEVELOPMENT AND RESEARCH

The Student Development and Research component of ARC provides academic advisement and counseling to many students who are enrolled in ARC courses. Each student who has been recommended to enroll in ARC courses is assigned a counselor in the Student Development and Research Component. The counselor then aids the student in adjusting to university life, provides the student with a solid foundation of information, both vocational and university related, and serves as a resource person. In addition to individual counseling, the staff of the Student Development and Research unit also offers a study skills course for any student who may wish to enroll in such. Additionally, a wide variety of workshops, such as "Communication Skills" and "Test Taking," are designed to aid the student in his academic endeavors. All ARC counselors have the latest financial aid applications in their offices and can aid students in preparing their applications. The main concern of the Student Development and Research Component is the student's success.

TUTORING

The peer tutoring component of the Academic Resource Center provides free tutorial assistance to all University students. Tutoring in mathematics, statistics chemistry, physics, biology, engineering, and other need areas is done by highly-qualified upper level students who have been employed as tutors not only because of their knowledge of the subject matter, but also because of their ability to communicate and work with other students. The Tutoring Component maintains library and study aid materials for most of the courses; also, the tutoring component makes use of mini-computers and University computer networks for computer assisted instruction. All tutoring is done primarily on an appointment basis; however, drop-in assistance is given on a first-come, first-serve basis if a tutor is available. Tutoring appointments are made in the Rendleman Building, Room 0214 — or Room 2036 in the East St. Louis Center.

The Academic Resource Center is dedicated to providing the academic support needed by many students at the University. Any student who may desire to use the services on the Edwardsville Campus or who may have questions should contact an ARC staff member.

UNIVERSITY COLLEGE COURSES

060—3 ELEMENTARY MATHEMATICS. Basic arithmetical skills. Operations with whole numbers, fractions, decimals, percent. Five contact hours per week. Credit not to be counted for graduation.

080—4, 4 COLLEGE READING SKILLS. Designed to develop effective and efficient college reading skills. Emphasis placed on vocabulary and comprehension skills. Credit not to be counted for graduation.

090—4, 4 BASIC WRITING. Designed to develop basic writing skills. Provides content base for developing ideas and cognitive skills. Credit not be be counted for graduation.

AEROSPACE STUDIES

Ayres, H. G., Captain, MBA, Adjunct Assistant Professor
Bachman, L. D., Lieutenant Colonel, M.A., Adjunct Professor
Bild, N. A., Lieutenant, M.A., Adjunct Assistant Professor
Hrapla, M. F., Captain, M.S., Adjunct Assistant Professor
Mahoney, W. J. Staff Sergeant, Adjunct Instructor
Pilkington, J. C., Staff Sergeant, Adjunct Instructor
Reaves, W. F., Staff Sergeant, Adjunct Instructor

The Air Force Reserve Officers Training Corps qualifies students for appointment as Second Lieutenants in the United States Air Force. The Air Force ROTC at Southern Illinois University at Edwardsville is administered by commissioned officers of the USAF who are assigned by the Department of the Air Force with approval of the University.

The Department of Aerospace Studies offers a two-year and a four-year program. The latter is divided into the General Military Course (GMC), covering the freshman and sophomore years, and the Professional Officer Course (POC), covering the junior and senior years. The two-year program includes the POC only. Academic hours are creditable toward graduation requirements.

The GMC curriculum includes two main themes: the Air Force today and the development of air power. The POC curriculum emphasizes the professional development of the future Air Force officer. The courses cover American Defense Policy and Air Force Management and Leadership. Air Force ROTC textbooks are loaned to all ROTC students without charge.

Leadership Laboratory is taken one hour per week throughout the student's enrollment in AFROTC. Instruction is conducted within the framework of an organized cadet corps with a progression of experiences designed to develop each student's 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 an Air Force junior officer. Students develop their leadership potential in a practical supervised laboratory which typically includes field trips to Air Force installations throughout the U.S.

AFROTC cadets must also successfully complete supplemental courses to enhance their utility and performance as commissioned officers. These include university courses in English composition and mathematical reasoning. Specific courses are designated by the Professor of Aerospace Studies.

AFROTC Field Training is offered during the summer months at selected Air Force bases throughout the United States. Students in the four-year program participate in four weeks of Field Training usually between their sophomore and junior years. 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. Major areas of study include: junior officer training, aircrew/aircraft orientation, career orientation, survival training, base functions and Air Force environment, and physical training.

Qualified senior Air Force ROTC cadets designated as pilot candidates participate in the Flight Instruction Program. Each FIP student receives twenty-five hours of free flight instruction.

In addition to the Air Force ROTC programs offered for academic credit, Aerospace Studies sponsors the Arnold Air Society. This is a national honorary service organization open to selected AFROTC cadets.

Application may be made for either program at any time. Selection of students for enrollment into the POC is made by the Professor of Aerospace Studies. General qualifications are: (a) qualify on the Air Force Officer Qualification Test, (b) meet physical standards prescribed for appointment to the United States Air Force Reserve, (c) be a full-time student at Southern Illinois University at Edwardsville and be in good academic standing, (d) complete successfully Field Training.

Students in the POC also receive the following: (a) a monthly subsistence allowance of $100 per month for a maximum period of twenty months, (b) an Air Force uniform (this includes all required uniform items for summer and winter), (c) in excess of $300 for the summer field training course and a travel allowance to and from that place of training.

AEROSPACE STUDIES MINOR

The aerospace studies minor educates the student 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 chosen from several closely related areas in consultation with the student's adviser.

COURSES

100—3 (1,1,1) THE AIR FORCE TODAY. a) Examines the role of the Air Force in contemporary society, the basic characteristics of air doctrine, and the mission and organization of the U.S. Air Force. b) Examines the functions of U.S. strategic offensive and defensive forces, including their missions, organizations, and weapon systems. c) Examines U.S. general purpose forces, their missions, organization, and weapon systems. Also includes aerospace support forces, including airlift, research and development, logistics, and related agencies. One hour lecture and one hour laboratory per week.

200—3 (1,1,1) THE DEVELOPMENT OF AIR POWER. a) Examines the factors contributing to change in the nature of military conflict and the development of airpower from balloons and dirigibles up to WWII. b) Examines the development of airpower from WWII to the Korean War. Includes development of an independent Air Force and studies the Berlin Airlift. c) Examines the development of airpower from the early 1950s through the peaceful employment of airpower in relief missions and civic action programs in the late 1960s, and the air war in Southeast Asia. One hour lecture and one hour laboratory per week.

300—9 (3,3,3) AIR FORCE MANAGEMENT AND LEADERSHIP. a) Development of the understanding of managerial and leadership responsibilities of a manager. Examination of the basic concepts of individual motivation, organizational dynamics, and leadership. Comprehension of the decision making processes. b) Communication development in the areas of listening, speaking and writing skills for the manager. c) Application of case study method to develop analysis techniques of current management operations. Three hours of lecture and one hour of laboratory per week. Prerequisite: satisfactory completion of GMC and/or field training course.

350—2 FLIGHT REGULATION AND NAVIGATION. A study of flight regulations, weather, and navigation. Two hours lecture per week. Prerequisite: enrollment in the Air Force ROTC Flight Instruction Program or consent of PAS.

351—9 (3,3,3) NATIONAL SECURITY FORCES IN CONTEMPORARY SOCIETY. Studies the Armed Forces as an integral element of society with an emphasis on the broad range of American and military relations and the environmental context in which U.S. defense policy is formulated and implemented. Special themes include: Societal attitudes toward the military;

the role of the professional military leader-manager in a democratic society; the fundamental values and socialization process associated with the armed services, the requisites for maintaining adequate national security forces; political, economic and social constraints of the national defense structure; the impact of technological, and international developments on strategic preparedness; the variables involved in the formulation and implementation of national security policy, and military justice. Three hour lectures and one hour laboratory per week.

BACHELOR OF LIBERAL STUDIES

The Bachelor of Liberal Studies Program is designed to provide students with the option of obtaining a college degree without concentrating within any particular discipline of study. This degree provides the student who has no particular specialization or major in mind with an opportunity to obtain a greater understanding of the basic areas of knowledge.

Degree Requirements[1]

General Studies Requirements	68
Broad Area Requirements	72
Natural Sciences	24
Social Sciences	24
Humanities-Fine Arts	24
Electives	52
	192

[1]No more than 32 hours of General Studies and/or Departmental courses can be taken in any discipline. 80 hours of the total must be in courses numbered 300 or above.

A student may declare into Liberal Studies anytime prior to the senior year by applying at the Office of Academic Advisement. Upon the student's declaration into Liberal Studies a student-adviser contract for the entire degree will be prepared, subject to periodic review by both the student and the adviser.

OPEN UNIVERSITY

The Open University concept, which originated in Great Britain, is designed to provide regular college credit to adult students whose schedules prevent attendance at conventional classes. Specially prepared and coordinated workbooks, textbooks, and audio-visual materials greatly supplement contact with SIUE faculty at flexibly scheduled class sessions. Four foundation courses are offered, as well as advanced courses. Open University foundation courses substitute as credit toward fulfillment of the GHA, GSM, GSS, and GIS Areas of General Studies. All Open University courses are fully accredited and can be interchanged with other SIUE courses. Regular tuition and fee schedules apply, as well as all scholarships, grants, loans etc. A number of courses are broken down into three-quarter sequences. While it is not required that a student take all three quarters of a sequence, it is strongly recommended. Interested students should also note that almost all of the requirements for a Bachelor of Liberal Studies degree can be fulfilled through the Open University.

COURSES

HUMANITIES FOUNDATION. (OUHU 201—8 hours; OUHU 202—8 hours; OUHU 203—8 hours.) Credits: one quarter: 4 hours GHA, 4 hours electives; two quarters: 8 hours GHA, 8 hours electives; entire sequence: 12 hours GHA, 4 hours GIS, 8 hours electives. A beginning course for all persons who are interested in western history and cultural achievements. In addition to introducing students to basic disciplines, e.g., the handling of source material, the evaluation of a work of art or literature, clear and logical thinking, it also raises questions about the possible relations between technological development, social organization, religion, thought, and the arts.

SOCIAL SCIENCES FOUNDATION. (OUSS 204—8 hours; OUSS 205—8 hours; OUSS 206—8 hours.) Credits: one quarter: 4 hours GSS, 4 hours electives; two quarters: 8 hours GSS, 8 hours electives; entire sequence: 16 hours GSS, 8 hours electives. Brings together elements of sociology, economics, politics, and psychology. Current issues such as crime and unemployment are studied with respect to the differing viewpoints of the layman and the social scientist. Analyzes society in terms of population and technology, communication and mobility, as well as discussion production and allocation of resources, work, social relations, and beliefs and attitudes towards power.

TECHNOLOGY FOUNDATION. (OUST 201—8 hours; OUST 202—8 hours; OUST 203—8 hours.) Credits: one quarter: 4 hours GSM, 4 hours electives; two quarters: 8 hours GSM, 8 hours electives; entire sequence: 16 hours GSM, 8 hours electives. A course about technology, not a course in technology, it presents the what, why and should of technology, and not merely the traditional how. Examines the things we aspire to do with technology, the kind of thinking involved in its interactions with other fields of human activity.

SCIENCE FOUNDATION. (OUST 221—8 hours; OUST 222—8 hours; OUST 223—8 hours.) Credits: one quarter: 4 hours GSM, 4 hours electives; two quarters: 8 hours GSM, 8 hours electives; entire sequence: 16 hours GSM, 8 hours electives. Presents and explains some of the concepts and principles of importance in modern science and shows how science, technology, and society are interrelated. Designed both for students who may not intend to study science beyond the foundation level and for those who need the course as prerequisite for higher level science courses. Should have completed a technology or science course before enrolling for this foundation course.

CITY AND THE WORLD. (OUSS 321—8 hours; OUSS 322—8 hours; OUSS 323—8 hours.) Credits: elective. Analyzes the

characteristics of urban societies and the universal process of urbanization. Focuses on urban communities throughout the world and is designed to increase the student's academic understanding of the operation of the city as an evolving social institution.

AGE OF REVOLUTIONS. (OUHU 330—8 hours; OUHU 331—8 hours; OUHU 332—8 hours.) Credits: electives. Presents and explains some of the main developments in European life and thought in the age of the French, American, and Industrial Revolutions, 1760-1848. Includes the extended study of the social, political, and economic changes, and the applicability of the term "revolution." Also a series of case studies: Jefferson, Rousseau, Goethe, Wordsworth, Kant, and the revolution in philosophy; Sir Humphry Davy and the developments in the physical sciences; Blake, "high art," Beethoven, and politics in France.

SCIENCE AND THE RISE OF TECHNOLOGY. (OUIS 301—8 hours.) Credits: 4 hours GIS, 4 hours electives. A one-quarter course intended for all students interested in the rise of our modern technological society. Beginning in 1800 a presentation of the main developments in science and technology insofar as these interacted substantially with each other. Nationalistic trends in science and the social implication of science and technology.

SCIENCE AND BELIEF: FROM COPERNICUS TO DARWIN. (OUIS 303—8 hours.) Credits: elective. A one-quarter course concerned with the intellectual rather than the technological implications of science. These are considered in their historical context. One particular aspect of the history of science, namely the history of scientific ideas.

FUNDAMENTALS OF HUMAN GEOGRAPHY. (OUSS 360—8 hours; OUSS 361—8 hours; OUSS 362—8 hours.) Credits: elective. Provides a basic introductory geography experience in three distinct areas of study. People and Environment looks at such matters as the effect of environment on people and their modification of it. Spatial Analysis explores a special approach to the study of geography, adopting an abstract stance in the study of man-environment relations. Values, Relevance and Policy considers the current changes in theory of the discipline of human geography.

HISTORICAL DATA AND THE SOCIAL SCIENCES. (OUHU 401—8 hours.) Credits: elective. A one-quarter course that is a broad introduction to the methodology of applied historical studies. Concerns the application of historical data to the problems of the social sciences. Of special interest to students in social science seeking to test their findings on other than contemporary materials, and to history students eager to learn more of the tools of social science and the ways in which it can extend their understanding of the past.

EARLY ROMAN EMPIRE AND THE RISE OF CHRISTIANITY. (OUHU 345—8 hours.) Credit: elective. This one-quarter course presents the developments in the Roman Empire from the death of Augustus to the principates of Trajan and Hadrian. The philosophical schools of the Epicureans and the Stoics; the historical works of Tacitus and Juvenal; the architecture of Pompeii as well as the incursion of Mithraism into western Europe and the rise of Christianity.

EARTH'S PHYSICAL RESOURCES. (OUST 325—8 hours.) Credit: elective. Prerequisite: OUST 203 or OUST 223 or GSM 101. A one-quarter course which attempts to integrate geological with socio-economic considerations while focusing on some of the wider aspects of resource-based industry. Four fundamental subdivisions; energy resources, mineral resources for the chemical industry, constructional materials, and mineral resources for service and industry.

STUDENT COLLOQUIUM

The Student Colloquium is a program in which a group of students may plan and carry out a unit of study and receive course credit. It is an opportunity to study subjects not in the regular curriculum or to experiment with new approaches to learning. Each colloquium group plans its objective, outlines a course of study, and carries out planned activities. At the conclusion the group summarizes its accomplishments and evaluates its achievements.

To form a class section a group of five or more students must agree upon a subject to be studied during the quarter. A minimum of five students must complete the course and participate in the determination of grades. To be eligible to participate, students must have sophomore or higher standing at the time of registration.

In order to form a colloquium the interested students are required to find a faculty member willing to serve as a sponsor for the group. It is the duty of the faculty adviser to approve the topic and the terms of the proposal. The faculty adviser, upon request of the participants, is available for aid and direction during the course of the term.

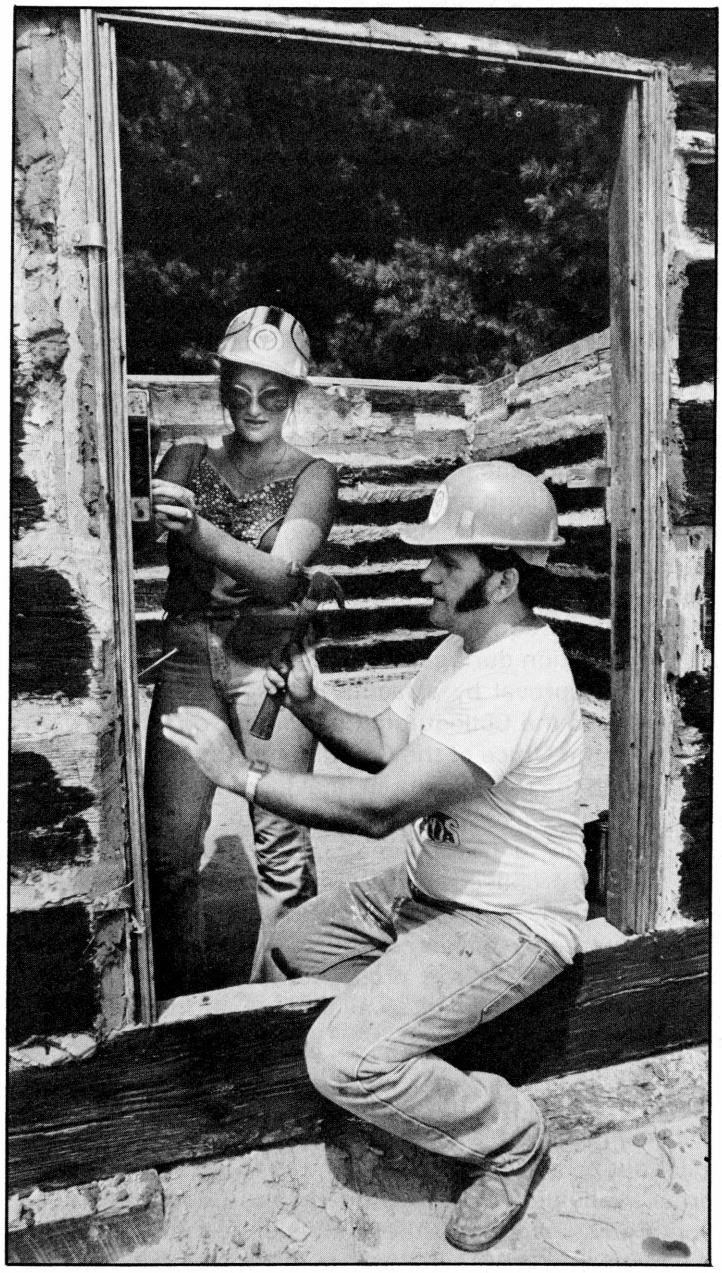
After approval by a faculty adviser, the proposal is forwarded to the Colloquium Coordinator on forms available from the Office of the Coordinator. Course proposals must reach the Coordinator in final form not later than the last day of registration of the quarter for which the colloquium is to be credited. The Coordinator decides whether the proposed colloquium is appropriate for credit and how many hours of credit it should receive. The Coordinator also makes certain that, as stated in the catalog description, the proposed colloquium does not duplicate courses already available in the University curriculum.

The members of the colloquium submit their final report to the faculty adviser. It is due by the close of the final examination period of the quarter for which the colloquium is to be credited, and is to be submitted on forms available from the Office of the Coordinator. The faculty adviser forwards the final report to the Coordinator recommending approval or disapproval along with the reasons supporting the recommendation. The Coordinator determines whether or not credit should be granted for the colloquium.

Students receive a grade of "pass" or "no credit," to be 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 exceed 8 hours 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 Studies credit or for credit toward a major or minor field of study. In case of such appeal the Coordinator approaches either the Dean of University College or the undergraduate adviser of the department involved, whichever is appropriate, with the request. The outcome of the request is made known as early as possible.



COURSES

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.

SCHOOLS OF THE UNIVERSITY

By the beginning of their senior year, usually much earlier, students seeking degrees must elect to study in one of forty-five degree programs offered by the University. More than half of students' course work during their last two years is usually taken in a single discipline, which becomes the major course of study, or "major."

When students declare their majors, they enter one of the Schools of the University. Each School is organized by departments and is responsible for the awarding of degrees in several related disciplines. Students are advised by departments about the requirements for degrees they seek, the curricula available to meet the requirements, secondary concentrations or "minors" in other disciplines, and the best ways to plan their programs in light of their personal and professional interests and goals.

The Schools and the majors they offer are listed below.

SCHOOL OF BUSINESS

- Accountancy
- Business Administration
  - Specializations include:
    - General Accounting
    - Administrative Services
    - Business Data Processing
    - Economics
    - Finance
    - General Business Administration
    - Management Information Systems
    - Manpower and Industrial Relations
    - Marketing
    - Organizational Behavior and Development
    - Production and Operations Management
- Business Economics
- Business Education

SCHOOL OF EDUCATION

- Early Childhood Education
- Elementary Education
- Health Education
- Physical Education
- Psychology
- Recreation Education
- Secondary Education
- Special Education

SCHOOL OF FINE ARTS AND COMMUNICATIONS

- Art and Design
- Mass Communications
- Music
- Speech Communication
- Speech Pathology and Audiology
- Theater and Dance

SCHOOL OF HUMANITIES

- American Studies
- English Language and Literature
- Foreign Languages and Literature
- Philosophical Studies

SCHOOL OF NURSING

- Nursing

SCHOOL OF SCIENCE AND ENGINEERING

- Biological Sciences
- Chemistry
- Civil Engineering
- Construction
- Electrical Engineering
- Industrial Engineering
- Mathematics, Statistics and Computer Science
- Physics

SCHOOL OF SOCIAL SCIENCES

- Anthropology
- Earth Science
- Economics
- Geography
- Government
- History
- Social Work
- Sociology

Other degree programs offered include the interdisciplinary Human Services baccalaureate, awarded by the Delinquency Study and Youth Development Center, and baccalaureate in Liberal Studies, awarded by University College.

SCHOOL OF BUSINESS

FACULTY

Professors:

Aucamp, D. C.
Ault, D. E.
Blackledge, W. L.
Fogarty, D. W.
Hoeke, R. S.
Hollenhorst, J. J.
Hoover, A. E.
Jain, S. K.
King, T. E.
Kohn, R. E.
LaGarce, R. F.
Lin, A. Y.
Lindsay, V. J. (Dean, Graduate School)
Luan, D. C.
Miller, B. B.
Prell, A. E.

Pyke, W. O.
Rutman, G. L.
Schultheis, R. A.
Schwier, A. S.
Steffen, H. H.
Sultan, P. E.
Wait, W. B.
Werner, D. J. (Dean, School of Business)

Associate Professors:

Barringer, R. L.
Benjamin, J. E.
Bernardi, R. D.
Blount, D. F.
Campbell, W. L.
Casstevens, E. R.
Eaton, J. O.
Eckardt, W. L.
Elliott, D. S.
Enos, D. D.
Harrick, E. J.
Hashimi, R. M.
Hirsch, M. L.
Kaikati, J. G.
Krone, L. H.
Levin, S. L.
McKinney, R. N.
Meisel, J. B.
Milles, R. J.
Nyerges, R. T.
Patsloff, P. K.
Schrage, J. F.
Sharp, J. A.
Virgo, J. M.
Weir, J. E.
Whitmore, W. J.
Wilson, G. T.

Assistant Professors:

Bosse, D. B.
Campbell, P. B.
Carver, M. R.
Edmonds, R. G.
Evans, R. C.
Michlitsch, J. F.
Miller, J. F.
Schmitt, N. V.
Segal, M.
Statler, L. D.
Tarpey, P. R.

Instructors:

Bagamery, B. D.
Erthal, M.
Hansel, W. M.
Holloway, J.
Kulfinski, K.
Netemeyer, R. G.
Small, E. W.

Lecturer:

Franke, A. G.

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

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.

ADMISSION

The Bachelor of Science degree programs in the School of Business are upper-division programs. Students are admitted into the School of Business after admission to the University and after completing the following requirements:

1. Completion of GSM 144, College Algebra, and GSM 244, Statistics (or their equivalent), with a C or better in both courses.
2. Cumulative grade-point average of 3.0.
3. Completion of GSK requirements.

Presidential Scholars and other exceptional students may be accepted before fulfulling all of the above requirements. A student may request an exception to the admission requirements by writing to the School of Business Undergraduate Scholastic Review Committee.

Students who have earned an associate degree in business are admitted to undergraduate programs in accordance with the Illinois Schools of Business articulation statement regarding transfer of community college work. Other transfer students must fulfill the same requirements as students who register as freshmen at Southern Illinois University at Edwardsville.

The School of Business limits the transfer of business courses taken at the lower level at another institution to lower division credit (100 and 200 level courses). Prospective transfer students should contact the School of Business Advisement and Counseling 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 undergraduate programs: (1) a C average must be maintained in all courses and in all required business courses; (2) all business courses taken to meet degree requirements must be taken in regularly scheduled classes (not by

extension); (3) the senior year requirement of 48 credit hours must be taken in residence.

ADVISEMENT AND COUNSELING

The School of Business has an Advisement and Counseling Office to assist students in scheduling their courses to meet program requirements. This office also provides guidance to students with academic problems.

ACCOUNTANCY

The degree program in Accountancy is a preparation for entry into a professional career in Accounting in either the private or public sector. The program provides students with an educational foundation upon which they can build future professional growth in the practice and study of Accounting. Students seeking admission to the program must have a 3.5 grade-point average in all Accounting courses taken, which must include a minimum of Accounting 230 and 232 or equivalents, and must have a cumulative grade-point of at least 3.5. Candidates who fail to maintain these standards may be dropped from the program. After admission to the program, the student should contact the School of Business Academic Advisement Office for consultation with an undergraduate adviser to plan a specific plan of study. The student will also be assigned an adviser from the Accounting faculty.

Bachelor of Science Degree in Accountancy

General Studies Requirements	60[1]
General Business Requirements	60
Accounting 230, 232, 341	
Finance 320	
Economics 201, 202	
Management 340, 390 (or substitute), 440, 441	
Marketing 371	
Management Information Systems 200	
Management Science 311, 320	
Production 315	
Accounting Degree Requirements	
Accounting 335, 351, 352, 353, 441, 453, 456, and 458	32
Management 342	4
Economics 343	4
Accounting Electives	12
Non-Business Electives	20
	192

BUSINESS ADMINISTRATION

Bachelor of Science Degree in Business Administration

General Studies Requirements	60[1]
Program Core Requirements	76
Specialization Requirements (in any one of 11 possible specializations)	16-28
Business Electives	4
Non-Business Electives	12
Electives	24-12
	192

[1]This area must include a course in college algebra and a course in statistics.

PROGRAM CORE REQUIREMENTS

All BSBA students take the BSBA Core listed below.

School of Business Core Requirements:
Accounting 230, 232, and either 233 or 341[2]
Economics 201, 202, 343
Finance 320
Management 340, 341, 390, 440, 441
Management Information Systems 200, 381
Management Science 311 and either 312, 314, or 320
Marketing 370, 371
Production 315

[2]Those students specializing in accounting should take 341.

The purpose of the core curriculum is to provide the student with a basic understanding of the major functions and processes of business and administration. The core curriculum encompassing the common body of knowledge in business as defined by the American Assembly of Collegiate Schools of Business (AACSB), includes 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 and methods of accounting, quantitative methods, and information systems; (d) the concepts of organization theory, interpersonal relationships, control and motivation systems; and (e) interrelationships involved in analysis and policy determination.

SPECIALIZATION REQUIREMENTS

Each BSBA student must complete one of the following specializations.

GENERAL ACCOUNTING

Accounting 351, 352, 353, 441, 453

ADMINISTRATIVE SERVICES

Administrative Services 426, 427, 428
Management Information Systems 201a

BUSINESS DATA PROCESSING

Management Information Systems 201a, 301, and 480, and 4 hours of 400-level MIS electives

ECONOMICS

Economics 401, 402 and two electives in economics

FINANCE

Finance 420, 423, 424, 425

GENERAL BUSINESS ADMINISTRATION

To be planned on an individual basis; requires prior approval of the program director.

MANAGEMENT INFORMATION SYSTEMS

Management Information Systems 201a, 281, 301, 480, 481, and 8 hours from 400-level MIS electives, Accounting 458 or Administrative Services 430

MANPOWER AND INDUSTRIAL RELATIONS

Economics 431, 432, Management 430, 434

MARKETING

Marketing 377, 480, and three of 470, 471, 472, 474, 475, 476, 477

ORGANIZATIONAL BEHAVIOR AND DEVELOPMENT

Management 430, 431, 432, 433

PRODUCTION AND OPERATIONS MANAGEMENT

Production 410, 461, 462, 463

AREAS OF SPECIALIZATION

The School of Business provides specializations in a variety of business fields. In addition, those students who have other interests related to business may arrange sequences of courses in such fields as mathematics, government, and sociology, as part of the general business administration specialization; these specializations require the prior approval of the BSBA Program Director. Students are advised to select a specialization in view of their career objectives and are encouraged to discuss the various specializations with the academic advisers and faculty in the School of Business before making a choice.

ACCOUNTING

The accounting specialization within the BSBA degree is designed for individuals who need additional accounting training beyond the general School of Business requirements but not to the extent required for a professional accounting degree. This program does not qualify the student to take the uniform CPA examination.

ADMINISTRATIVE SERVICES

The specialization in administrative services is designed to prepare students for positions in office and management systems administration. The specialization includes the study of data processing systems, computer programming, information storage and retrieval systems, office systems and procedures, and word processing systems.

Students who complete the administrative services specialization will have such career opportunities as office administration, office product marketing, systems analysis and corporate services administration. The administrative services program along with related work experience may permit students to earn professional recognition as a Certified Administrative Manager.

BUSINESS DATA PROCESSING

The business data processing (BDP) specialization is designed to prepare graduates for an entry-level position as a programmer/analyst in a data processing center or in a functional area. Positions are found in service, governmental, and business organizations. The specialization includes the study of languages, equipment, software, and systems for information as well as the specific application of management techniques and analysis tools to information systems.

The professional career examination in this field is the Certificate in Data Processing (CDP) which is sponsored by the Institute for Certification of Computer Professionals (ICCP). The business data processing specialization is designed for students preparing to take this examination.

ECONOMICS

The specialization in economics in the BSBA Program provides the student with knowledge of the analytical methods for solving the basic problems affecting profit and growth of the business organization. In addition, economics offers courses in national income determination and the 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.

FINANCE

The finance specialization prepares a student for decision-making positions in private industry and government service. Courses in finance are designed to develop analytical ability and fuller comprehension of the nature of financial problems as encountered in business and industry.

GENERAL BUSINESS ADMINISTRATION

The specialization in general business administration provides the student with an opportunity to obtain further depth of study in related subjects offered by the other Schools. Among the areas to which this option is applicable are government, mathematics, psychology, and sociology. Other areas may be approved upon application to the

Director of the BSBA Program. In each instance students pursue a sequence of courses totaling at least 16 quarter hours in the area of their choice. The particular sequence must be approved in advance.

MANAGEMENT INFORMATION SYSTEMS

The management information systems (MIS) specialization is designed to prepare personnel for programming and/or design of business-related information systems in either the private or public sectors. The specialization includes the preparation of abilities to:

a. Create computer programs to solve organization problems
b. Formulate basic organization functions and conceptualize problems using analysis and design techniques
c. Assimilate how information delivery systems support functional management activities
d. Recognize needed hardware, software, and peopleware — terminology and functions — for service to the organization
e. Utilize the team approach to computer program and project development
f. Communicate effectively, both orally and in writing.

Most professional career examinations in the computer field are administered by the Institute for Certification of Computer Professionals (ICCP), which currently present the certification in data processing (CDP) and computer programming (CCP). The MIS program is responsive to the requirements of the professional career examinations of the above, plus proposed certifications in EDP Auditing Systems Analysis.

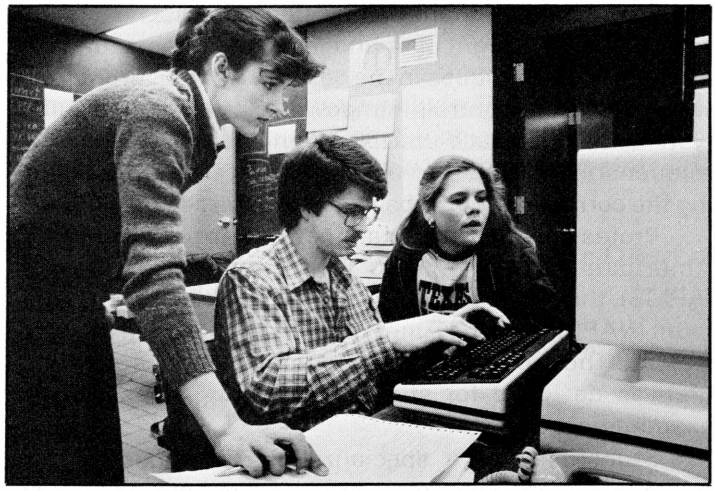
The student completing the MIS area is well prepared for an initial position as a business computer programmer and/or as a systems analyst for business, government and service organizations.

MANPOWER AND INDUSTRIAL RELATIONS

The specialization in manpower and industrial relations provides an opportunity for students to enter private industry, government, or service-oriented industries. This specialization equips students to enter the field of industrial relations, which includes personnel administration and labor relations.

Students study manpower planning, personnel, collective bargaining, industrial relations law and practice, training and development, and compensation programs. Also included are contemporary issues, such as discrimination, pensions, safety, and equal employment.

Graduates are prepared for entry-level positions in industrial relations, personnel, employment, selection, safety, compensation, or training. They frequently enter graduate programs in industrial relations, business, economics, law and psychology.



MARKETING

The marketing curriculum is designed to enable a student to analytically address the problems inherent in providing consumer and industrial goods and services to a wide variety of markets. The curriculum prepares the student 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 the student for a career in commercial, governmental, and service organizations that serve the public in ways other than producing tangible goods.

ORGANIZATIONAL BEHAVIOR AND DEVELOPMENT

This specialization is designed for individuals who have an interest in one or more of the following careers: supervision and management, management development and employee training, organizational systems design and change specialists, and other staff positions requiring effective interaction with human resources in organizations.

Course content is designed to enhance the individual's understanding of theories, models, concepts, and tools pertaining to human behavioral patterns within organizations. Special attention is given to organizational design considerations, leadership style and consequences, effective management of conflict resolution processes, and its processes which result in effective organizational change.

Courses are designed to provide the student with opportunities to develop skills in effective management of human resources through personal involvement in various experiential exercises.

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 those in 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 the corresponding subsystems is stressed and studied.

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. The graduate is equipped to serve as an assistant to a plant manager, hospital administrator, transportation manager, or any manager whose duties involve scheduling, quality control, cost control, or inventory management.

OTHER PROGRAMS

EXECUTIVE SECRETARY AREA OF STUDY

Those students interested in pursuing the executive secretary area of study should take the administrative services specialization and Business Education 202, 221b, 221c, 324a, and 327 as electives.

The executive secretary area of study provides a background in office management and procedures, principles of data processing, informational analysis, and the systems and procedures that are used in business offices. Upon completion of the degree requirements, the graduate is prepared to enter a position as executive secretary, administrative assistant, supervisor, or office manager.

PROFESSIONAL EXPERIENCE PROGRAM

The School offers the Professional Experience Program (PEP) to those students who are interested in combining academic and work experiences. After achieving sophomore standing, the PEP student alternates six months of academic work with six months of work in industry. Although five years are needed to complete this program, the PEP student derives valuable experience and financial support from this effort. Interested students should contact the PEP Office in the School of Business.

SMALL BUSINESS INSTITUTE PROGRAM

The Small Business Institute Program provides both managerial counseling to small business in the region and valuable experience to students. Undergraduate seniors and graduate students study a small business, especially management's areas of concern, analyze the situation, develop recommendations, and submit the recommendations to the firm's management. The students report to a faculty adviser on the nature of the study, its progress, and final recommendations. Their performance affects a course grade.

Organizations become candidates for participation in this program by applying either to the Small Business Administration or to the Director of the Small Business Institute at SIUE.

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, administrative services, business education, economics, finance, manpower and industrial relations, management information systems, management science, marketing, organizational behavior and development, and production. A minimum of 12 hours must be taken in residence.

The student must contact the Advisement Office of the School of Business for assistance in planning and approval of a minor.

BUSINESS EDUCATION

The business teacher education curriculum is designed to prepare teachers of business subjects for secondary schools, community colleges, vocational-technical schools, and similar institutions. Each student in the program completes a core of business administration and education courses and specializes in one area of business administration. Students interested in business teacher education should enroll in Secondary Education 215 and promptly contact the business education adviser.

Bachelor of Science Degree, School of Education

General Studies Requirements 60
(This area should include one mathematics and one statistics course, a government course, and a psychology course.)
Health and Physical Education
(required for teacher certification) 6
Business Teacher Education Core 64
- Accounting 230, 232
- Administrative Services 426
- Business Education 327, 350, 402[1]
- Economics 201, 202
- Finance 320
- Management 340, 342, 390, 441
- Management Information Systems 200
- Management Science 311
- Marketing 371

Subject Matter Specializations (choose one) 12
- ACCOUNTING-DATA PROCESSING
- Accounting 233 (or other accounting elective)
- Business Education 408
- Management Information Systems 201a
- SECRETARIAL ADMINISTRATION
- Administrative Services 427
- Business Education 324a, 404

[1]May be substituted in exceptional cases by the Departmental Chairperson.

MARKETING AND DISTRIBUTIVE EDUCATION
Marketing 472 or 474
Business Education 414, 416
ECONOMICS
Management 440
Economics 401 or 402, 425
Free Electives 13
Professional Development Sequence
(Choose either A or B) 37-41
A. Secondary Education 215, 401a,b,c, Business Education/Secondary Education 405
B. Secondary Education 215, 315
Counselor Education 305
Foundations of Education 355
Secondary Education 352c (12-16 hours)
Business Education/Secondary Education 405
Elective (0-4 hours)[1]

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[1]Secondary Education 351 is recommended for those interested in additional teaching methodology.

BUSINESS ECONOMICS

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

Bachelor of Science Degree, School of Business

General Studies Requirements 60
Requirements for Major in Economics 84
GSM 144, 244 ..... (9)
Accounting 230, 233 8
Economics 201, 202, 321, 401, 402, 417 24
(prerequisite to 417 is MS 311 or equivalent)
Economics Electives 20
Finance 320 4
Management 340, 390, 440, 441 16
Management Information Systems 200 4
Marketing 371 4
Production 315 4
Minor 28
The minor must be in mathematics or a social science and must be approved by the student's adviser.
Electives 20

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Minor in Economics

The minors in economics or business economics shall consist of 28 hours and must include 201, 202, 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

See School of Social Sciences section of this catalog.

COURSES

ACCOUNTING

230—4 INTRODUCTION TO FINANCIAL ACCOUNTING. A basic study of the financial aspects of asset resources including their nature, valuation, sources, and uses in operations; transaction analyses within the accounting information processing system and cycle; income and financial position measurements and reporting; and financial statement analyses and fund flows. Prerequisite: sophomore standing.

232—4 FUNDAMENTAL ACCOUNTING PRINCIPLES AND STANDARDS. Study of professional accounting principles and standards, mainly in the financial area but incorporating certain managerial concepts as well. The principles and standards in the financial area include those related to the balance sheet presentation of assets; liabilities and owner's equity, revenue and expense measurements and matching; financial statement interpretation as an information source; resource and fund flows. Prerequisite: 230.

233—4 INTRODUCTION TO MANAGERIAL COST ACCOUNTING. A basic study of productive asset resources, including their acquisition, utilization, input-output measurement; cost behavior and structure, cost-volume-profit and break-even analyses; planning and controlling cost resources, the standard cost system with performance reporting; and budgeting in the accounting system. Open only to non-accounting majors. Credit not acceptable in the accounting programs. Accounting majors take 341. Prerequisite: 232.

301—1 to 6 ACCOUNTING READINGS. May be repeated to a maximum of 6 hours. Prerequisite: consent of instructor.

335—4 PRINCIPLES OF INCOME TAXATION. Study of the Federal Income Tax laws as they affect individuals, partnerships, corporations, estates, and trusts, in determination of the taxable income for computing the tax liability due. Prerequisite: 232.

341—4 MANAGEMENT ACCOUNTING CONCEPTS AND PROBLEMS I. A study of accounting cost information in the management planning and controlling process, including cost structure and behavior; cost-volume-profit analyses; standard costs with performance reporting; company-wide and responsibility center performance measurements; relevant cost information in decision making; contribution concepts; variable costing; transfer pricing; optimizing capacity resources; budgeting within the accounting process. Prerequisite: 232.

351—4 INTERMEDIATE FINANCIAL ACCOUNTING THEORY AND PROBLEMS I. In depth study of financial accounting principles and standards, including those relating to asset and equity valuations and revenue and expense measurements and matching; financial statements presentation and interpretation as an information source; fund and cash flows; and the accounting information system and cycle. Prerequisite: 232.

352—4 INTERMEDIATE FINANCIAL ACCOUNTING THEORY AND PROBLEMS II. Continuation of 351. Prerequisite: 351.

353—4 INTERMEDIATE FINANCIAL ACCOUNTING THEORY AND PROBLEMS III. Continuation of 352. Prerequisite: 352.

432—4 ACCOUNTING PROBLEMS IN FEDERAL TAXATION. Income tax problems of partnerships, corporations, estates, and trusts; brief study of social security, federal estate, and gift taxes; solving of complicated tax problems by research in source materials. Prerequisites: 335, consent of instructor and department chairperson.

441—4 MANAGEMENT ACCOUNTING CONCEPTS AND PROBLEMS II. A study of accounting cost information in the management planning and controlling process, including cost structure and behavior; cost-volume-profit analyses; standard costs with performance reporting; company-wide and responsibility center performance measurements; book concepts; variable costing; transfer pricing; optimizing capacity resources, budgeting within the accounting process; cost and product mix with yield variances; productive assets acquisitions. Prerequisite: 341.

453—4 ADVANCED ACCOUNTING. Advanced study of accounting principles and procedures relating to specialized topics, including partnership equity, installment and consignment sales, insurance, compound interest, and preparation and use of consolidated statements. Prerequisite: 353.

456—4 AUDITING I. Involves an overview of auditing, the auditor's decision process, understanding of the client's business, and development of audit working papers. Also includes in-depth study of the nature of audit tests in the sales and collection cycle, inventory and warehousing cycle, capital acquisition and repayment cycle, cash balances in the bank, and the completion of the audit. Prerequisites: 341, 353.

457—4 AUDITING II. A study of the environment of auditing, including internal auditing, the auditor's legal liability, and evaluation of internal control. Includes analyses of current Statements on Auditing Standards, statistical sampling applications, the impact of EDP systems on auditing, and preparation of auditor's reports. Prerequisite: 456.

458—4 ACCOUNTING SYSTEMS. Problems in accounting systems design and installation. Examination of existing systems and practice in system design and reports. Prerequisites: 341, 352.

461—4 PREPARATION FOR ACCOUNTING PRACTICE. An examination of current accounting issues, practical accounting problems, and the pronouncements of authoritative accounting bodies (e.g., the SEC and FASB). Prerequisites: grade of B or higher in 353, consent of instructor.

490—1 to 8 INDEPENDENT STUDY IN ACCOUNTING. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings or research projects. May be repeated by permission up to a total of 8 credit hours. Prerequisite: consent of instructor and department chairperson.

ADMINISTRATIVE SERVICES

426—4 ANALYZING INFORMATION AND ADMINISTRATIVE SUPPORT SYSTEMS. An analysis of administrative support and information systems including data entry, data processing, transactive processing, communications, clerical services, reprographics, word processing, mail services, records management. The development of skill in using analysis tools such as task lists, work distribution charts, decision tables, playscript, flow charts, forms analysis, work simplification, layout flow analysis, and cost measures. Emphasis on field projects in which tools are used to analyze real information and support systems.

427—4 INFORMATION STORAGE AND RETRIEVAL SYSTEMS. The requisites for records administration. The value of files and their creation, control, retention, and disposition. Applications to such records as medical, legal, educational. Prerequisite: 426 or equivalent.

428—4 SYSTEMS AND PROCEDURES. A problems approach to the office systems-procedures function in the modern business firm; seminar and laboratory work on improvement of systems and procedures, administrative information and paperwork engineering; theory of office-systems design; systems administration and work simplification. Prerequisite: 426 or consent of instructor.

429—4 INTERNSHIP IN ADMINISTRATIVE SERVICES. Applications of analysis tools acquired in 426, 427, and 428 to real business situations under the supervision of administrative services personnel in area business firms. Must spend a minimum of 10 contact hours per week for the quarter in one or more administrative services units. Preparation of a report in which a specific problem associated with a unit is identified and analyzed and recommendations delineated. Group seminars are held biweekly for the exchange of views on problems identified and recommended solutions. Administrative services personnel from area firms are invited to participate. Prerequisites: 426, 427, 428 or their equivalent, consent of instructor.

430—4 WORD PROCESSING SYSTEMS. The analysis and design of word processing systems for integrated and nonintegrated offices including the creation, transcription, editing, reproduction, distribution, and storing of information. Includes management strategies for organizing, staffing, procedures, work measurement, layout, equipment, feasibility, integration of WP and DP, and costs of current systems and management strategies. Prerequisites: MIS 200 and 381.

BUSINESS EDUCATION

201—4 BEGINNING TYPEWRITING. Mastery of the keyboard, speed and accuracy in the touch operation of the typewriter, and

skill and knowledge needed for vocational and personal uses. May not be taken for credit if have had previous high school or other formal instruction in typewriting.

202—4 INTERMEDIATE TYPEWRITING. Mastery of the keyboard, speed and accuracy in the touch operation of the typewriter, and skill and knowledge needed for vocational and personal uses. Prerequisites: 201 or one semester of other formal instruction in typewriting, ability to type at least 30 words per minute.

221—12 (4,4,4) SHORTHAND AND TRANSCRIPTION. Study of Gregg shorthand theory and the development of skill and knowledge required for dictation and transcription. (a) Prerequisite: may not be taken for credit by students who have had previous high school or other formal instruction in shorthand. (b) Prerequisite: 221a or one semester of other formal instruction in shorthand-transcription. (c) Prerequisite: 221b or two semesters of other formal instruction in shorthand-transcription and the ability to take new-matter dictation at 60 words per minute for three minutes.

222—4 FORKNER SHORTHAND FOR PERSONAL USE. Designed to provide students with skill in using Forkner shorthand to record course and library notes, term paper ideas, and other school and personal communications. May not be taken for credit by students with credit in 242 or 262.

225—8 (4,4) MACHINE SHORTHAND. The development and application of skill in the use of machine shorthand. Students wishing to further skills should follow 225b with 221c. Prerequisite for (a): 201 or equivalent; for (b): 202 or equivalent.

242—4 FORKNER SHORTHAND FOR COMMUNICATIONS SPECIALISTS. Designed to provide majors in TV, radio, journalism, and other communication specialties with skill in using Forkner shorthand to record notes of interviews, speeches, programs, and to record ideas swiftly. May not be taken for credit by students with credit in 222 or 262.

262—4 FORKNER SHORTHAND. The development of dictation and transcription skills in Forkner shorthand. Designed for preparation of secretarial or business teaching careers. Students wishing to further skills should follow 262 with 221b. May not be taken for credit if credit in 222 or 242. Prerequisite: 201 or equivalent.

324a—4 ADVANCED SHORTHAND AND TRANSCRIPTION I. The development of high-level dictation and transcription skill and knowledge. Prerequisites: 221c or three semesters of other formal instruction in shorthand-transcription and the ability to transcribe on the typewriter new-matter dictation taken at a sustained rate of 80 words per minute.

327—4 ADVANCED TYPEWRITING AND OFFICE PROCEDURES. Further development of production typewriting within a study of office efficiency pertaining to administrative functions, filing procedures, word processing, dictating and transcribing equipment, copy systems, selection and utilization of information storage systems, as well as the knowledge and skills necessary for decision-making in secretarial activities. Prerequisite: 202 or equivalent.

350—4 CONSUMER INCOME MANAGEMENT. The development of concepts relative to the management of the personal financial affairs of the American consumer. Budgeting income and expenses, installment purchasing, and comparison of prices, insurance, real estate, taxation, and savings and investments.

402—4 TEACHING TYPEWRITING AND OFFICE PRACTICE. Instructional procedures, skill-building principles and techniques, selection and preparation of instructional materials, standards of achievement, and evaluation of pupil performance. Prerequisite: 327 or equivalent.

404—4 TEACHING SHORTHAND AND TRANSCRIPTION. Instructional procedures, skill-building principles and techniques, selection and preparation of instructional materials, standards of achievement, and evaluation of pupil performance. Prerequisite: 324a or equivalent.

405—4 TEACHING GENERAL BASIC BUSINESS SUBJECTS. Instructional procedures, analysis and selection of materials, preparation of teaching units, evaluation of pupil performance. Prerequisites: 350 or equivalent, Economics 200, 201.

408—4 TEACHING DATA PROCESSING AND BOOKKEEPING. Instructional procedures, analysis and selection of materials, preparation of a teaching unit in data processing, and evaluation of pupil performance. Prerequisites: Accounting 230, 232, Management Information Systems 200 or equivalent.

414—4 ORGANIZATION AND ADMINISTRATION OF COOPERATIVE VOCATIONAL EDUCATION PROGRAMS. Philosophy and objectives of cooperative vocational programs, methods of selecting students and work stations, placing and supervising students on part-time jobs, preparation of instructional materials, job analyses, conducting related information courses, evaluating workers and work stations, advisory committees, and public relations aspects of cooperative programs.

415—6 SUPERVISED BUSINESS EXPERIENCE AND RELATED STUDY. Classroom study of the principles and problems of coordinating in-school and cooperative vocational business education programs, with analysis and evaluation of on-the-job experience of the members of the class in relation to their future work as coordinators and vocational teachers.

416—4 COOPERATIVE WORK EXPERIENCE COORDINATION TECHNIQUES. Development of techniques for initiation, implementation, and operation of cooperative work experience coordination including student diagnosis, community relations, press and communication relations, interdisciplinary relations and activities, student evaluation, follow-up studies of programs, and current issues in vocational education. Prerequisite: 414 or equivalent with consent of instructor.

490—1 to 4 INDEPENDENT STUDY IN BUSINESS EDUCATION. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings and projects. May be repeated for total of 4 hours. Prerequisite: consent of instructor or department chairperson.

ECONOMICS

201—4 PRINCIPLES OF MICROECONOMICS. Principles and characteristics of the market economy. Household and firm

behavior, supply and demand, markets for goods and resources, market structure, and the regulation of business and labor. Prerequisite: GSM 144 or equivalent with grade of C or better.

202—4 PRINCIPLES OF MACROECONOMICS. Introduction to the measurement and determination of the quantity of goods and services produced by the U.S. economy and the level of employment and prices. The role of the government in determining the rates of unemployment and inflation through its spending, taxes, control of the money supply, and income policies. Prerequisite: 201.

305—4 ENGINEERING ECONOMICS. Economic decisions in engineering. Economic principles applied to design of materials, method of production, location, use of machines, employment of personnel, choices of long-run investments, and other considerations. Prerequisites: 201, Math 260a.

321—4 ECONOMIC HISTORY OF THE UNITED STATES. European and colonial backgrounds of American economic history; industrialization and economic growth, 1790-1865; transition from an agricultural to industrial economy, 1865-1920; the 1920's, the Great Depression and the New Deal; challenges of the post-war economy. Prerequisites: 201, 202.

327—4 SOCIAL ECONOMICS: ISSUES IN INCOME DISTRIBUTION, EMPLOYMENT AND SOCIAL POLICY. An introduction to the economic factors affecting income distribution, the level of employment, and occupational structure of the U.S. and other economics. Policies to alter income distribution and employment patterns are discussed with emphasis upon the performance of present public assistance programs. Recommended for social work students. Prerequisites: GSS 150, Economics 201, 202.

331—4 LABOR ECONOMICS. Theories of labor force participation, wage determination, and employment; theories of unemployment and economic insecurity; trade unionism; collective bargaining and public policy. Prerequisites: 201, 202.

343—4 MONEY AND BANKING. Study of the relationships between money, credit, prices, and macroeconomic activity. Money creation in a banking system, the role of the Federal Reserve System, monetary and fiscal policy, international financial relationships. Prerequisite: 202.

345—4 ECONOMICS OF THE PUBLIC SECTOR: NATIONAL. The role of government in the economy, optimum levels of public activities, government budgets, and national income; financing of government expenditures, principles of taxation, examination of the role of fiscal policy. Prerequisites: 201, 202.

400—4 QUANTITATIVE METHODS FOR ECONOMIC AND BUSINESS ANALYSIS. Applications of mathematical tools to economic analysis with emphasis on learning to use calculus and linear algebra in economic models. A systematic survey of mathematical economic models, including optimization, static equilibria, comparative statics, activity analysis (linear programming), and the theory and application of input-output models. Prerequisites: 201 and 202 or equivalent.

401—4 INTERMEDIATE MICROECONOMIC THEORY. Determination of prices and quantities in markets for goods and services. Theories of consumer behavior, exchange cost structures, and factor payments. Firm behavior in alternative market structures. Prerequisite: 201.

402—4 INTERMEDIATE MACROECONOMIC THEORY. Classical, Keynesian, and post-Keynesian theories of inflation, employment and the determination of national income. Survey of recent macroeconomic stabilization policy and performance. Prerequisite: 202.

415—4 ECONOMETRICS I. Statistical inference and hypothesis testing. The simple linear regression model. Multivariate regression, relaxation of the classical assumptions, problems of specification, and prediction. An introduction to estimation of simultaneous equations. Prerequisite: MS 311 or equivalent or consent of instructor.

417—4 ECONOMIC FORECASTING. Study of the methodology used to forecast or predict general macroeconomic conditions and market conditions for individual products, sectors, or regions. Trend analysis, barometric indicators, survey techniques, input-output analysis as well as more sophisticated econometric techniques are used to analyze historical or cross-sectional data in order to forecast future economic conditions. Prerequisites: 415 or MS 311, GSM 244 or equivalent, and intermediate microeconomics and macroeconomic theory; or completion of MBA courses in economics and quantitative methods.

421—4 ECONOMIC HISTORY OF EUROPE. Sources of European economic growth before the Industrial Revolution. Development of European agriculture, industry, finance, and international trade after 1750. Prerequisites: 201 and 202.

423—4 HISTORY OF ECONOMIC THOUGHT. Contributions of political and economic philosophers and schools of thought from mercantilism to J. M. Keynes, with emphasis on the development of economic ideas and their influence on contemporary economic theory and national policy. Prerequisites: 201 and 202.

425—4 COMPARATIVE ECONOMIC SYSTEMS. An extensive comparison of the nature and performance of capitalism, communism, socialism, facism, and other economic systems. Prerequisites: 201 and 202.

431—4 LABOR AND PUBLIC POLICY. The government's role in influencing and regulating labor markets and labor behavior; legislation governing conditions within the firm and the labor markets; legislation affecting the growth of the labor market. Prerequisite: 331.

432—4 COLLECTIVE BARGAINING AND DISPUTE SETTLEMENT. An analysis of the collective bargaining process and conflict resolution. Theoretical bargaining models, union governance, and jurisdiction, wages, employment conditions, and the effect of bargaining power in the settlement of labor disputes. Prerequisite: 431 or consent of instructor.

435—4 INDUSTRIAL ORGANIZATION AND PUBLIC POLICY. Analysis of the economic implications of alternative market structures. Investigation of the impact of concentration, economies of scale, advertising, and conglomerates on business behavior and public welfare. Policy issues include regulation,

antitrust, and public enterprise. Study and evaluation of current issues in market structure, antitrust policy, and regulation. Prerequisite: 401 or equivalent, or consent of instructor.

443—4 ADVANCED MONEY AND BANKING. Role of money and credit in U.S. economy; the commercial banking market structure and commercial banking operations; non-banking financial intermediaries, financial markets and the commercial banking system; issues regarding structure, service, and monetary management functions of Federal Reserve System; current approaches to monetary theory and policy; international monetary problems. Prerequisite: 343.

445—4 ECONOMICS OF THE PUBLIC SECTOR: STATE AND LOCAL. Economic functions of government at the state and local levels; analysis of public expenditure and taxation, intergovernmental fiscal relations, budgeting techniques, public choice. Prerequisites: 201 and 202, or consent of instructor.

451—4 AN INTRODUCTION TO URBAN ECONOMICS. Causes of urban growth and analysis of the spatial pattern of economic activity in urban areas; the implications of these for public policy responses to urban problems of housing segregation and racial discrimination, urban transportation and urban environmental pollution. Prerequisite: 401; 400 and 415 suggested.

453—4 LOCATION OF ECONOMIC ACTIVITY. The impact of space upon economic analysis including such topics as the location of economic activity, regional economic development, and the theoretical and practical problems encountered in the planning of land use. Prerequisite: 401; 400 and 415 suggested.

461—4 INTERNATIONAL ECONOMICS. The causes and effects of international trade. The effect on resource allocation, the price level, income and employment. Policy questions including trade barriers and free trade areas. The international monetary system. Prerequisite: 401; 343 or 402 suggested.

463—4 INTRODUCTION TO ECONOMIC DEVELOPMENT. Theory and problems associated with increasing incomes of the less developed countries. Emphasis on the changes in the internal economic structure that must be made for development to be sustained. Prerequisites: 201 and 202.

490—1 to 8 INDEPENDENT STUDY IN ECONOMICS. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings or research projects are pursued under the supervision of a member of the economics faculty. May be repeated by permission of the department chairperson up to a total of 8 credit hours. Prerequisite: consent of instructor and department chairperson.

FINANCE

320—4 CORPORATION FINANCE. A study of the principal duties of corporate financial officers and the problems of administrative financial management of business. Topics include planning, budgeting and control, external sources of capital. Prerequisites: Accounting 232, Economics 200, 201.

420—4 PROBLEMS IN CORPORATION FINANCE. Application of principles of finance to specific cases. Development of analytical ability and fuller comprehension of the nature of financial problems as encountered in business and industry by combining specific cases and collateral readings. Prerequisite: 320.

423—4 COMMERCIAL BANKING OPERATIONS. The administration and operation of a commercial bank, including organization structure and asset management. Major problems are analyzed through the study of cases. Prerequisite: 320.

424—4 FINANCIAL INSTITUTIONS. A study of the evolution, functions, and practices of the many types of financial intermediaries, especially which have come into prominence since World War II. Particular attention to commerce and government. Prerequisite: 320.

425—4 INVESTMENTS. A survey of the investment field in theory and practice. Study of the state and federal agencies concerned with regulation of the issuance and exchange of securities in the interest of the investing public. The analysis of the particular types of investment securities and the bases for investment decisions and the management of investment portfolios. Prerequisite: 320.

435—4 REAL ESTATE FINANCE AND INVESTMENT. A systematic investigation of the basic aspects of income-producing real estate. Various types of property and approaches to the real estate field will be explored. The emphasis is on investment and financing decision-making. The decision models and methodology of finance theory will be relied on throughout the course. Prerequisite: 320 or equivalent.

445—4 FINANCIAL MARKETS. The study and analysis of the functioning of domestic money and capital markets, including analysis of the possible impact of recent structural and regulatory changes on the flow of funds and interest rates in these markets. The course examines the factors affecting the determinants of the demand for and supply of long-term and short-term funds. Prerequisite: 320 or equivalent.

450—4 INTERNATIONAL FINANCE. An introduction to international financial markets and the economic forces affecting them. Topics to be covered include foreign exchange markets, the balance of payments under different international monetary systems, the analysis of firm short-term investments, and the financing of long-term investments within the international context. Prerequisite: 320 or equivalent.

490—1 to 8 INDEPENDENT STUDY IN FINANCE. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings or research projects are pursued under the supervision of a member of the economics faculty. May be repeated by permission of the department chairperson up to a total of 8 credit hours. Prerequisite: consent of instructor and department chairperson.

MANAGEMENT

140—4 INTRODUCTION TO BUSINESS. An overview of the basic nature of business in an essentially market-disciplined economic system. Emphasis on the interdisciplinary nature of business and the broad administrative principles governing organized human endeavor. The systems approach is stressed. Introduction to business and economic terminology and to the

case method of developing analytical ability. Junior and senior business majors are not eligible to take this course.

340—4 MANAGEMENT: ORGANIZATIONAL THEORY PRACTICE AND POLICY. Development of the understanding of organizations and of an appreciation of the decision-making skills required of a manager. Examination of all concepts of management and the basic functions—planning, organizing, motivating, and controlling. Emphasizes the reasons for change and progression in managerial philosophy and the role of values as well as the manager's affinity for risk. Prerequisite: junior standing.

341—4 ORGANIZATIONAL BEHAVIOR. Development of the student's knowledge and skill in the application of behavioral science theories and concepts to organizational processes and problems. Emphasis on intrapersonal, interpersonal, small group, intergroup, managerial, and total organizational issues and problems. Prerequisites: 340, 390.

342—4 CONTRACTS AND AGENCY LAW. Study/discussion of the terminology, definitions, and principles of contract law applicable to the contractive problems in the operation of a business, including the relevant provisions of the uniform commercial code. The application of the principles of agency law by the entrepreneur in operating his firm, and his legal liability to his agency and third parties with whom he deals. Prerequisite: junior standing.

390—4 BUSINESS COMMUNICATION. Improvement of the understanding of the vital role of effective communication in business and development of skill in business writing with emphasis on the preparation of reports. Refinement of the skill of listening plus consideration of the quality of speech appropriate for use in business situations. Opportunities to learn to interpret data and present information in a logically organized and acceptable form. Prerequisite: completion of General Studies Skills requirements.

430—4 PERSONNEL ADMINISTRATION. Designed to provide basic exposure to areas of personnel management. The field of industrial relations includes personnel management and labor relations. Labor relations deals with those activities impacting on employees as members of a collective bargaining unit as they interface with management. Personnel management deals with those activities related to individuals and their employers. Directed primarily to the latter validation methods available in personnel. Prerequisite: 340, 341 or consent of instructor.

431—4 LEADERSHIP IN FORMAL ORGANIZATIONS. Designed to develop understanding of the context and function of the leadership role in formal organizations through the examination of leadership research and theories of leadership effectiveness. The various bases for exercising influence and the situational factors affecting leadership. Emphasis on understanding the leadership function as well as developing thinking and action capabilities for improving leadership effectiveness. Prerequisite: 340, 341, or consent of instructor.

432—4 MANAGEMENT OF CONFLICT AND CHANGE. The study of the function of managing organizational change processes at the individual, group, and total organization levels of analysis. Understanding the sources, nature, uses, and resolution of differences and conflict at the interpersonal and intergroup levels of analysis is a major problem area for study within the context of organizational change. Emphasis on student development of skills pertinent to planning and implementing organizational change strategies. Prerequisite: 340, 341 or consent of instructor.

433—4 STUDIES IN ORGANIZATIONAL STRUCTURE AND DESIGN. A capstone course to develop an understanding of the interrelationships between human, technological, managerial, and environmental factors as these factors influence organizational design. The objective is to explore the dimensions of effective organizational designs through analysis of theoretical models, case studies, and empirical studies. Prerequisites: 340, 341 or consent of instructor.

434—4 MANAGEMENT OF HUMAN RESOURCES. This senior seminar in the concentration of manpower/industrial relations focuses attention on contemporary issues in the area of manpower utilization. Attention to selection, EEOC, interviewing, manpower planning, OSHA, labor-management conflict, and pensions. Prerequisites: 340, 341, 430 or consent of instructor.

440—4 THE LEGAL ENVIRONMENT OF BUSINESS. Develops an understanding of how the philosophical background of the business environment of the U.S. originated. Analyzes the nature of the U.S. economy from the standpoint of economic theory in order to illustrate the theoretical desirability of keeping it as competitive as possible. For this reason, the roles of the Federal and State Governments in aiding the private sector to achieve this goal through the use of antitrust laws, regulatory agencies, and the general provision of public goods and services form a significant part of the material. Prerequisites: 340, 341, Economics 200, 201, or consent of instructor, and senior standing.

441—4 BUSINESS POLICY. Development of a top-management view leading to the formulation of general policies to be followed by the organization. Determination of objectives, the development of plans for their achievement, organizing administrative personnel to carry them out, implementation of programs, measurement of results, and reappraisal of objectives, plans, and action-patterns in the light of evolving situations. Prerequisites: 341, 440 or consent of instructor, and final quarter standing.

441l—1 to 8 BUSINESS POLICY MANAGEMENT PROBLEMS LABORATORY. Promotes application of business knowledge/skills to the analysis of actual complex business problems. Students learn to discover and feasibility test the full range of strategies, policies, and practices used by goal-oriented organizations. Extensive use of a local "data bank" firm plus case studies. Satisfies 4 units of electives plus 441 requirement. Prerequisites: senior business major, consent of instructor.

475—4 to 16 ORGANIZING AND OPERATING A SMALL BUSINESS. Management of a small business, covering topics such as task organization in an informal climate, risk-taking, intra- and inter-personal stress, and emphasizing individualized projects and problems. Graduate students limited to 4 hours credit. Prerequisites: 340, 341, Accounting 230, and senior standing or consent of instructor.

490—1 to 8 INDEPENDENT STUDY OF BUSINESS ADMINISTRATION. An investigation of topical areas in greater depth

than regularly titled courses permit. Individual or small group readings or research projects under the direction of a faculty member of the department. May be repeated by permission up to a total of 8 credit hours. Prerequisite: consent of instructor.

MANAGEMENT INFORMATION SYSTEMS

200—4 BUSINESS DATA PROCESSING APPLICATIONS. Exposure to and experience with a variety of commercially available computer hardware and software techniques with emphasis on using them to aid resolution of real problems in business and business courses.

201—24 (4,4,4,4,4,4) COMPUTER PROGRAMMING. An introduction to computer programming in a specific language utilizing concepts of listing with heading and totals; computations; comparisons; control breaks; tables and/or arrays; and file processing. Students design, write, debug, and process business-oriented programs on the computer in (a) COBOL; (b) BASIC; (c) RPG; (d) PL/I; (e) BAL; or (f) PASCAL. Prerequisite: 200.

281—4 SYSTEMS ANALYSIS AND DESIGN. Introduction to the structures of the systems analysis and design cycle. Theoretical aspects will be coupled with applications to case problems using the tools and techniques of analysis and design. Prerequisite: 200 or introductory course in computers.

301—4 ADVANCED PROGRAMMING USING FILE TECHNIQUES. Advanced programming concepts dealing with arranging, creating, and/or changing data base files on the computer. Students design, write, debug, and process programs on the computer normally in COBOL. A minimum grade of C from MIS 201a or instructor permission is recommended to take this course. Prerequisite: 201a.

381—4 MANAGEMENT INFORMATION SYSTEMS. Study of the application of principles of systems analysis and systems design to business problems. Attention to the complexities involved in the simultaneous design and integration of production, marketing, and other sub-systems. Prerequisite: 200 or concurrent enrollment.

480—4 to 8 SENIOR INTERNSHIP SEMINAR. Synthesis and application of appropriate material from other courses to realistic problems in a simulated working environment. Not available for graduate credit. May be repeated by permission to total of 8 credit hours. Prerequisites: senior standing, consent of instructor.

481—4 COMPUTER PROGRAMMING PROJECTS. The application of programming concepts, file techniques, and systems techniques to a major programming project for the design and writing of a business-oriented system of programs to accomplish designated tasks. A minimum grade of B from MIS 301 is recommended. Prerequisites: 301 and 281/381 or equivalent.

482—4 APPLIED OPERATING SYSTEMS. Examination of the purpose and structure of the class of software called operating systems and their attendant job control languages as seen from the user's point of view. Levels of sophistication and necessary hardware support configurations will be discussed. Prerequisite: 301 or equivalent.

483—SMALL COMPUTER SYSTEMS AND DISTRIBUTED DATA PROCESSING. An analysis of applications of micro- and mini-systems as sole machines in small businesses and as a means of distributing computing power in major corporations. Prerequisite: 281 or 381 or equivalent.

484—4 EDP AUDITING CONTROLS AND CONCEPTS. A study of the administrative procedures, organization controls, documentation standards, and audit trails necessary to insure proper operations of the data processing function. Students will design audit trails for systems, including computer audit programs and procedures. Prerequisites: 281/381 and Accounting 233/341 or equivalent.

485—4 SIMULATION AND MODELING TECHNIQUES. Integration of analysis and simulation modeling. Development of simulation models and use of simulation techniques in problem solving. Prerequisites: 281/381 and 311 or equivalent.

486—4 DATA BASE AND COMMUNICATION SYSTEMS. An overview of basic terminology and the concepts of data base systems and communication systems. Students will view typical systems and propose improvements based on theoretical concepts. Prerequisites: 281/381 and 301 or equivalent.

489—4 INFORMATION SYSTEMS ADMINISTRATION. A study of the structure and administration of the organizational entities involved in information systems. Special attention will be given to the aspects of multi-discipline project management and management of service operations in a rapid change high technology environment. Prerequisites: 381 or 281 or equivalent and consent of instructor.

490—1 to 8 INDEPENDENT STUDY IN MANAGEMENT INFORMATION SYSTEMS. An investigation of special topical areas. Individual or small group readings or projects are required. May be repeated by permission to a total of 8 hours. Prerequisites: consent of instructor and department chairperson.

495—1 to 8 SEMINAR: MANAGEMENT INFORMATION SYSTEMS. Pertinent issues related to managerial aspects of the computer field. May be repeated with permission to a total of 8 hours. Prerequisite: consent of instructor.

MANAGEMENT SCIENCE

311—4 STATISTICAL ANALYSIS FOR BUSINESS DECISIONS. A continuation of statistical concepts as applied to business, including analysis of variance, correlation and regression analysis, stochastic processes, and probability distributions. Prerequisite: GSM 244.

312—4 STATISTICAL ANALYSIS OF BUSINESS ORIENTED PROBLEMS. Sample design and computer software applications to topics covered in intermediate statistics, with emphasis on problems definition, data collection and analysis in business and economics. Prerequisite: 311.

314—4 INTRODUCTION TO DEMAND FORECASTING. An introduction to several commonly used methodologies in business for estimating the demand for the output of the organization. Moving averages, exponential smoothing, probability models, regression analysis. Methods for evaluating forecast techniques. Analysis of trend and seasonal factors. The use of index numbers. Prerequisite: 311.

320—4 INTRODUCTION TO OPTIMIZATION MODELS. Introduces optimization models, with emphasis on differential calculus and linear programming. Focus on recognizing appropriate applications and evaluating and interpreting the solutions, with emphasis on business and economic related problems. Prerequisite: GSM 144.

402—2 to 8 SEMINAR IN MANAGEMENT SCIENCE. Seminar discussions devoted to interpretation and application of quantitative and nonquantitative models to organizational situations. Emphasis on the relation of management objectives to programmed and nonprogrammed management decision information systems. May be repeated to total of 8 credit hours by permission. Prerequisite: consent of instructor.

490—1 to 8 INDEPENDENT STUDY IN MANAGEMENT SCIENCE. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings or research projects. May be repeated by permission up to a total of 8 credit hours. Prerequisite: consent of instructor and department chairperson.

MARKETING

370—4 MARKETING AND ITS ENVIRONMENTS. A macro view of marketing which encompasses an interdisciplinary approach to the analysis and interpretation of consumer buying habits and motives and the resultant purchases of goods and services. The purchaser's psychological, economic, and sociocultural actions and reactions are stressed as they relate to a better understanding of consumption.

371—4 PRINCIPLES OF MARKETING MANAGEMENT. A micro view of marketing which provides an introductory survey of the problems encountered by the marketing executive and the analytical and evaluative systems available which can be used to improve operating efficiency. Emphasis on the use of marketing management factors in the areas of markets, products, distribution, price, and promotion. Prerequisite: 370.

377—4 MARKETING RESEARCH. A development of the concepts necessary for understanding and performing research primarily in the marketing area of business. The basic procedures and theories underlying research are investigated, evaluated and applied to marketing decision-making. Market, advertising, and sales research. Prerequisites: 371, Management Science 311.

470—4 MARKETING LOGISTICS AND DISTRIBUTION. Study, analysis and prescription of systems of managing the flow of raw materials, parts, semi-manufactured and finished goods from their sources to the ultimate consumer. Capabilities of channel members, including storage facilities and their connecting transportation linkages are reviewed, leading to comprehensive system design. Prerequisite: 377 or equivalent.

471—4 ADVERTISING POLICY AND MANAGEMENT. Advertising strategy, planning, and research and their relationship to other marketing tools. Emphasis on problems faced by marketing and business executives in administering and advertising effort. Prerequisite: 377.

472—4 SALES POLICY AND MANAGEMENT. An examination of the organization of the sales effort and of functions of salesmen and sales managers (including all echelons from the general marketing managers to the territory salesmen). Problem areas such as sales department organization, recruitment of salesmen and their motivation and supervision, design and administration of sales territories, appraisal of salesmen's performance. Prerequisite: 377.

474—4 RETAIL MANAGEMENT AND PROMOTION. Functions, organization, and management of retail enterprises; impacts of recent and contemporary forces. Detailed study of merchandising and promotional activities. Retailing careers and appropriate preparation. Prerequisite: 370.

475—4 CONSUMER BEHAVIOR. An analysis of consumer motivation, buying behavior, market adjustment, and product innovation including a survey of explanatory theories of consumer market behavior and producer reactions. Behavioral aspects of the marketing process from the producer to ultimate user, or consumer. Fundamentals of product planning development, engineering, and promotion as part of the total marketing program. Prerequisite: 377 or equivalent.

476—4 INTERNATIONAL MARKETING. The significance of international markets to American firms. Tariffs, social and cultural restrictions, economic and politicai environments, and legal restrictions. The international distribution system, international pricing decisions, multinational product planning, communications decisions and international marketing research. Prerequisite: 377 or equivalent.

477—4 ANALYSIS OF MEDIA AND ADVERTISING EFFECTIVENESS. Acquiring familiarity with the various types of advertising media, the audiences that these media reach and the costs of media. Understanding the media buying process is emphasized as well as the prevailing trends in agency purchased commissioned billing and the media buying services. The development of knowledge concerning the rationale for proof of advertising effectiveness. The measurement techniques for each medium and the history and validity of various measurement methodologies. Prerequisite: 471.

480—4 ADVANCED MARKETING MANAGEMENT. Development of student's ability to identify marketing problems, investigate alternative solutions, and render decisions. Should be final marketing course taken by undergraduate marketing major. Prerequisites: 377 or equivalent, senior standing.

490—1 to 8 INDEPENDENT STUDY IN MARKETING. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings or research projects under the direction of a faculty member of the department. May be repeated by permission up to a total of 8 credit hours. Prerequisite: consent of instructor and department chairperson.

PRODUCTION

315—4 PRODUCTION AND OPERATIONS MANAGEMENT MODELS AND SYSTEMS. A study of the basic systems and models of production and operations management. The objectives and relationships of materials management systems including purchasing, production planning, inventory control, and transportation as well as quality control, cost control, and work measurement systems. Basic planning and control models and

decision rules. Emphasis on the impingement of real world conditions on such systems and the necessity of integrating such systems. Prerequisite: Management Science 311 or equivalent.

410—4 QUALITY CONTROL SYSTEMS. The study of quality control, product liability control, and reliability systems as well as decision making techniques. Quality specification and design, process quality planning and control, material quality planning and control, and product performance subsystems. X and R charts, sequential sampling plans and continuous sampling techniques. Prerequisite: Management Science 311 or equivalent.

461—4 METHODS DESIGN AND WORK MEASUREMENT. (See Engineering 471.) Prerequisite: Management Science 311 or equivalent.

462—4 PRODUCTION PLANNING AND CONTROL. (See Engineering 472.) Prerequisites: 315 or 522; Management Science 311 or 502; and Management Science 320 or consent of instructor.

463—4 ADVANCED PRODUCTION MANAGEMENT. Examines the operating decisions that confront the managerial and supervisory production personnel of large, medium, and small scale manufacturing firms using a variety of production processes. Emphasizes decision-making leading to the solution of production operating problems, and to the formulation of plans of action. Assigned cases provide a view of the types of decisions involved in planning, organizing, coordinating, integrating, and controlling resources so that production goals may be realized. Prerequisite: preregistration or concurrent registration in 462.

490—1 to 8 INDEPENDENT STUDY IN PRODUCTION AND OPERATIONS MANAGEMENT. An investigation of topical areas in greater depth than regularly titled courses permit. Individual or small group readings of projects. May be repeated by permission up to total of 8 credit hours. Prerequisites: consent of instructor and department chairperson.

SCHOOL OF EDUCATION

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 is offered both as a nonprofessional bachelor of arts major and as 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.

ADVISEMENT

Prospective students are encouraged to obtain specific information about School of Education programs as early as possible even during their freshman and sophomore years. Undergraduate advisers are available to work with students interested in pursuing any of the programs offered by the School. Students may arrange to see advisers by requesting appointments in the office of appropriate departments in the School of Education.

Most students find it useful to know about the levels and fields where there are employment opportunities, the general characteristics of courses in education, recreation, and psychology, certification requirements, and the aptitudes associated with successful professional practice. Students should establish and maintain continuing communication with their advisers throughout their undergraduate programs from initial advisement through graduation.

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, to be graduated in teacher education, or to qualify for a teaching certificate.

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 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 the teaching certificate in other states. Students taking degrees in other majors may also qualify for a secondary teaching certificate by completing an approved program in teacher education.

ACCREDITATION

All School of Education programs are fully accredited by the North Central Association of Colleges and Schools. 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
Dramatics
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

RESEARCH AND INSTRUCTIONAL FACILITIES

The School of Education maintains the following facilities which offer research and instructional resources to both the campus and the University's service area.

Early Childhood Center. The School operates an on-campus Early Childhood Center primarily for children of students enrolled in the University. Children between the ages of three and five may be enrolled on a quarterly basis throughout the year. The program provides a variety of developmental activities in an informal setting. Students interested in early childhood education may take a practicum in this Center to meet part of the student teaching requirement.

Early Childhood Resource Center. The Early Childhood Education Resource Center is housed in Classroom Building III, Room 1312. The center houses materials, equipment, resource books, periodicals, and journals pertaining to early childhood education. All early childhood education classes, both graduate and undergraduate, are held in the center. Therefore, early childhood education majors have exposure to professional literature in the field and ready access to it. Young children are often brought to the center during classtime for observation and interaction with students. Seminars and colloquia are also held in the

center for the early childhood community in the metropolitan area.

Psychology Laboratories. Two psychology laboratories with modern equipment provide a setting for the development of experimental programs. These laboratories and the University computer facilities provide on-campus experience in the instructional and research program. Students are encouraged to use these facilities that make a direct contribution to all of the programs in the School of Education.

The Reading Center. The Reading Center is a well-equipped laboratory of diagnostic and instructional materials and equipment used in diagnosing and correcting reading deficiencies. Sudents 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 the public and parochial schools of the area by providing a facility where current materials can be studied and evaluated.

Special Education Instructional Materials Center. The Special Education Instructional Materials Center provides assessment and methodology materials for use in Special Education and related fields. It is also used as an observation and participation laboratory including demonstrations related to classroom management and techniques of teaching. Preclinical teaching activities in material development are sponsored at this site by the Madison County Teachers Center.

Teaching Techniques Laboratory. The School maintains several video recording studios which afford students opportunities to practice specific teaching skills under systematic conditions. Typically, students present short lessons to small groups of pupils. Subsequently, tapes of the lessons are analyzed and critiqued 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.

ELEMENTARY AND EARLY CHILDHOOD EDUCATION

Professors:

Carpenter, R.
Comer, J. M.
O'Brien, T. C.
Rockwell, R. E.
Russell, I. L.

Associate Professors:

Baden, D. J.
Darnell, D.
Jordan, A. E.
Nall, S. M. (Chairperson)
Patty, D. L.
Starr, D. F.
Turner, C. J.
Williams, R. A.

Assistant Professor:

Owens, J. L.

Instructor:

Havis, B. J.

The Department of Elementary and Early Childhood Education offers two programs leading to the Bachelor of Science degree in Education. The first program is Elementary Education which fulfills the requirements for a Bachelor of Science degree in Education and entitlement to the Illinois Standard Elementary Certificate, kindergarten through grade nine. In addition, students are qualified to teach in twenty-five other states through the National Council for Accreditation of Teacher Education (NCATE) reciprocity agreements. The second is the program in Early Childhood Education, which leads to the Bachelor of Science degree in Education and entitlement to the Illinois Early Childhood Certificate. Students are thereby entitled to teach children through six years of age, exclusive of those enrolled in public school kindergarten. The program also prepares students for professional careers in early childhood centers, nursery schools, and day care centers.

ELEMENTARY EDUCATION

The Elementary Education program consists of 92 hours of general education, 76 hours of professional education and 24 hours of electives. Elective hours may be taken in course work that would apply toward a second major, such as early childhood education or special education.

Elementary Education 200—2 should be taken before any other professional requirement. A student must have completed 64 quarter hours of course work, have a grade-point average of 3.4 or higher, and demonstrate proof of competency in basic skills prior to enrolling in 200. Competency tests are given several times a year. Students should consult the Office of Student Teaching and Advisement for testing dates and times.

The prospective elementary or early childhood education major must be admitted to the Department by satisfactorily completing 200. Students must maintain a 3.4 grade-point average or higher in order to continue in the program. Should a grade of D or below be received in a professional education course, the student must repeat the course with a grade of C or above. Psychology 301 is required and may be taken concurrently with Elementary Education 200.

The elementary program is field based; that is, stu-

dents and professors participate regularly in public schoo classrooms through teacher education centers in the loca area. Thus, students are provided many opportunities to visit and work with pupils in "real-life" situations. The Illinois State Board of Education requires all education students to complete successfully at least 100 clock hours of clinical experiences prior to student teaching. The elementary program provides opportunities for well over 100 clock hours. Students participate one-half day per week for each class in which they are enrolled. In addition to a course in the exceptional child, knowledge about Special Education is integrated into the field experience programs.

Courses are grouped into three field experiences. It is necessary to preregister for all of the 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 in a public school and two days in campus classes. Students study techniques of teaching in content areas (e.g., reading, etc.) and learning theory. They have opportunities to demonstrate skills learned with pupils in public schools and on video-tapes (micro-teaching) for analysis and critique.

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 is student teaching and 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.

Bachelor of Science Degree, Elementary Education

General Education Requirements 92
- GSK Language Arts and Skills 16
- GSM Science and Mathematics (including at least 8 hours of Math) 16
- GSS Social Science (including a course in American History and/or Government) 16
- GHA Humanities and Fine Arts 16
- Fitness and Leisure Skills 6
- Additional recommended work in any of the above fields including a minimum of one GIS course 22

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 or 300-3
  - P.E. 350-4
  - GSS 370-4 or Ed. Fd. 355-4
- Field Experience III 16
  - Ed. El. 451-16

Electives 24

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EARLY CHILDHOOD EDUCATION

The Early Childhood Program consists of 92 hours of general education, 54 hours of professional education and 46 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 clock hours of pre-student teaching clinical experience.

Bachelor of Science Degree, Early Childhood Education

General Education Requirements 92
- (See elementary education section)

Professional Education Requirements 54
- Ed. El. 200-2
- Ed. El. 201-4
- Ed. El. 202-4
- Ed. El. 317-4
- Ed. El. 412-4
- Ed. El. 420-4
- Ed. El. 421-4
- Ed. El. 422-4
- Sp. Ed. 400-4
- Sp. Ed. 440-4
- Sp. Ed. 441-4
- SpPA 312 or Sp. Ed. 498-4
- Ed. El. 450-16

Electives 46

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HEALTH, RECREATION AND PHYSICAL EDUCATION

Professors:

Archangel, R.
DeLong, B. J.
Herrold, Z. C. (Chairperson)
Showers, N. E.

Associate Professor:

Guelker, R. M.

Assistant Professors:

Bobka, L. A.
Buddell, W.
Gallatin, H. J.
Goldsmith, M. D.

Grist, A. L.
Gunsten, P. C.
Kristoff, L. D.
Lee, R. E.
Luedke, G. C.
Moehn, L. N.
Sappington, V. E.
Schild, M. M.

Instructors:
Dudley, J. E.
Whitted, J. J.

Lecturers:
Carpenter, S.
Crow, E.

The Department of Health, Recreation and Physical Education offers undergraduate programs for students interested in careers in health education, recreation education, or physical education. For students interested in careers as physical education teachers there are three special options from which to choose. Courses are available in health education and driver education, which students may use 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

Students electing to major in health education will develop the knowledge and skills necessary to obtain jobs in both school and community settings. Completion of the program leads to the Illinois Standard Secondary Teaching Certificate, which applies to the teaching of health education in grades 6-12. Graduates will also be qualified to apply for many of the hundreds of jobs within the public health field, such as nutritionists, family planning counselors, and sex educators.

The ever-expanding field of health education draws its subject matter from among the social sciences, behavioral sciences, and the biological sciences. In addition to course work preparing majors to teach or work in the area of public health, emphasis is also put on the student's individual growth within each area of the health curriculum.

Interested students should see a health education adviser by contacting the Department of Health, Recreation and Physical Education.

Bachelor of Science Degree, Health Education

General Education 70
- A. General Studies 60
  (including GSM 130, 233, GIS 342)
- B. Prerequisites to the Major 10
  (including Chemistry 110a, 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 312a, Special Education 400)

Electives[1] 16
- 2 Courses selected from the following:
  - Health Education 313s, 350, 410, 462, 463, 464, 465, 466
  - Speech 200, 223, 301, 313
  - English 325
  - Instructional Technology 417
  - Psychology 432
  - Secondary Education 481
- 2 Courses selected from the following:
  - Philosophy 312
  - Anthropology 400, 416, 426, 442
  - Government 342
  - Sociology 303, 342, 394, 407, 441
  - Foundations of Education 490
  - Psychology 305, 306
  - Secondary Education 485

Professional Education 32
(including Health Education 460, Secondary Education 215, 352, 401a)

Electives or Second Teaching Field 29

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[1]Substitutes allowed with adviser's consent.

Minor Requirements

In addition to the degree programs mentioned previously, the Department of Health, Recreation and Physical Education also 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 EDUCATION

A candidate for the Bachelor of Science degree in Recreation is expected to follow a program of study which provides a broad, rich background in recreation skills, activities, and knowledge. Program experiences and courses are in General Studies and appropriate disciplines. All students work with faculty advisers in selecting courses for this program.

Graduates are able to qualify for employment in community, military, institutional, industrial, agency, private, governmental, or commercial recreation media. The student majoring in recreation receives upon graduation the Bachelor of Science degree in Recreation, a nonteaching degree offered within the School of Education.

Bachelor of Science Degree, Recreation Education

General Studies Requirements	60
Professional Courses	27
Recreation 100, 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 230	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	41-40
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PHYSICAL EDUCATION

For students interested in careers related to physical education, a variety of majors and minors is available. The basic major is designed for students planning a career in either teaching or nonteaching situations. For students who desire teacher certification in Illinois, a professional education component must be completed in addition to the basic major.

In addition to the basic major and teacher certification programs, two minors are also available. A minor in physical education is designed for any student who has a personal interest in physical education, but who does not necessarily plan a career in this field. The coaching minor is devised for any student who plans to coach in a school or non-school setting.

Prior to admission as a degree candidate in physical education, all students must complete a health exam and attain a minimum overall grade-point average of 3.0. For students who wish teacher certification in physical education, the admission requirement is 3.4. Depending upon the specific program the student selects, additional admission requirements must be met. These requirements are available from the physical education adviser. Specific course requirements for each of the programs are listed in the section below.

All activity courses are open to men and women; courses numbered 102 through 199 are primarily for non-physical education majors and minors and may be taken on a Pass/No Credit option. Courses numbered 300, 301, and 302 are for physical education majors and minors.

Physical Education Major: 48 hours

General Studies Requirements	60
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	84
	192

Secondary (6-12) Certification: 105 hours

General Studies Requirements	60
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
Physical Education	22
Physical Education 305, 350, 382, 470	16
Physical Education 389	6
Professional Education	35
Counselor Education 305	4

Foundations of Education 355 4
Health Education 201 3
Secondary Education 215 4
Secondary Education 352p 16
Special Education 400 4
Electives 27

192

K-12 Certification: 124 hours

General Studies Requirements 60
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
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
Counselor Education 305 4
Elementary Education 351d 8
Foundations of Education 355 4
Health Education 201 3
Secondary Education 215 4
Secondary Education 352p 8
Special Education 400 4
Additional Electives 8

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Physical Education Minor Requirements

General Studies Requirements 60
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
Additional Major and Electives 100

192

Coaching Minor Requirements

General Studies Requirements 60
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
Additional Major and Electives 100

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Driver Education Certification

Students may seek certification in Driver Education through transcript evaluation by the Illinois Office of Education. Courses offered by the Department in meeting 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.

Minor in Instructional Technology

Through the Department of Instructional Technology, courses are offered 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 planned 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.
Starr, F. H.
Taliana, L. E.
Traxler, A. J.

Associate Professors:

Hatfield, J. L.
Robbins, G. E.
Skinner, K. K.

Assistant Professor:
Rogers, B. J.

Visiting Instructor:
Krohn, E. J.

Adjunct Professors:
Chaves, J. F.
Goldman, H.

Assistant Adjunct Professor:
Botto, R. W.

Assistant in Psychology:
Ruhl, R.

The undergraduate courses in psychology acquaint the student both with the methods used and knowledge gained by psychologists in their unceasing efforts to understand behavior. Students will 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 a scholarly scientific discipline which seeks to understand and explain behavioral phenomena 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 in terms of program planning. It is designed to provide students both with practical career-oriented skills and a theoretical foundation with which the student can understand and explain psychological processes. Elective courses in psychology are open to all undergraduate students, regardless of major.

Psychology Department Facilities

The Psychology Department has extensive laboratory, classroom, and supporting facilities. Among these are ample space and equipment for a wide variety of student and faculty research. There are individual research cubicles, electrically shielded and sound shielded rooms, and large (group) and small (individual) areas where observations may be performed using mirrors and intercoms. Facilities exist for studying children and adults, as well as laboratory animal subjects.

Microcomputers are connected by cables to many of the laboratory rooms and can be used for presenting stimuli and for collecting and analyzing behavioral responses. An extensive and sophisticated video tape 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 service appropriate courses and to provide help to student and faculty researchers desiring to employ these measures.

Career Opportunities

Advanced graduate training (at least at the master's level) is a prerequisite for careers involving the application or use of psychological skills and using the title "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. These careers are to be found in the business and industrial sectors and may include such positions as personnel officer, insurance claims adjuster, aerospace technician, consumer protection specialist and public relations specialist. Careers in health care in the public sector include such positions as suicide prevention worker, family planning counselor, social research analyst, prison warden, youth counselor, probation or parole officer, mental health worker, child care worker, drug counselor, mental retardation program worker, occupational therapist and statistician/research analyst.

Programs in Psychology

Following declaration of a major in psychology, students will be assigned to a psychology faculty adviser. Students should contact their faculty adviser as soon as possible so that an academic program can be developed which most satisfies the student's interests and needs. Students are encouraged to make full use of their faculty adviser as a resource person about the department and the University as a whole.

All students declaring a major in psychology are strongly advised to take Psychology 300a as a first course in psychology. Students majoring in psychology are expected to complete the sequence of 300a, b, and c, in that order, not concurrently, within the first three quarters after declaring their major. Psychology 300b must be successfully completed before the student may enroll in 300c. Psychology majors and minors transferring credit from other colleges or universities are advised to have any transferring psychology courses evaluated as soon as possible by the psychology undergraduate adviser.

While only the sequence of 300a, b, and c is required of psychology majors, the department has recommended programs for students (a) wishing to get a general background in psychology; (b) interested in working in a community service agency; (c) interested in working in business and/or organizations; (d) planning careers in such professions as law, medicine, dentistry, and allied health professions. Students are encouraged to construct a program which best meets their needs in consultation with their faculty adviser.

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 a file containing examples of the student's academic work that he/she chooses to insert, 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.

Bachelor of Arts Degree, School of Education

The Bachelor of Arts degree program is designed to meet the needs and interests of students with diverse interests. A major in psychology provides excellent training for students who are interested in preparing for a professional career in human and community services, business and industry, graduate training in psychology or related disciplines, or other preprofessional degree programs. In addition, psychology is an excellent major for students who have no specific vocational plans but are interested in psychology because of its intrinsic interest.

General Studies Requirements	60
GSS 260 and 261 do not count toward major.	
Requirements for Major in Psychology	61
Foreign Language	12
Psychology 300a, b, c	13
Should be completed within three quarters after declaration of major.	
Psychology electives	36
Psychology 432 does not count toward major.	
Minor	28
Electives	43
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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 program in consultation with the psychology adviser.

General Studies Requirements	60
GSS 260 and 261 do not count toward major.	
Requirements for Major in Psychology	49
Psychology 300a, b, c	13
Should be completed within three quarters after declaration of major.	
Psychology electives	36
Psychology 432 does not count toward major.	
Minor	28
Electives	55
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All psychology majors must have a cumulative GPA of at least 3.0 in psychology courses to be recommended for graduation.

Minor Requirements

A minor in psychology consists of a minimum of 28 hours. Psychology 300a is required plus 24 hours of psychology electives. Psychology 432, GSS 260, and GSS 261 do 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 300b, c, plus psychology electives to meet minimum hour requirements.

Students who have completed GSM 244 or Sociology 308 should not include Psychology 300b in their program of study for a minor in psychology.

SECONDARY EDUCATION

Professors:

Ahlbrand, W. P. (Chairperson)
Gore, S. J. (Dean, School of Education)
Harmin, M.

Associate Professors:

Boss, H. T.
Brown, W. L.
Bruker, R. M.
Freeman, R.
Goodwin, G. H.
Keefe, D. R.
Madson, D. C.
Wehling, L. J.
Wilson, R.

Assistant Professors:

DeSanctis, V.
Meyer, V. E.

The Secondary Education Program is a four-year professional degree program culminating in a teaching certificate for junior high schools, middle schools, and secondary schools. The program includes work in General Education, Teaching Fields, and Professional Education.

In the first two years the student completes a University College program of general studies in Natural Science/Mathematics, Social Science, Humanities/Fine Arts, and Communication Skills (English composition, verbal communication and logic). During this time the student also enrolls in an introductory Education course designed to develop a clearer focus regarding his or her professional goals. Information concerning employment opportunities is given in this course along with opportunities for career guidance in consultation with a secondary education adviser.

During the third and part of the fourth year, work in the major teaching field (such as Art or Biology) is normally completed. The remainder of the program involves professional education experiences in a field based Teacher Education program; this may be taken in a two- or three-quarter sequence and is usually completed during the fourth year.

General requirements for admission to the Teacher Education Program include a successful completion of the introductory Education course, recommendations by the advisers in Education and the teaching field, and recommendation by the Secondary Education Undergraduate Admission and Retention Committee.

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.

TEACHING FIELDS

In cooperation with other Schools at the University a wide range of teaching fields is available to students in secondary education. Assistance in making a choice between these fields can be obtained from a secondary education adviser in the Office of Teacher Education. The adviser also provides students with career guidance, the details of the teaching field programs, and directs them to a teaching field adviser.

A student who is preparing to teach at the junior or senior high school level may select first teaching fields 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 are stated by academic field elsewhere in this bulletin.

The second teaching field 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 fields (not requiring a second field), showing the hour requirement, 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 Studies Requirements 60
These must include General Psychology, United States History or American Government.
Professional Education Requirements 37
Secondary Education 215
Secondary Education 401a, b, c
It is recommended that all secondary education students also take at least one course in the teaching of reading as an elective course.
Teaching Field 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 field.
Health Education 3
Physical Education Activity Courses 3
Electives 14

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SPECIAL EDUCATION

Professors:
Long, R. D.
Shea, T. M.

Associate Professors:
Cook, R. E.
Wagner, R. M. (Chairperson)
Whiteside, W. R.

Assistant Professors:
Blackhurst, E. W.
Brimer, R. W.
Gilles, D.

Instructor:
Sims, P. J.

Visiting Instructor:
Garanzini, M. B.

The Department of Special Education offers preparation programs at the undergraduate level for teaching emotionally disturbed 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 mental retardation, emotional disturbance, or learning disability have the option of

choosing one of two programs which lead toward teaching certification.

Option A. The single certificate program with a major in one of the areas listed above and ending with a Standard Special Certificate.

Option B. The dual certificate program is in the process of revision, and interested students should contact the Chairperson of Special Education or Elementary Education for program description and requirements.

Bachelor of Science Degree, Special Education

Option A — Single Certification

General Studies Requirements 78
- GHA Area Courses: GHA 110, GHA 136, two GHA literature courses and elective hours to total 18 for the area 18
- GIS Area: any course 4
- GSM Area Courses: GSM 130, GSM 212, one physical science course and two mathematics courses 20
- GSS Area Courses: GSS 260, GSS 370, two courses from GSS 130, GSS 150, GSS 210, or GSS 240, and GSS 200 or a course in American government which satisfies the Illinois Constitution requirement 20
- GSK Area Courses: GSK 101, GSK 102, GSK 123, and GSK 152 16

Health and Physical Education 6
- Health Education 201
- Three 1-hour physical education activity courses

Professional Education Requirements 16
- Counselor Education 305
- Elementary Education 314, 337, 338

Special Education Requirements 64
- One of the following specializations: (see course listings for prerequisites)

EDUCABLE MENTALLY HANDICAPPED
- Counselor Education 422 or Psychology 421 4
- Physical Education 350 4
- Psychology 432 4
- Special Education 400, 410b, 410g, 411, 420b, 470, 430, 481, 499, and one Sp. Ed. elective 52

LEARNING DISABLED
- Counselor Education 422 or Psychology 421 4
- Physical Education 350 4
- Psychology 432 4
- Special Education 400, 410g, 411, 420a, 430, 470, 481, 496, 499, and one Sp. Ed. elective 52

SOCIAL-EMOTIONAL DISORDER
- Counselor Education 422 or Psychology 421 4
- Physical Education 350 4
- Psychology 432 4
- Special Education 400, 410a, 410g, 411, 420a, 470, 430, 481, 499, and one Sp. Ed. elective 52

Elective 28

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Option B — Dual Certification

Interested students should contact the Chairperson of Elementary Education or Special Education for program description and requirements.

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 teaching 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 during the summer quarter is not available.

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

GENERAL

The following are prerequisites that must be met prior 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 assign-

ment. 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 within the last ninety days must be on file in the University Health Service. A report of a tuberculosis skin test or X-ray taken within ninety days of the student teaching assignment is also required.

EARLY CHILDHOOD EDUCATION

Students majoring in early childhood education must complete a 16-hour sequence in early childhood education, including 201 and 317, prior to student teaching. It is necessary to have a 3.4 overall grade-point or higher in order to student teach. A student must not have a grade of D or below or any incompletes in any professional education courses.

ELEMENTARY EDUCATION

Students majoring in elementary education must complete a minimum of 38 quarter hours in professional education courses prior to student teaching. Students must complete Ed. El. 200, Psych. 301, Field Experiences I and II prior to student teaching. It is necessary to have a 3.4 overall grade-point or higher in order to student teach. A student must not have a grade of D or below or any incompletes in any professional education courses.

PHYSICAL EDUCATION

Students with a broad field major will complete a minimum of 60 hours in physical education prior to student teaching. Student teaching will be split between elementary and secondary levels.

SECONDARY EDUCATION

1. Secondary education students must be admitted to the teacher education program by the Department of Secondary Education Admissions Committee before an application for student teaching can be approved.
2. Student teaching is an integral part of Secondary Education 401a, b, c, Secondary Education Teacher Training System, based at Teacher Learning Centers. Secondary Education 401c, Student Teaching, should be preceded by Secondary Education 215, 401a, and 401b.
3. It is also expected that secondary education students will have completed 32 hours of their studies in their teaching field except that 48 hours will be completed by students who have chosen one of the following teaching fields: art education, business education, general science and mathematics, language arts, physical education, physical science, and social studies.
4. Prospective secondary student teachers must present two recommendations, one from their education adviser and one from their teaching field adviser. Forms for this purpose will be distributed at an orientation meeting which will be held during the quarter preceding student teaching assignment.
5. Secondary Education 352, Student Teaching, may be assigned for students admitted to secondary education before June 1973 or in special cases approved by the Secondary Education Department Chair. This assignment requires 17 hours in professional education courses prior to student teaching including Counselor Education 305, Foundations of Education 355, and Secondary Education 315, and an elective course in the School of Education.

SPEECH PATHOLOGY AND AUDIOLOGY

Students must secure written consent of the Speech Pathology and Audiology Department and must have completed GSS 370, Counselor Education 305, and Speech Pathology and Audiology 450 before registering for student teaching.

COURSES

ADULT EDUCATION

490—4 INTRODUCTION TO ADULT AND CONTINUING EDUCATION. An orientation to the nature of the field and major areas of professional practice. Examines basic concepts and issues and analyzes various program areas and institutional settings.

495—1 to 8 SELECTED TOPICS. Varied content related to adult and continuing education. To be offered from time to time as need exists and as faculty interest and time permit. May be repeated until a maximum of 16 hours have been earned provided no topic repeats itself.

COUNSELOR EDUCATION

305—4 EDUCATIONAL PSYCHOLOGY. Study of the learner and the learning process. Includes study of behavior, discipline, development, the school environment, application of learning theories, and methods of assessment. Prerequisite: GSS 260.

350—4 A SURVEY OF HUMAN DEVELOPMENT. Surveying knowledge and understanding of human development throughout the life cycle. The various phases of life in the areas of physical, affectional, socialization, peer-group relations, and self-development.

422—4 EDUCATIONAL MEASUREMENTS. Study of the philosophy and techniques of measurements. Special attention to statistical foundations of and use of teacher-made tests. Prerequisite: 305.

426—4 INDIVIDUAL INVENTORY. Procedures for studying individual pupils and their problems for guidance purposes. Emphasis on interview, observation, ratings, case study, cumulative record, etc. Prerequisite: 422 or consent of instructor.

480r—4 INTRODUCTION TO REHABILITATION. (Same as Special Education 480r.) A survey of the philosophy, procedures and practices underlying the rehabilitation movement, including the history and legislation that have contributed to its rapid development.

483—8 COMMUNITY PROGRAMS FOR THE PREVENTION OF JUVENILE DELINQUENCY. Analysis of delinquency prevention in community programs administered by the public schools, social welfare, governmental agencies. A study of the various categories of juvenile delinquency is applied to a critique of existing programs and to the development of experimental programs. The roles of professional workers pertinent to such programs is delineated with special reference to the public school administration, counselor, the social workers, the court, probation officers, and police. Prerequisite: consent of instructor.

EDUCATIONAL ADMINISTRATION AND SUPERVISION

405—4 TEACHERS' ROLE IN EDUCATION MANAGEMENT. Designed to provide teachers, teacher organization officials, and teacher education students with a basic understanding of school law, school finance, and legislative processes. Emphasis on concepts and principles which provide the background necessary for proactive participation in education management by teachers.

ELEMENTARY EDUCATION

051—4 READING SKILLS DEVELOPMENT. Designed to aid students who are deficient in basic reading ability. Major attention to comprehension and word-attack skills. To be taught on Pass/No Credit and PR bases.

060—2 to 4 PARENTING THE YOUNG CHILD. For parents of young children who would like to develop a sensitivity toward and an awareness of their children and the child rearing process. Child development and child rearing issues are presented, shared, and discussed. Designed to help parents become more knowledgeable about the needs and development of young children and more insightful and skillful in parenting.

200—2 INTRODUCTION TO ELEMENTARY EDUCATION. First course in the elementary education sequence. Acquaints the student with the role of the teacher and enables student to assess his or her own interests, skills, and abilities as related to that role. Satisfactory performance is required for admission to the teacher education program. Prerequisite: student must have accumulated 64 quarter hours and have a 3.4 G.P.A.

201—4 UNDERSTANDING THE PRE-PRIMARY CHILD. An introductory study of the characteristics of infants, toddlers, and young children (birth through six) with emphasis on study and observation in both informal and formal settings.

202—4 LEADERSHIP ROLES IN EARLY CHILDHOOD EDUCATION. Opportunities to explore interpersonal relationships via examination of values, beliefs, attitudes, and goals. Communications skills and role relationships: teacher vis-a-vis children, colleagues, and administrators.

314—4 ELEMENTARY SCHOOL METHODS. The fundamental principles of education, the interpretation of current educational theory and practice, the processes of teaching and learning involved in elementary education. Field experience in public schools is required. Prerequisites: 200, admission to the program, concurrent enrollment in 337, 343, and 365. Registration by permit only.

317—4 PRE-KINDERGARTEN METHODS. Instructional strategies appropriate for pre-school children, with emphasis on interrelatedness of sensorimotor, conceptual, and social development. Learning objectives in language, numbers, science, and social studies in the context of creative activities such as art, dramatics, storytelling, poetry, and music. Prerequisite: 200 or consent of instructor, 201.

337—4 READING IN THE ELEMENTARY SCHOOLS. The principles of reading, factors that condition reading, together with grade placement of aims and materials; diagnostic and remedial treatment. Field experiences in public schools are required. Prerequisites: 200, admission to the program, concurrent enrollment in 314, 343, and 365. Registration by permit only.

338—4 CORRECTIVE PROCEDURES IN READING. Techniques and materials for diagnosing and correcting reading disabilities with emphasis on meeting instructional needs of each individual in the classroom. Involvement in laboratory experiences with disabled readers. Prerequisites: completion of Field Experience I, concurrent enrollment in 415, 442, and 445. Registration by permit only.

343—4 SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. Organization of materials for teaching purposes, techniques of classroom presentation, bibliographies or materials, use of audio and visual aids to instruction, and techniques for evaluating student progress. Readings, lectures, and discussions related to required teaching experience. Field experiences in public schools are required. Prerequisites: admission to the program, concurrent enrollment in 314, 337, 365. Registration by permit only.

351b—4 to 16 ELEMENTARY STUDENT TEACHING: ART. Prerequisites: 365, 314, 337.

351c—4 to 16 ELEMENTARY STUDENT TEACHING: MUSIC. Prerequisites: 365, 314, 337.

351d—4 to 16 ELEMENTARY STUDENT TEACHING: PHYSICAL EDUCATION. Prerequisite: 365.

365—4 LEARNING THEORIES AND THE ELEMENTARY SCHOOL CHILD. Principles of learning applied to the mastery of materials used in elementary school subjects. Field experiences in public schools are required. Prerequisites: 200, admission to the program, concurrent enrollment in 314, 337, and 343. Registration by permit only.

410—4 PRINCIPLES OF PRE-PRIMARY EDUCATION. Examination of research and other materials dealing with intervention for strategies for preschool children. Principles governing the stimulation of readiness for school experiences and related strategies both for preschool children and of parent involvement.

412—4 EARLY CHILDHOOD CURRICULUM. A study of the theory, design, organization, implementation, and evaluation of early childhood curriculum. Prerequisite: 317 or consent of instructor.

413—4 CHILDREN'S LITERATURE. Emphasizes types of literature, analysis of literary qualities, and selection and presentation of literature for children. Prerequisites: 200, admission to the program or graduate standing.

415—4 TEACHING MATHEMATICS IN THE ELEMENTARY SCHOOL. Items to be taught include the grade placement of content, newer instructional practices and materials of instruction, and means of evaluating achievement. Field experiences in public schools are 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. Exploration of the history, philosophy, and current trends underlying strategies for teaching the young child. Prerequisite: 201 or 410.

421—4 CHILD, FAMILY, AND COMMUNITY RELATIONSHIPS. Designed to expose early childhood education personnel (preschool, primary) to parent involvement strategies and community agencies as they relate to the goals of early childhood education programs. Prerequisite: 201 or 410.

422—4 HEALTH AND NUTRITION FOR THE YOUNG CHILD. An understanding of nutrition principles related to the development of the young child. Included is a practicum integrating nutrition and food services with the educational curriculum. Prerequisite: 201 or 410.

433—12 (4,4,4) FIELD STUDY: PROBLEMS 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. May not be repeated for credit.

442—4 TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. Study of content and methods of elementary school science. Field experiences in public schools are required. Prerequisites: completion of Field Experience I, concurrent enrollment in 338, 415, 445. Registration by permit only.

445—4 LANGUAGE ARTS IN THE ELEMENTARY SCHOOL. Current practices in the teaching of the language arts other than reading. Attention to evaluation of teaching materials in these areas. 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. Not for graduate credit. Prerequisites: 16 hours of Early Childhood course work to include Ed. El. 317. Registration by permit only.

451a—16 ELEMENTARY STUDENT TEACHING. Not for graduate credit. Prerequisite: completion of Field Experience II. Registration by permit only.

470—4 SEX EDUCATION. (Same as Health Education 470.) An examination of individual, family, school, and community concerns and approaches to sex education. Physiological, psychosocial, and environmental factors affecting sexuality will be explored in relation to the learning experience. Open to teachers, nurses, counselors and other individuals interested in various aspects of sex education in the United States. Prerequisite: Health Education 201 or 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) individually guided education, (j) environmental education, (k) metric education. Prerequisite: consent of instructor.

FOUNDATIONS OF EDUCATION

355—4 PHILOSOPHY OF EDUCATION. The philosophical principles of education and the educational theories and agencies involved in the work of the schools.

406—4 ANTHROPOLOGY AND EDUCATION. The dynamics of enculturation as they affect formal education and the interrelations between education and other parts of the culture. Prerequisite: GSS 260.

451—4 SEXISM AND EDUCATION. An examination of policies and practices in education with regard to the issues of sexism and sex-role stereotyping, discrimination against students and school staff based upon sex; bias in curricular materials; attitudes and behavior of school personnel; sex discrimination in higher education; the role of education in promoting sex equality, goals and strategies for change.

490—4 to 12 INTERCULTURAL STUDY IN EDUCATION. Selected aspects of patterns of education examined in their social matrix. By means of field studies, conferences, lectures, or seminars, the student is helped to gain a mature understanding of cultures and subcultures, to evaluate critically American educational patterns in light of alternatives, and to develop fresh curricular approaches in the area of intercultural understandings through an examination of cultural patterns. May be repeated for credit with permission of instructor.

HEALTH EDUCATION

201—3 HEALTHFUL LIVING. Personal and community health. Presents scientific health information as a basis for developing wholesome health attitudes and practices.

205—4 PRINCIPLES AND FOUNDATIONS OF HEALTH EDUCATION. Introduction to philosophy and history of health education as well as functions of the school health department and voluntary agency interaction in the health education program. Prerequisite for all 300-level courses and above.

250—4 MOOD MODIFIERS. An in-depth study of drug and non-drug alternatives that modify mood and behavior. The emphasis is on factors influencing use, psychological effects, legal control, and teaching strategies. Prerequisite: 201 or consent of instructor.

300—4 INTRODUCTION TO EPIDEMIOLOGY. The study of causes, prevention, and control of communicable, chronic, and degenerative diseases in various community settings. Prerequisite: 201 or consent of instructor.

302—4 DRIVER EDUCATION AND TRAINING. Preparation of the college student for teaching driver education and training in the secondary school. Prerequisite: a valid driver's license.

313s—4 PRINCIPLES OF ACCIDENT PREVENTION. Presents an analysis of the causes of a variety of accidents including home, school, occupational, and recreational. Emphasis will be placed on safety procedures related to the reduction and/or prevention of accidents. Experiences will be provided in methods of safety education.

334s—4 FIRST AID. An American National Red Cross Advanced First Aid course with lectures, demonstrations, and practical application. The completion of the course leads to certification in both Advanced First Aid and Cardio-Pulmonary Resuscitation (CPR).

350—4 HEALTH EDUCATION IN THE ELEMENTARY SCHOOL. In-depth study of the elementary teacher's role in all phases of the school health program including appraisal and screening, referral, safety, health planning, curriculum integration and teaching strategies. Prerequisite: 201 or consent of instructor.

355—4 INTRODUCTION TO COMMUNITY HEALTH. An examination of the health educator as he/she relates to the role and function of local, state, and national health agencies in their effort to meet community health needs and solve community health problems. Prerequisite: 201 or consent of instructor.

360—4 NUTRITION, EXERCISE, AND WEIGHT CONTROL. Presents the relationship among nutritional needs, exercise, and weight control. Specific emphasis will be placed on nutrition and exercise as preventative measures with respect to obesity, diabetes, heart disease, cancer, and other health problems. An examination of teaching concerns and approaches will also be explored. Prerequisite: 201 or consent of instructor.

400—4 HEALTH APPRAISAL OF SCHOOL CHILDREN.

410—4 ENVIRONMENTAL HEALTH EDUCATION. A study of people's relationship with their environment, and the impact this relationship has on the status of one's health. This study includes individual and community roles in the promotion of environmental health. Prerequisite: 201.

415s—3 WORKSHOP IN DRIVER EDUCATION AND TRAFFIC SAFETY. Summer course designed for pre-service teachers of driver education and traffic safety. Individual and group problems are treated. Lectures by safety authorities, demonstrations, field trips, audio-visual materials, and individually supervised research in special problem areas. Prerequisite: 302 or equivalent.

443s—4 METHODS AND MATERIALS IN DRIVER EDUCATION.

445s—2 DRIVER SIMULATION. For in-service and pre-service teachers and supervisors of driver and traffic safety education. A program enabling teachers to instruct a large number of students in correct driving procedures and orient students to emergency situations too hazardous to duplicate on the highway. Prerequisite: 443s.

460—4 METHODS AND MATERIALS IN SECONDARY SCHOOL HEALTH EDUCATION.

462—1 to 4 SPECIAL TOPICS IN HEALTH EDUCATION. A seminar dealing with a relevant health issue, with topic and credit hours to be announced at time of offering. Prerequisite: 201 or consent of instructor.

463—4 CONSUMER HEALTH. An examination of consumer health issues related to the individual, community, and society; including an analysis of local, state, and federal agencies involved in various aspects of consumer protection. Not for graduate credit.

464—4 DEATH EDUCATION. A course for parents, teachers, counselors, nurses, clinicians, and others who are directly or indirectly involved with helping people deal with topics of death, dying, and bereavement. The class will include an exploration of one's own attitudes, professional concerns, resources, and approaches to death education. Students are encouraged to complete GIS 342 prior to enrollment. Prerequisite: 201 or consent of instructor.

465—4 CURRICULUM DEVELOPMENT IN HEALTH EDUCATION. This course includes organizational strategies, needs, assessment, critical appraisal of current curriculum approaches, utilization of resources, objectives, content, implementation, and evaluation techniques in a simulated school setting. Prerequisites: 201, 205 and junior status; or consent of instructor.

470—4 SEX EDUCATION. (See Elementary Education 470.)

471—4 THE SCHOOL HEALTH PROGRAM. An in-depth study of the principles of administration and organization of the three phases of the total school health program. This includes health services, environment, and the health instruction program with regard to the role assumed by the health educator, utilization of resources, and promotion of health in students, teachers and the community. Prerequisites: 201, 205 and junior status; or consent of instructor.

480s—4 WORKSHOP IN SAFETY EDUCATION. Summer course for in-service teachers, nurses, administrators, advanced students, and others interested in safety education as it applies to the public school and the community. Individual problems, lectures, demonstrations, films, field trips, and individual group study in special areas of interest. Prerequisite: 313 or 323 or consent of instructor.

485s—4 CURRICULUM DEVELOPMENT IN DRIVER EDUCATION. The structure, content and approaches of curriculum development as applied to traffic safety based upon the Highway Transportation System operation task analysis, with appropriate learning activities. Prerequisite: 302.

INSTRUCTIONAL TECHNOLOGY

401—4 INSTRUCTIONAL MEDIA SERVICES. An overview of instructional media services in relation to the educational objectives of elementary and secondary schools and community college programs: organization, supervision, finance, housing, equipment, standards and evaluation.

402—4 MEDIA SELECTION. Principles for selection and evaluation of print and nonprint media; use of standard selection aids, and review, writing of annotations; policies governing the building and maintenance of a collection.

403—4 INSTRUCTIONAL MEDIA FOR CHILDREN AND YOUNG ADULTS. Study of the aids, methods, and criteria for the selection and use of books and other instructional materials for students in grades K-12. Prerequisite: 402 or consent of instructor.

407—4 BASIC REFERENCE 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. Underlying principles, existing theories, practical applications and experience in the cataloging and classification of book type materials.

417—4 AUDIO-VISUAL METHODS IN EDUCATION. Selection and utilization of instructional materials in the learning environment, elementary through adult levels. Audio and visual materials and procedures are emphasized with some attention given to bibliographies and reference books for teachers.

430—2 BASIC AUDIO-VISUAL MAINTENANCE TECHNIQUES. Basic instruction in simple maintenance techniques required to keep audio-visual equipment operating in instructional situations. Useful in media centers without services of an audio-visual technician. Laboratory type course with short lectures.

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. Design and development of 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 are handled together. Prerequisite: 417 or consent of instructor.

450—4 INSTRUCTIONAL PHOTOGRAPHIC PROCESSES. Designed for professional educators involved in the production and use of photographic materials. Emphasis on photographic processes and their application to the development of instructional materials. Prerequisite: senior standing in education.

458—4 THE MEDIUM OF THE MOTION PICTURE. A study of the full range of expression by motion pictures including the documentary, theatrical, educational, experimental, and industrial films. Representative films are screened.

460—4 TELEVISION IN THE CLASSROOM. Instructional television programming and its value to the student and the teacher in the learning environment. Instructional sequences ar produced with video equipment.

461—4 GRAPHICS FOR INSTRUCTIONAL TELEVISION Preparation of visual materials for instructional television prc grams for teaching in schools. Prerequisites: 445, 460.

490—1 to 8 SEMINAR: SELECTED TOPICS IN INSTRUC TIONAL TECHNOLOGY. Varied content. Topics selected fror instructional technology field which are considered innovativ and of immediate concern to existing educational needs. May b repeated to a maximum of 8 hours with no topic repeating itsel Prerequisite: senior standing.

PHYSICAL EDUCATION

All courses are open to both men and women. Course numbered 102 through 199 may be taken on a Pass/Fai option or taken to receive a letter grade.

102—1 PHYSICAL FITNESS.

104—(1 per activity) INDIVIDUAL AND TEAM ACTIVITY. (c Basketball, (f) Soccer, (j) Softball, (n) Cross Country, (r) Racquet ball, (u) Wrestling, (x) Handball.

112—1 BASIC BODY MOVEMENT.

115—3 (1,1,1) RESTRICTED PHYSICAL EDUCATION.

116—(1 per activity) SWIMMING. (a) Beginning Swimming, (b Intermediate Swimming.

116d—1 LIFE SAVING AND WATER SAFETY. Theory and practice of techniques involved in water safety. Personal safety and rescue methods for use in, on, and about the water. Leads to American Red Cross Senior Life Saving Certificate. Prerequisites proficiency test, preliminary swimming.

117—(1 per activity) DANCE. (a) Square, (b) Folk, (c) Social, (d Beginning Contemporary, (e) Intermediate Contemporary, (g Modern Jazz Dance, (h) Intermediate Folk Dance, (i) Intermediate Social Dance.

118—(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, (n) Field Hockey, (o Boating and Canoeing, (r) Stunts and Tumbling, (s) Gymnastics (w) Track and Field, (x) Recreational Sports, (y) Judo.

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. (d) Canoeing

and Sailing. (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 of physical principles to specific instructional problems. Prerequisite: (a) course in general biology; (b) 303a, four activity courses.

304a—4 BASIC CONCEPTS OF PHYSICAL EDUCATION. Provides a background for the understanding of the history, principles, and scientific bases for physical education. Designed to orient the beginning student of physical education about the profession. Prerequisite: concurrent enrollment with 304b.

304b—2 BASIC CONCEPTS OF MOVEMENT. An introductory course designed to expose the student to a wide variety of fundamental stability, locomotive and manipulative movement patterns and their relationship to movement skills and abilities within the physical education curriculum. Prerequisite: concurrent enrollment with 304a.

305—4 PHYSICAL EDUCATION FOR THE ATYPICAL STUDENT. The recognition of physical deviations and the provisions of special or modified physical education or recreational activities for such students. Prerequisite: 303a.

323—3 (1,1,1) OFFICIATING TECHNIQUES. Study of rules and their interpretation; requirements for ratings given by the United States Field Hockey Association and the National Association of Girls' and Women's Sports. 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. The organization and conduct of the program, program planning, evaluation of materials, observation and practice in creative rhythms, singing games, folk dancing, and games of low organization. (Required for elementary education.)

382—4 METHODS AND MATERIALS FOR TEACHING SECONDARY PHYSICAL EDUCATION. Conduct of programs in physical education for grades 7-12. Emphasis on teaching methods and materials for the instructional program. Attention to routine procedures and common problems related to teaching. Prerequisite: six 300-level activity courses.

383—3 OUTDOOR AND INDOOR GROUP GAMES. Prepares student to develop a program of outdoor and indoor group games for the elementary level. Emphasis on techniques, fundamentals, and strategy. Stresses the use of lead-up games in the program.

384—2 RHYTHMICAL ACTIVITIES. Deals with all phases of the rhythmical program, teaching techniques, analysis of problems, evaluation techniques. Includes experience in working with children. Prerequisite: 302a or equivalent.

387—2 DEVELOPMENTAL SKILLS. Stresses basic developmental skills that should be included in physical education programs for the elementary school. Emphasis upon progression from gross skills to refined skills. Prerequisite: consent of instructor.

388—2 SELF-TESTING ACTIVITIES. Prepares the student to develop programs of self testing skills. Stresses knowledge of problems, techniques, materials, safety factors, and evaluation procedures. Includes experience with children. Prerequisite: 118s or 300b.

389—2 to 6 AFFILIATION IN PHYSICAL EDUCATION. Observing and assisting instructor in planning, scheduling, and conducting a physical education program by working in area schools. May be repeated for maximum of 6 hours credit. Prerequisite: consent of instructor.

390—2 EVALUATION TECHNIQUES IN THE ELEMENTARY SCHOOL PHYSICAL EDUCATION PROGRAM. A study of the methods and concepts in measuring a child's growth and development and physical fitness index with emphasis on analyzing various skill tests and their application to the child. Prerequisite: 350.

400—16 (2,2,2,2,2,2,2,2) COACHING. Advanced theory and practice relating to skills, strategies, conditioning, organization, and administration of the principles underlying participation in 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 for dance, teaching techniques and facilities, and fundamental dance movements leading to knowledge and command of dance skills.

410—4 ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION PROGRAMS. The nature of the administrative process; analysis of resources in program planning; policies and procedures for implementation of programs; line and staff relationships; budget and finance; facility use; legal considerations. Prerequisite: senior standing or consent of instructor.

420—4 PHYSIOLOGICAL EFFECTS OF MOTOR ACTIVITY. The general physiological effects of motor activity upon the structure and function of body organs; specific effects of exercise on the muscular system. Prerequisite: 303a or equivalent.

425—4 CARE AND PREVENTION OF ATHLETIC INJURIES. An introduction to the various athletic injuries. Considerable attention to those injuries which commonly occur to athletes. Prerequisite: 303a or equivalent.

427—4 PHYSICAL EDUCATION AND RECREATION FOR THE HANDICAPPED. (Same as Special Education 427.) Characteristics of handicapped children as they affect the feasibility of physical education and recreation activities. Values of specific activities for certain types of children and methods and materials for teaching physical education and recreation skills. Emphasis on activities suitable to classroom, home, and institution. Prerequisite: Counselor Education 305.

470—4 MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION. Test and norm construction use of tests as diagnostic, prognostic, and instructional tools, evaluation of curricula, courses, and methods, analysis of test results; survey of common standardized tests in physical education and related aspects of human performance adaptation of tests to meet specific needs.

473—4 THEORY OF COACHING. Principles and theory of coaching interscholastic athletics. Emphasis on psychology of coaching, organization and selection of teams, training techniques and coaching methods.

475—2 to 4 INDIVIDUAL RESEARCH. The selection, investigation, and writing of a research paper under the supervision of instructor.

476—2 to 4 TEACHING ATHLETIC SKILLS. Modern techniques of teaching skills, conditioning, and strategies for prospective physical education teachers and coaches.

PSYCHOLOGY

300a—4 FOUNDATIONS OF PSYCHOLOGY. An in-depth survey of the following content areas: history, psychological methods and techniques, biological foundations of behavior, personality, psychopathology, development, social psychology, motivation and learning.

300b—4 INTRODUCTION TO STATISTICS. Basic methods for organizing and describing psychological data are presented along with correlation concepts. An introduction to hypothesis testing and statistical inference. Three lecture and two laboratory hours per week. Prerequisite: 300a for psychology majors, consent of instructor for non-majors.

300c—5 METHODS OF PSYCHOLOGICAL ENQUIRY. A survey of laboratory, field, and social techniques that psychologists use to study behavior. Four lecture, two laboratory hours per week. Prerequisites: 300a, 300b.

301—4 CHILD PSYCHOLOGY. A study of the biological and psychological development of the child from birth through puberty, and of relevant research methods and results. Prerequisite: 300a or GSS 260.

303—4 ADOLESCENT PSYCHOLOGY. Examines the physical and psychological development of the adolescent and the relevance of childhood development to adolescent problems. Prerequisite: 300a or GSS 260.

304—4 PSYCHOLOGY OF MATURITY AND OLD AGE. A consideration of psychological factors in later maturity and old age and their concomitant problems, both individual and societal. Prerequisite: 300a or GSS 260.

305—4 INTRODUCTION TO PERSONALITY DYNAMICS. Exploration of human motivations, personality patterns, and ways of coping with the stresses of modern life. Prerequisite: 300a or GSS 260.

307—4 SOCIAL PSYCHOLOGY. Introduction to the study of the individual's interaction with his social environment. Considers problems of social learning, attitude formation, communication, social influence processes, and group behavior. Prerequisite: 300a or GSS 260.

308—4 SOCIAL PSYCHOLOGY OF NONVERBAL BEHAVIOR. A systematic introduction to the study of nonverbal behavior in generalized settings. Contributions from anthropology, psychology, speech, and other areas are integrated to provide an opportunity for increased sensitivity to student's own and other's nonverbal behavior. Prerequisite: 300a or GSS 260.

311—4 EXPERIMENTAL PSYCHOLOGY: LEARNING. Investigates the processes governing behavioral change. Emphasizes experimental studies of conditioning, memory, and forgetting. Laboratory work includes the design and conduct of experiments with humans and animals. Lecture and laboratory. Prerequisite: 300a or consent of instructor; 300c recommended.

312—4 EXPERIMENTAL PSYCHOLOGY: PERCEPTION. Investigates the variables influencing an organism's stimulation by his environment. The structure and operation of the sense organs as well as complex perceptual phenomena are examined in lectures and laboratory. Prerequisites: 300a, 300b, 300c.

313—4 EXPERIMENTAL PSYCHOLOGY: MOTIVATION. An examination of both biological and social variables influencing the activation, direction, and maintainance of behavior. Laboratory work examines the effects of motivation upon behavior. Prerequisites: 300a, 300b, 300c.

314—4 EXPERIMENTAL PSYCHOLOGY: COMPARATIVE AND PHYSIOLOGICAL. An examination of the physiological and phylogenic variables affecting behavior. The laboratory involves work with different types of organisms emphasizing physiological concomitants of behavior. Lecture and laboratory. Prerequisite: 300a or consent of instructor.

320—4 INDUSTRIAL PSYCHOLOGY. A study of functions of psychology as a science and as a profession in contemporary business and industry. Prerequisite: 300a or GSS 260.

404—4 CONTEMPORARY THEORIES OF LEARNING, PERCEPTION, AND MOTIVATION. An examination of different behavior theories in the areas of learning, motivation, and perception. Theories that are of contemporary significance and are comprehensive in nature are emphasized. Prerequisite: one of 311, 312, 313, or consent of instructor.

405—4 PSYCHOLOGY OF WOMEN. The psychological and cultural history of women, sexuality of women, various relevant psychological theories of socialization, psychopathology in women and related current issues. Laboratory includes emphasis on techniques for awareness and personal change. Prerequisite: 300a or GSS 260 and advanced standing.

409—4 HISTORY AND SYSTEMS. Study of the important antecedents of contemporary scientific psychology. Considers issues, conceptual developments, and research advances, and presents the major schools and systems. Prerequisite: 300a or GSS 260.

410—4 PROFESSIONAL ISSUES IN TEACHING PSYCHOLOGY. A survey of professional trends in the teaching of psychology at secondary, college, and graduate levels. Compares differ

ent models for teaching psychology and acquaints students with library, laboratory, and testing resources. Prerequisite: advanced standing.

414—4 ALTERED STATES OF CONSCIOUSNESS. Use of known principles of sensation, perception, and neuropsychology to explain phenomena of normal and altered states of consciousness; i.e., meditation, hypnosis, and biofeedback. Class discussion supplemented by films and demonstrations. Prerequisite: 300a or GSS 260.

415—4 ENVIRONMENTAL PSYCHOLOGY. (Same as Environmental Studies 415.) Surveys man-environment relationships from a psychological perspective. Selected topics such as environmental perception, attitudes, spatial behavior, stress, and habitat needs are examined. Some attention to psychological methods of research and problem solving. Prerequisite: 300a or consent of instructor.

420—4 BEHAVIOR MODIFICATION. An examination of the learning principles, evaluation methods and techniques of managing and modifying human behavior. The learning principles consist largely of knowledge based on the scientific inquiry of operant and respondant conditioning. Prerequisite: 300a or GSS 260.

421—4 PSYCHOLOGICAL TESTS AND MEASUREMENTS. Principles of psychological measurement, including errors of measurement, techniques of estimating reliability and validity, techniques of test construction, and problems in assessment and prediction. The laboratory includes the use of selected instruments. Lecture and laboratory. Prerequisite: 300b.

430—4 APPLIED BEHAVIOR ANALYSIS. Development of skills of applying behavior management principles to human behavior. Principles such as shaping, reinforcement, stimulus control and punishment developed in laboratory and applied settings. Prerequisite: 420.

431—4 PSYCHOPATHOLOGY. Classification, description, etiology and treatment of the disorders of personality organization and behavioral integration. Observations in a state mental hospital setting. Prerequisite: 305 or consent.

432—4 MENTAL HYGIENE. An integration of psychological knowledge and principles concerning factors and conditions affecting the individual which tend to facilitate or determine health.

437—4 THE PSYCHOLOGICAL INTERVIEW. Development of basic skills and techniques of interviewing. Consideration of various types and theories of interview and interview data interpretation and evaluation. Prerequisite: 305 or 307.

440—4 THEORIES OF PERSONALITY. A review and critical evaluation of major personality theories and their supporting evidence. Prerequisite: 305 or consent of instructor.

451—4 ADVANCED CHILD PSYCHOLOGY. An examination of concepts, methods, and problems of human development with consideration of both its psychological and psychosocial aspects. Prerequisite: 301 or 303 or graduate standing.

461—4 ADVANCED SOCIAL PSYCHOLOGY. Examines current areas of interest in the study of social behavior: language behavior, communication, social influence, attitude change, interpersonal perception, etc. Emphasis on the individual in the social context. Prerequisite: 307 or consent of instructor.

465—4 GROUP DYNAMICS AND INDIVIDUAL BEHAVIOR. Examination of research and theory in the area of small-group interaction. Examines such topics as group structure and function, group problem-solving, leadership, etc. Prerequisite: 305 or graduate standing.

468—4 PSYCHOLOGY OF HUMAN SEXUALITY. Explores the psychological aspects of human sexuality. Topics include crosscultural sexuality, sexuality in childhood and adolescence, adult sexuality, and roles, typical sexual behavior, special forms of sexual expression, and sexual dysfunction, as well as other areas. Prerequisite: consent of instructor.

473—4 PERSONNEL PSYCHOLOGY. Psychological methods in selection, placement, evaluation, and criterion development. Emphasis on principles and techniques with some examples of application to decision-making in business and industry. Prerequisite: 320 or consent of instructor.

474—4 ORGANIZATIONAL PSYCHOLOGY. Organizational and individual interaction influence on behavior and how these affect job satisfaction, motivation, performance, and the psychological climate in the work setting. Prerequisite: 320 or consent of instructor.

479—4 PSYCHOLOGY OF INDUSTRIAL CONFLICT. Consideration of social and psychological factors underlying controversies between workers and management. Prerequisite: 320 or consent of instructor.

487—4 PSYCHOLOGY OF AGING. An in-depth examination of psychological factors involved in adjustment to the aging process. Special problems such as adjustment to retirement, leisure time, widowhood, aloneness and death and dying, as well as evaluation techniques and general principles of treatment and prevention. Prerequisites: 304 or graduate standing.

490—1 to 4 INDEPENDENT PROJECTS. Independent readings and projects in psychology. Prerequisite: consent of instructor and chairperson. May be repeated for a total of 8 hours.

495—1 to 4 SEMINAR: SELECTED TOPICS. Varied content. To be offered from time to time as need exists and as faculty interest and time permit. Prerequisite: consent of instructor. May be repeated for a total of 16 hours.

RECREATION

100—4 INTRODUCTION TO RECREATION. The philosophy and history of recreation. Emphasis on principles and standards conducive to sound program development.

200—4 PROGRAMS IN RECREATION. An introduction to the various recreational media. Considerable attention to those programs commonly found in a leisure-oriented society. Prerequisite: 100.

312—2 to 6 PLAYGROUND LEADERSHIP. Field experiences. Prerequisite: consent of instructor.

348—3 RECREATION LEADERSHIP. Leadership functions and skills related to recreational settings.

349—2 CAMPING EDUCATION. Designed to give the potential camp counselor an understanding of the camp, its physical set-up, equipment, and necessary routines; its personnel, purpose, traditions, and possibilities.

365—3 ORGANIZATION AND ADMINISTRATION OF COMMUNITY RECREATION. The social, economic, and governmental structure of the community; establishing the community recreation program; problems of facilities, equipment, finance, promotion; selecting and supervising personnel; integration with associated programs. Prerequisite: consent of instructor.

389—4 to 6 AFFILIATION IN RECREATION. A field experience for recreation majors to observe and assist in an approved recreational program in the area under professional supervision. Prerequisite: consent of instructor.

390—4 RECREATIONAL PLANNING. Analysis of planning principles and standards for areas and facilities associated with recreation programs. Attention to general building features as well as special requirements. Prerequisite: 200.

400—16 INTERNSHIP IN RECREATION. Participation as full-time intern for one quarter in one or more recreational agencies. Under University and agency supervision, the intern engages in planning, administering, and implementing recreational activities. Not offered for graduate credit. Prerequisite: 390.

410—4 PROBLEMS IN RECREATION. Analysis of specific contemporary factors relating to relevant economic, political, sociological, and psychological problems. Prerequisite: 390.

420—3 PARKS AND RECREATION LAW. Interpretation and application of local, state, and federal statutes pertaining to recreation programs operated by public and quasi-public agencies. Emphasis on personal negligence, liability, and governmental immunity. Prerequisite: 390.

SECONDARY EDUCATION

215—4 INTRODUCTION TO SECONDARY EDUCATION. Through three types of settings—field experiences and on campus and off campus seminars—students are given the opportunity to explore, experience, and study teaching as a profession. Required of all students before they may be considered for admission into secondary teacher education.

315—5 HIGH SCHOOL METHODS. Study and discussion in various types of procedures used for effective classroom teaching. The problem approach and unit method are stressed. Participation in microteaching laboratory. Prerequisites: Counselor Education 305, Foundations of Education 355.

352—4 to 16 SECONDARY STUDENT TEACHING. Practice of teaching in junior and senior high school subjects in the student teacher's area of concentration. The application of theory to practice as it applies to the teacher's responsibility in the secondary education classroom and the school as a whole. 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. The preparation of secondary school teachers through a systems approach with emphasis on field experiences conducted in Teacher Learning Centers. Alternative learning experiences provided according to needs of students and profession. Must be taken in sequence or consent of department chairman. Not for graduate credit. Prerequisites: 215, admission into secondary education.

407—4 THE MIDDLE AND JUNIOR HIGH SCHOOL. Designed to help prospective middle and junior high school teachers understand the background and present status of these schools. The development, population, curriculum purposes, and methods of the schools with a major emphasis on curriculum.

440—4 TEACHING READING IN THE SECONDARY SCHOOL. A foundation course in how to teach reading in junior and senior high school; developmental and corrective reading programs, appraisal of reading abilities; methods and materials of instruction. Prerequisite: 315.

481—4 DRUG USE AND ABUSE. Relevant background information for teachers, curriculum development specialists, administrators, and others who are interested in the problems in drug use and abuse as they relate to students at the secondary school level and above.

487—4 TEACHING THE NATURAL SCIENCES IN SECONDARY SCHOOLS. Objectives of science education; instruction methods and techniques appropriate for teaching science; desirable equipment, audio-visual aids, and instructional materials; development of a course outline and at least one instruction unit.

495—1 to 8 SELECTED TOPICS. Varied content. To be offered from time to time as need exists and as faculty interest and time permit. May be repeated until a maximum of 16 hours have been earned provided no topic repeats itself. Prerequisite: consent of instructor.

SPECIAL EDUCATION

400—4 THE EXCEPTIONAL CHILD. An introductory overview of the physical, emotional, and social traits of all types of exceptional children. Effects of handicaps in learning situations and methods of differentiation, as well as techniques for rehabilitation. Not for graduate credit.

410a—4 PROBLEMS AND CHARACTERISTICS OF BEHAVIOR DISORDERED CHILDREN. A review and study of the concepts of screening, assessment, placement, programming, and behavior management as they relate to the education of children with behavior disorders. Emphasis on increasing the student's knowledge concerning behaviorally disordered children. Prerequisite: 414 or concurrent enrollment.

410b—4 PROBLEMS AND CHARACTERISTICS OF THE MENTALLY RETARDED CHILD. Educationally significant characteristics including cognitive, emotional, and sociological considerations. Problems of definition, screening, diagnosis, classification systems, and classroom management. Prerequisite: 414 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.

410f—4 PROBLEMS AND CHARACTERISTICS OF THE SOCIALLY MALADJUSTED CHILD. Definition and characteristics of the socially maladjusted, as related to problems of identification and classroom practice. A developmental approach to causes and to recommended practice at preschool, elementary, and secondary levels. Prerequisite: 414 or concurrent enrollment.

410g—4 PROBLEMS AND CHARACTERISTICS OF THE LEARNING DISABLED CHILD. Study of the child with a wide discrepancy between ability and achievement, accompanied by serious educational maladjustment. Emphasis on definition, identification, diagnosis, individualized remedial programs and placement. Prerequisite: 414 or concurrent enrollment.

411—4 ASSESSMENT AND REMEDIATION OF LEARNING DISABILITIES. Special tests and remedial programs designed for children with specific learning disabilities of a perceptual or coordination nature and who may demonstrate related adjustment problems. Prerequisite: 410g.

413a—4 DIRECTED OBSERVATION OF EMOTIONALLY DISTURBED CHILDREN. Student observation and participation in group and individual work with mentally retarded children. Often taken concurrently with 410b. Prerequisite: consent of department chairperson.

420a—4 METHODS AND MATERIALS FOR CHILDREN WITH LEARNING AND/OR BEHAVIORAL PROBLEMS. Methods and materials needed in teaching children with learning and/or behavioral problems in special education programs. Prerequisite: 411.

420b—4 METHODS AND MATERIALS IN THE EDUCATION OF THE EDUCABLE MENTALLY HANDICAPPED. Methods and materials needed in teaching educable mentally handicapped children. Prerequisite: 411.

420c—4 METHODS AND MATERIALS IN THE EDUCATION OF THE GIFTED. Methods and materials needed in teaching gifted children.

427—4 PHYSICAL EDUCATION AND RECREATION FOR THE HANDICAPPED. (See Physical Education 427.)

430—4 BEHAVIOR MANAGEMENT IN SPECIAL EDUCATION. The application of biophysical, psychodynamic, ecological, and learning theories to the management of the behavior of exceptional children. Prerequisite: 414.

440—4 PRESCHOOL EDUCATION FOR EXCEPTIONAL CHILDREN. A survey of preschool programs for the exceptional child. Investigation of theories of child development as related to special education. Observation experience with preschool exceptional children. Prerequisite: any Special Education 410g.

441—4 PRESCRIPTIVE TEACHING—PRESCHOOL EXCEPTIONAL CHILDREN. The use of formal and informal instruments in the assessment of academic, cognitive, and perceptual-motor development of preschool exceptional children. Emphasis on diagnosis and remediation. Participation experiences with preschool exceptional children and parent involvement. Prerequisite: 440.

470—4 SECONDARY SCHOOL PROGRAMS FOR EXCEPTIONAL CHILDREN. Organizational, administrative, and curricular aspects of programs for exceptional children at the secondary level. Emphasizes adjustments needed because of intellectual, behavioral, physical, or learning disabilities. Stresses work-study programs. Prerequisite: 414.

480r—4 INTRODUCTION TO REHABILITATION. (Same as Counselor Education 480r.) A survey of the philosophy, procedures, and practices underlying the rehabilitation movement, including the history and legislation that have contributed to its rapid development.

481—4 SEMINAR IN THE INSTRUCTION OF EXCEPTIONAL CHILDREN AND ADOLESCENTS. A concluding and synthesizing seminar for students seeking to be classroom and/or resource room teachers of exceptional children. Focus is on the applied aspects of assessment, prescriptive teaching, teaching evaluation, individual and group behavior management techniques, instructional methodologies, and instructional materials. Prerequisite: concurrent enrollment in 353.

496—1 to 8 READINGS AND INDEPENDENT STUDY IN SPECIAL EDUCATION. Study of highly specific problem area in the education of exceptional children. Open only to selected seniors and graduate students. Topic and conditions of study must be approved via contract. Hours may be repeated, with a maximum of 8 hours applicable to a degree. Prerequisite: consent of instructor.

498—4 SEMINAR: SELECTED TOPICS IN SPECIAL EDUCATION. Special education concepts, teaching strategies, and current concerns to various educational personnel. May be repeated, with a maximum of 8 hours applicable to a degree. Prerequisite: consent of instructor.

499—16 SPECIAL EDUCATION STUDENT TEACHING. The practice of teaching, under the immediate supervision of a critic teacher and the general supervision of a University instructor. Involves lesson preparation and planning of instruction. Not for graduate credit.

SCHOOL OF FINE ARTS AND COMMUNICATIONS

The mission of the School of Fine Arts and Communications is to broaden and intensify experiences in the fine and communicative arts and related sciences in the geographical area served by the University; to impart to all University students an awareness of the cultural values of the arts; in visual and plastic arts, in design, music, speech communication, theater and dance, speech pathology and audiology, radio-television, journalism, and film; 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 objectives are:

1. To provide preprofessional and professional training in art and design, music, dance, theater, speech pathology and audiology, radio, television, journalism, and film.
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 of the campus and off-campus communities; 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 off-campus communities through our service units and instructional laboratories: Broadcasting Service, Speech and Hearing Center, University Theater, bands, choruses, orchestras, quartets, and recitals.

Students may be further informed about each specific program by reading the descriptions included elsewhere in this section.

ART AND DESIGN

Professors:

Davis, D. F. (Chairperson)
Hampton, P. J.
Hilberry, H. H.
Huntley, D. C.
Malone, R. R.
Richardson, J. A.
Smith, M. J.

Associate Professors:

Anderson, D. J.
Coleman, F. W.
Daw, L. M.
Decoteau, P. H.
Gipe, T. D.
Ringering, D. L.
Smith, J. E.
Weber, J. A.

Assistant Professors:

Colby, T. B.
Dresang, P. A.
Weaver, R. C.

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 degree 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 providing for a major in: drawing, painting, printmaking, sculpture, ceramics, fiber/fabric, graphic design, photography, jewelry and multimedia; in art historical studies; or professional preparation for the future teacher of art at the elementary or secondary levels. A course is also offered in glass blowing.

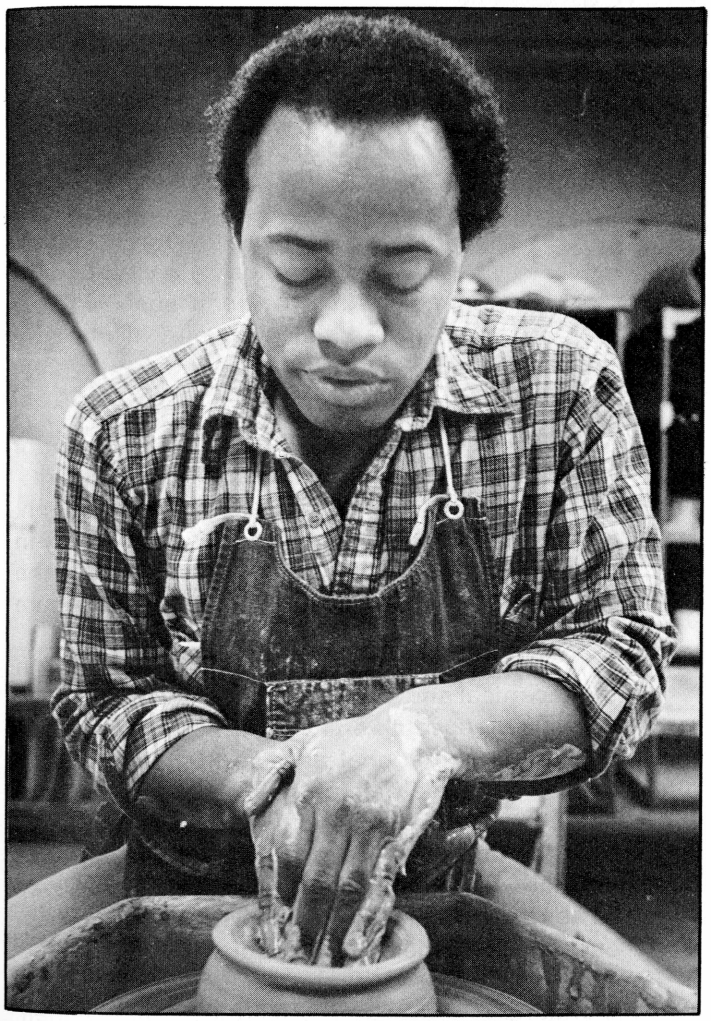
To augment the academic program, the Department of Art and Design has a comprehensive program in the visual arts which includes a Visiting Artist Program and an Exhibitions Program. These programs provide an opportunity for both general students and art majors to come in contact with well-known artists and artworks that are brought to the University. The Department of Art and Design cosponsors some of these programs with the cooperation of the University's Office of Cultural Arts and University Museums.

Students who have graduated from accredited high schools are admitted to the B.A., B.S., and B.F.A. programs. A grade-point average of 3.4 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. A student must have a cumulative grade-point average of 3.5 on all work and a 4.0 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

Individuals majoring in art find career opportunities in a wide variety of professional fields, including 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 undergrad-

uate programs in art also prepare students for graduate study in their fields of specialization. The quality of the undergraduate programs has been such that the graduates of the Department of Art and Design at Southern Illinois University at Edwardsville have been able to compete very successfully for career opportunities.



Degree Requirements

Bachelor of Arts Degree, Art (Studio Art)

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Art 96
- Foreign Language 12
- Art 100-15, 202-15, 225-9 39
- 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 6

Electives or Minor 36

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Bachelor of Arts Degree, Art (Art History)

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Art History 75
- Foreign Language 12
- Art 225-9 9
- 54 hours from the following: GHA 310, 311, 312, 315, 316, 317, Art 424, 447, 448, 449, 469, 481, 483 54

Electives and/or Minor 57
- (Majors are urged to elect Philosophy 360 and Anthropology 305 plus courses in nonvisual arts and history. Studio work is encouraged and additional language study advised.)

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Bachelor of Science Degree, Art (Studio Art)

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Art 94
- Art 100-15, 202-18, 225-9 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 elective 3
- Art education courses 289, 300a, b, c, d, 365 19
- Art electives 12

Professional Education Electives 38
- (Includes: C. Ed. 305; Ed. El. 351b; Ed. Fd. 355; Ed. S. 215, 352; Sp. Ed. 414.)

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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 3.5 on all work and a 4.0 grade-point average in studio courses to remain in the program.

General Studies Requirements 32
- GSK 12
- GSS 8
- GSM 8
- GHA 4

Requirements for Major in Art 118
- Art 100-15, 200-21, 304-1, 331-3, 441-3, 405-3, 15 hours from at least five of the following: Art 302, 305, 310, 358, 377, 384, 386, 393 61
- Major medium (300 and 400 level) 21
- Minor medium (300 and 400 level) 12
- Art history (200, 300 and 400 level) 18
- Thesis (499) 1-6

Academic Electives[1] 42

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[1]Art history courses are not included in these hours. Work in foreign languages is strongly recommended.

Bachelor of Fine Arts Teacher Certification

Students desiring secondary teaching certification with the Bachelor of Fine Arts degree may count 6 hours of

education courses in the 18 hours of electives. The remaining hours of required education and art education work are in addition to the basic 192 hour degree.

Bachelor of Science Degree, Art Education, School of Education

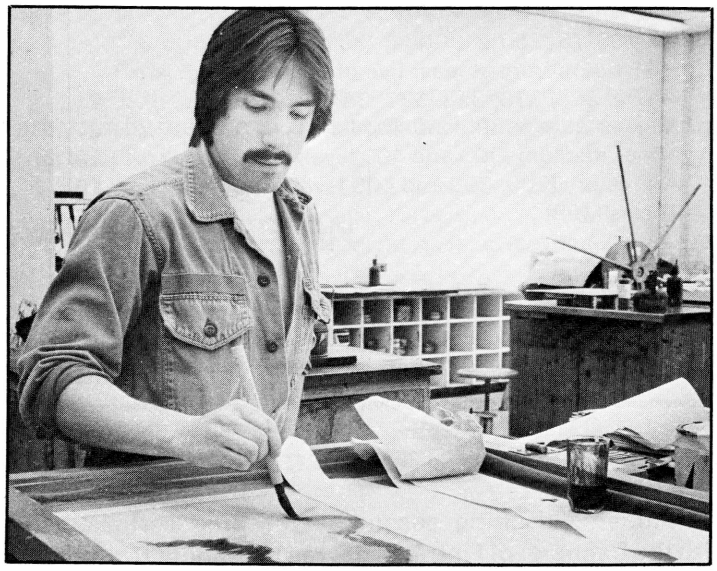
General Studies Requirements	60
Requirements for Major in Art Education	70
Art 100-15, 202-15 (a, b, c, d, required: elect e, f, g, or h), 225-9	39
18 hours from at least five of the following: Art 302, 305, 310, 312, 341, 358, 377, 384, 386, 393	18
Art history	3
Art education courses 289, 300d, 365	10
Art 300a, b, c (for K14 certification)	(9)
Professional Education Courses	33
See Secondary Education requirements	
Electives	29
	192

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 not required for graduation from Southern Illinois University at Edwardsville; permission to participate is extended in recognition of outstanding artistic ability.

Minor Requirements

A student desiring a minor in art should take the following courses: Basic Studio — Art 100—15; Intermediate Studio — Art 202—15 and History of World Art — Art 225—6 for a total of 36 hours.

A student desiring a minor in art history should take the following courses: History of World Art — Art 225—9 plus 18 additional hours from 400-level art history courses or 300-level GHA courses in art history for a total of 27 hours.



MASS COMMUNICATIONS

Professors:
Regnell, J. A. (Chairperson)
Rider, J. R.
Shaheen, J. G.
Ward, W. G.
Winter, K.

Associate Professors:
Killenberg, G. M.
Tirre, B. C.

Assistant Professors:
Maynard, R.
Willis, W. J.

Visiting Lecturers:
Daniel, A.
Landers, J.

The professional program leading to the Bachelor of Science degree in mass communications (television-radio, journalism) rests on three general beliefs about education:

1. That the liberal education of students, primarily in the liberal arts and sciences, is fundamental to the future success in the media and should constitute the major portion of their college experiences;
2. That students should become proficient enough in the technical and production aspects of the media and knowledgeable enough in the management, sales, and operational aspects that they will be able to enter the field of their choice as valuable employees after graduation;
3. That the liberal education and media experience and knowledge should be integrated in such a way so as to insure maximum opportunity for success as potential leaders in the media.

Important as the increased proficiency in techniques may be to undergraduate students, it is essential that their horizons should be broadened beyond the confines of the college classroom and the immediate program objective. They should have the opportunity to study the basic principles of our economic systems as they apply to the media, to dissect communication messages of the mass media to discover their ethical and emotional appeals, to investigate the psychology and sociological responses of the audiences in terms of their desires and their needs, and to examine the special responsibilities of the communicator to those audiences. Their educational experience should include the development of professional standards of performance and decision-making. To help with this development we offer a program of student internships in cooperation with the media in St. Louis and Metro-East.

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 schedule will permit. The latter would obviate the

necessity for the minor. Advisers are assigned to each major when he or she enters the department, and they remain with the student as he or she completes his or her study. There is a core of course work required of each student regardless of major, but beyond this each program is designed to fit the needs of the individual and his or her career aspirations.

Core requirements in journalism are 103, 201a, b, 210a, b or 212, 245 or 345 or 346, 303a, b, 320 or 321, 340, and 410. Electives must be taken from other mass communications offerings to total 54 hours of departmental courses.

Core requirements in television-radio are 100, 200, 201, 230, 252, 400, 402 or 403, and 408. Electives must be taken from other mass communications offerings to total 53 hours in departmental courses.

The Department of Mass Communications and its programs in Television-Radio and Journalism are accredited by the American Council on Education in Journalism and Mass Communications. Departmental programs are well-respected in media and business circles for their professional quality; and graduates have risen to responsible positions in the mass media in Illinois and metropolitan St. Louis as well as many major markets across the country.

For more detailed information regarding our programs please contact Dr. John A. Regnell, Chairperson, Department of Mass Communications.

CAREER OPPORTUNITIES

A degree in mass communications is specifically applicable in a number of ways: television and radio stations, newspapers, magazines, industrial and corporate publications, advertising agencies, teaching, production agencies, photography, film work, cable television, 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.

Degree Requirements

Bachelor of Science Degree, Mass Communications (Television-Radio)

General Studies Requirements	60
Requirements for Major in Mass Communications	53
Television-Radio 100, 200, 201, 230, 252, 400, 402 or 403, 408	33
Television-Radio electives (five of the following 4-hour courses: 202, 301, 302, 356, 359, 390, 401, 404, 405, 406, 407, 410, 450, 466)	20
Minor Outside Mass Communications (A double major is recommended.)	29
Electives (May include a minor in journalism.)	50
	192

Minor Requirements - Television/Radio

A minor in television-radio is possible by taking the following courses: 100, 200, 201, 230, 252, 401 for a total of 25 hours.

Bachelor of Science Degree, Mass Communications (Journalism)

General Studies Requirements	60
Requirements for Major in Mass Communications	54
Journalism 103, 201a, b, 210a, 210b or 212, 245 or 345 or 346, 303a, b, 320 or 321, 340, 410	44
Journalism, selected television-radio, and electives from other schools on campus as approved by the Department of Mass Communications	10
Minor Outside Mass Communications (A double major is recommended.)	28
General Electives (or additional minor in television-radio)	50
	192

Minor Requirements - Journalism

A minor in journalism consists of 103, 201, 210a, 320, 340, 402, and 415 for a minimum of 28 hours or alternate courses as approved by the director of journalism.

Mass Communications in a Democratic Society Minor

This minor is intended to be useful to those students in the University who do not wish to pursue a professional minor in the media. It is suggested that this sequence might be particularly valuable to those whose major can be complemented by an understanding of the role the media have played and are playing in the evolution of our society. Requirements for the minor are as follows: one from among Television-Radio 100, 159, or Journalism 101; also Television-Radio 200, 400, Television-Radio 401 or Journalism 483, Television-Radio 407, Television-Radio 450, or Journalism 415, Journalism 245, 345. A total of 31-32 hours must be taken.

MUSIC

Professors:
Claudson, W. D.
Joseph, W. A.
Kendall, J. D.
Kerr, R. S.
Lampe, M. M.
Mellott, G. K.
Perry, R. K.
Schieber, R. W.
Tarwater, W. H. (Chairperson)
Van Camp, L. W.
Williamson, R. N.
Woodard, J. P.

Associate Professors:
Haley, J. A.
Loucks, D. G.
Pival, J. E.
Stripling, L.
Turner, S. T.

Assistant Professors:
Oldani, R. W.
Rogers, K. C.
Scott, J. A.
Stamps, D. B.

Instructor:
La Reau, M. A.

Assistants in Music:
Gross, J. G.
Perry, L. W.

A fully accredited member of the National Association Schools of Music, the Department of Music believes that each student 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 the General Studies program. The ultimate aim is to develop skilled and informed musicians, able scholars and/or competent and enthusiastic teachers.

The Department of Music offers the following undergraduate degrees: Bachelor of Arts with major in Music; Bachelor of Music with specializations in Performance, Music Education and Theory/Composition. The B.A. degree is designed for students who wish to specialize in music with a Liberal Arts curriculum. It may also serve as the foundation for advanced studies in music. The Bachelor of Music degree is a curriculum designed to prepare students for professional careers in music and/or advanced graduate studies 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 are: 1) public and private schools positions in general music, or as orchestra director, band director, or choral director; 2) professional performances in symphony orchestras, studio orchestras, jazz groups, choruses, solo recitals, opera, oratorio and musical comedy; 3) composing and arranging; 4) music publishing; 5) music management and sales; 6) music criticism; 7) music librarianship; and 8) private studio teaching.

ADMISSION AND ADVISEMENT

Students seeking admission to any music major degree program must perform an acceptable audition prior to enrollment. No student is permitted to register for private lessons until the audition requirement is completed. To schedule an audition write or call the Department office.

Students desiring to pursue any of the music major programs are advised to file the Declaration of Major immediately and to consult a music adviser prior to registration. Each student is then issued the appropriate curriculum guide and Music Student Handbook.

Degree Requirements

Bachelor of Arts Degree, Music

These courses are for students who wish to specialize in music as part of their general cultural education. They may also be taken as background for advanced studies in music.

General Studies Requirements (Waive GHA-8)	60
Requirements for Major in Music	69
Foreign Language	12
GHA 230	(4)
Music 105-12, 205-12, and electives	39
Music private applied (2 hours per quarter)	12
Music major ensemble	6
Minor Concentration	24
Electives	39
	192

Bachelor of Music Degree (Music Performance)

General Studies Requirements (Waive GHA-8)	60
Requirements for Major in Music	118-126[1]
Foreign Language	12[1]
Music 105-12, 205-12, 309a, 312a, 318a, 326a, 442a	39[2]
Music 357	9
Music, private applied (major instrument)	40-48
Music, major ensemble (1 hour per quarter)	12[3]
Music, class piano, or secondary instrument/voice	6
Electives	14-9
	192-195

[1]Students with a specialization in voice should include two years of foreign language (generally one year each of French and German). The student should consult with the music adviser as to the sequence to be followed.
[2]Students with a specialization in piano may substitute 9 hours in Music 413 and/or 461 in lieu of 309a, 312a, and 442a.
[3]Students with a specialization in piano may substitute a maximum of 6 hours in 365 as partial fulfillment of this requirement.

Bachelor of Music Degree (Music Education)

General Studies Requirements (Waive GHA-8)	60
Requirements for Major in Music	77-96
Music 105-12, 205-12, 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[4]
Voice proficiency or class	0-3[4]
Music, class strings, woodwinds brass — 2 hours in each area	0-6[4]
One year of French or German is recommended for the student with a choral emphasis in music education.	
Professional Education Requirements	37
GSS 370	(4)[5]
Foundations of Education 355	4
Music 301	9
Counselor Education 305	4
Special Education 400	4
Elementary Education 351c, Secondary Education 352o	12
Electives	18-8
	192-197

[4]Study on a secondary instrument and/or voice is possible if requirements for class instruction are met by proficiency.
[5]Secondary Education 215 may be substituted.

Before being approved for student teaching, students must satisfy the course of study and proficiency prerequisites as established by the Music Department.

Bachelor of Music Degree (Theory/Composition)

General Studies Requirements (Waive GHA-8)	60
Requirements for Major in Music	117
Music 105-12, 205-12, 309-9, 312-9, 326-9, 357-9, 442-9	69
Music, private applied	18[6]
Music, major ensemble	12
Music electives	18[7]
Electives	15
	192

[6]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.
[7]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 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.

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 GHA 136 cannot be applied toward completion of the minor requirements. In order to secure the minor in music, the student must complete a total of 30 hours in approved music or General Studies courses with an overall average of 3.6 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.
Salden, D. R. (Chairperson)
White, H. L. (Dean, School of Fine Arts and Communications)

Associate Professors:

Goehe, P. A.
Graebe, A. M.
Munshaw, J. A.
Stoppe, R. L.
Valley, D. B.

Assistant Professor:

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. They often strive to internalize their formal learnings, and to seek increased understanding and competence in their relationships.

Speech communication at SIUE 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 at the dawn of western civilization. Courses focus on two-person interaction—from casual talk in friendships to interviews in formal work situations; small group interaction—from family communication patterns to task-oriented talk in work groups; speaker-audience interaction—from impromptu remarks at community meetings to formal rhetoric in national politics; 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 the complex communication patterns.

Students have the chance to 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 of persons at SIUE who cooperate in studying and improving human communication. Speech communication majors and minors are advised initially by the Director of the Undergraduate Program. After taking a few courses and having the chance to identify faculty members who share their interests, students are asked to select permanent advisers. Advisers and students then work together, on a continuing basis, to plan and coordinate an individualized program of coursework. Students who think they may share our interests are encouraged to contact the Director of the Undergraduate Program for more information about academic programs in speech communication.

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 the kinds of jobs and work environments to which they are suited best and to helping them select minor, cognate, and elective courses to complement the speech communication major and prepare for that career.

Degree Requirements

Bachelor of Arts or Bachelor of Science Degree, Speech Communication

General Studies Requirements (Waive GHA-8)	60
Requirements for Major in Speech Communication	48
Foreign Language	(12)
Speech Communication 301, 330, 410, and 302b	16
Electives in Speech Communication	32
Minor	24
Courses in Cognate Fields (other than student's minor, to be chosen at discretion of student and adviser)	12
Electives	48
	192

Majors seeking certification for teaching must take the program outlined above, plus SpC 461, and meet the 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 these activities. SpC 489, an internship course, enables qualified juniors and seniors to gain hands-on professional experience in the career environments that they anticipate entering after graduation.

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 meet current certification requirements as set forth by the Illinois Office of Education.

Minor Requirements

A 24-hour minor (30 hours for second teaching field) in speech communication is composed of any courses offered in the speech communication curriculum which the student and his or her adviser decide best fit the student's 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 Speech Communication Director of the Undergraduate Program.

General Studies courses are not applicable to the 24 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 Professors:

Buck, C.
Engleman, D.

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. The speech-language pathologist studies human communication, its normal development, and its disorders. Included in his or her responsibilities may be the identification, evaluation, and remediation of individuals having communicative disorders; in addition, the speech-language pathologist is involved in preventing disorders of speech, hearing, and language through public education, early identification of problems, and research into the causes and treatment of such disorders.

The audiologist is concerned with normal and defective hearing. This individual's responsibilities include the prevention of hearing loss and the identification and rehabilitation of those who have impaired hearing. The audiologist utilizes tests and instruments to determine whether a hearing loss is present and then works in a variety of ways to assist the person to make the best use of residual hearing. Like the speech and language pathologist, the audiologist is also 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) and the State of Illinois, the student wishing to pursue a career in either speech pathology or audiology must complete a master's degree. A secondary concentration in speech pathology and audiology is not offered on the undergraduate level. Specific requirements and options must be approved by the Department.

The Department of Speech Pathology and Audiology has a faculty of ten, all of whom are certified as clinically competent by ASHA. The terminal program in speech pathology is accredited by the Education and Training Board of the Board of Examiners in Speech-Language Pathology and Audiology of ASHA and entitled by the Illinois State Board of Education.

Any student 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. The majority 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 and, currently, employment possibilities are bountiful. Some graduates establish private practices or affiliate with physicians.

Degree Requirements

Bachelor of Arts or Bachelor of Science Degree, School of Fine Arts and Communications

General Studies Requirements (Waive GHA-8)[1] 60

[1]Must include basic psychology.

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[1] 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 401, 450[2], 462, or approved elective 4

Requirements in Related Areas 12
- Psychology 301, 305 8
- Special Education 400 4

Requirements for Illinois Certification in Speech and Language Impaired 25-33
- GSS 370 4
- Counselor Education 305 4
- Elementary Education 451 8-16
- Foundations of Education 355 4
- Health and Physical Education 5

Approved Electives 41-27
- Students are encouraged to pursue a minor in a related field.

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Twelve hours of foreign language are required for the B.A. option.

[1]SpPA 442, 443, and 444 are requirement for student preparing to student teach.
[2]Required for Illinois Certification in Speech and Language Impaired.

THEATER AND DANCE

Professors:
Kluth, L. F.
Vilhauer, W. W. (Chairperson)
Wiltz, A. III

Associate Professors:
Brown, S. M.
Mackie, W. C.
Sweezey, C. O.

Assistant Professors:
Grivna, W. J.
Shaul, K. J.
Sill, D. J.
Tallant, A.

The Department of Theater and Dance provides instruction and practical performance experience in all phases of dramatic theater production for the stage.

The Department furnishes a liberal arts orientation for students of the University through General Studies courses and main stage and experimental theater productions. Students majoring in theater or dance may elect any one of three possible specialization programs: performance emphasis, design and technical emphasis, dance emphasis.

Practicum training studios enable the student 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 Quonset Theater, the University Theater, and the Concert Dance Company.

All students desiring further information about work in theater and dance should contact the Theater and Dance office. Students must be advised by a member of the departmental faculty who will issue permit to enroll forms.

Career Opportunities

An undergraduate degree in theater and dance provides the student with the necessary preprofessional or professional theater and dance positions in acting, directing, dance, choreography, technical production, and design. Since professional theater and dance employment opportunities are very competitive and limited, career opportunities are largely dependent 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 provides career opportunities in television, radio, and areas related to promotional work.

Degree Requirements

Bachelor of Arts or Bachelor of Science Degree, Theater and Dance

PERFORMANCE EMPHASIS

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Theater (performance emphasis) 96
- Theater 100a-8, 100q-12, 100v-4, 200a-8, 200m-2 200q-2, 200u-8, 200v-4, 300a-8, 300b-4, 300m-4, 300r-4, 400r-4, 401a and b-8, 404a and b-8, 400a, p, r, u, or q-8 96

Electives 36

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DESIGN AND TECHNICAL EMPHASIS

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Theater (design and technical emphasis) 96
- Theater 100a-4, 100d-4, 100l-4, 100s-4, 200c-4 200d-4, 200k-2, 200l-4, 200m-2, 200q-2, 200s-4, 300c-4, 300d-4, 300m-4, 300r-4, 302-4, 400w-4, 401a and b-8, 404a and b-8, Art 100a-3, 100b-3, 100c-3, 100d-3, 100e-3, 202q-3 96

Electives 36

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DANCE EMPHASIS

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in Theater (dance emphasis) 92
Theater 100h-4, 100u-4, 200h-4, 200n-4, 200t-8, 300h-4, 300o-4, 300t-12, 300z-2, 302-4, 400e-4, 400h-12, 400o-4, 400t-12, 400z-2, 402-4, 403-4 92
Theater Electives 4
Electives 36

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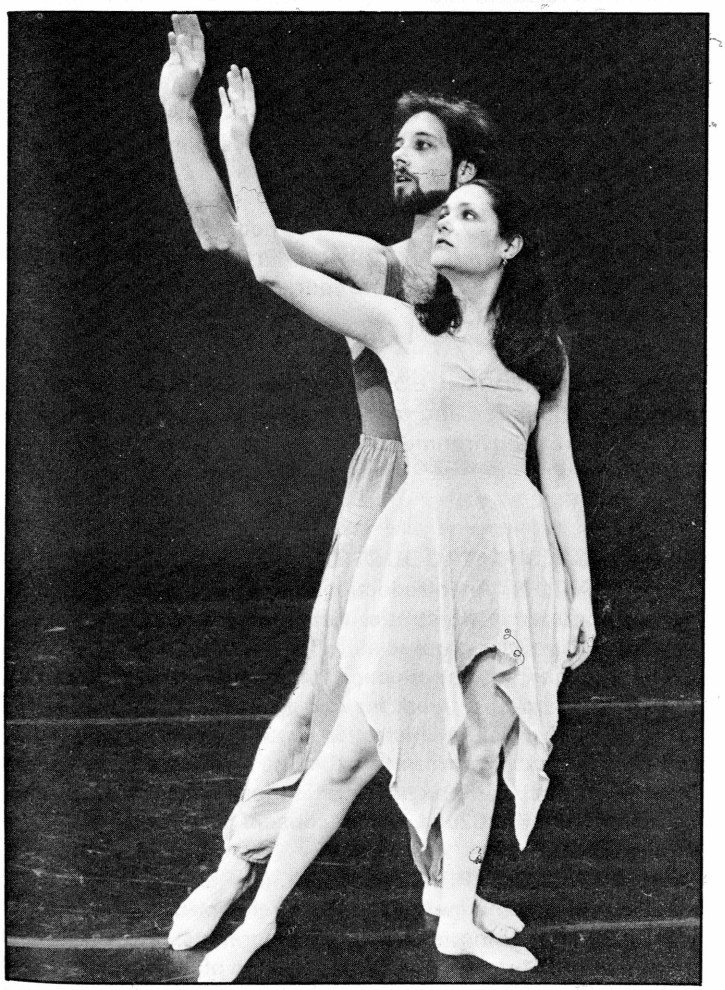
Students pursuing the Bachelor of Arts degree must complete 12 hours of foreign language.



Minor Requirements

A 40-hour minor in theater must be planned in consultation with the Chairperson of Theater and Dance prior to advisement.

Theater Education Requirements

Students desiring to qualify for teaching theater in the secondary schools must first be certified to teach in one of the approved areas listed in the Secondary Education section of this catalog. SIUE has no approved certification program in theater education; however, it is possible to qualify to teach theater on the basis of a minor provided that one holds a certificate that is based upon a major in another field. In theater education, the minor consists of 40 hours in theater or dance. This minor must be planned in consultation with the Chairperson of Theater and Dance prior to advisement. It is suggested that the student also obtain a 30-hour minor in Speech Communication or English.

COURSES

ART AND DESIGN

Fees are assessed for all studio courses. These fees, if any, are noted at the end of each course description. Fees can be paid at the Art Office at Wagner Building 194 at the beginning of the quarter. After that time they will be billed to the Bursar's Office.

Students dropping classes after the second week of the quarter will not be eligible for a cancellation of studio fees.

Art Education Courses: 289, 300, 364, 365, 408, 460, 466.
Art History Courses: 225, 424, 447, 448, 449, 469, 481, 483; GHA 310, 311, 312, 315, 316, 317.
Studio Courses: 050, 051, 100, 202, 302, 305, 310, 312, 325, 331, 341, 358, 384, 386, 393, 401, 402, 410, 412, 417, 418, 420, 430, 441, 484.

050—3 AVOCATIONAL PAINTING. An exploration of painting and drawing media for the interested non-major. Emphasis upon individual development of understanding and appreciation of painting media through direct experience in the practice of 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. An introduction to 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.

100—15 (3,3,3,3,3) BASIC STUDIO. (a) Drawing I. Introduction to some of the various approaches to drawing, utilizing a variety of media. (b) Visual Organization I. Introduction to and exploration of art concepts and form with emphasis on color. Work in two dimensions. (c) Drawing II. Continuation of (a) with emphasis on development of ideas. (d) Visual Organization II. Continuation of (b) with emphasis on three dimensions. (e) Life Drawing. A study of the human figure, utilizing a variety of media and further development of ideas and composition as they relate to the human figure. 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. This course will provide a basic technical and conceptual approach to sculpture. Such processes as casting, carving, welding and construction can be explored. Stress is placed on personal expression and understanding the nature of sculptural

development. (b) Printmaking. Introduction to fundamental printmaking techniques in relief and intaglio methods and multiple color printing. (c) Ceramics. Working with clay as an art medium. The student will also develop skills with glazing and firing, employing basic technique and technology while pursuing personal approaches and ideas. (d) Painting. Introduction to and exploration of oils as a medium of expression. (e) Drawing. Exploration of various approaches to drawing and composition including some figure work. (f) Design. Problem solving relative to two-dimensional visual design, exploring a variety of tools and media stressing the organization and structure of creative design. (g) Watercolor. Introduction to and exploration of tools and media and their application. (h) Weaving/Textiles. Introduction to beginning weaving, off-loom fibers and fabrics. Techniques include primitive weaving, wrapping, stitchery, quilting, tie-dye and bleach-out. 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—9 (3,3,3) HISTORY OF WORLD ART. A study of painting, sculpture, and architecture from prehistoric to modern times. Emphasis on the major periods and great styles in relation to their geographical and social backgrounds. Open to all students. (a) The art and architecture of ancient and classical man. (b) Art of the medieval epoch. (c) Art from Renaissance to the present.

289—3 PRACTICUM IN ART EDUCATION. An introduction to the profession of art education in the elementary and secondary schools. Readings, discussions, observations and involvement with children in selected public/private schools. Clinical experience required. Prerequisite: third quarter freshman.

300—9 (3,3,3) ART EDUCATION IN THE ELEMENTARY SCHOOLS. For students preparing to teach in elementary schools. A study of objectives, theory, and practice of art activities for grades K-6; includes clinical experience in selected schools. (a) Exploration and experimentation of a variety of materials used in the teaching of art. (b) The development of motivational and instructional materials used in the teaching of art concepts. (c) Materials and methods for teaching art on the elementary level from the art specialist's perspective. Prerequisite: junior standing or permission of instructor. Fee: $7.98.

302—12 (3,3,3,3) BASIC STILL PHOTOGRAPHY. An introduction to basic still, black and white photography as an art form, including the history and aesthetics of photography. Students must provide their own cameras, light meters, film, and photographic paper. This course includes 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.

304—1 SEMINAR I. Preparation for professional career as an artist-teacher at the college or university level. An acquaintance with practical problems, including job analysis, job application, exhibiting, galleries, studio development and general problems confronting those who pursue college or university teaching careers. Prerequisite: upperclass student pursuing BFA degree or consent of instructor.

305—12 (3,3,3,3) CERAMICS. Continued study of the clay medium as a means of expression. A more advanced sequence of study incorporating additional areas of technical and aesthetic development. (a) Introduction to the potter's wheel. (b) Intermediate handbuilding. (c) Intermediate wheel work. (d) Advanced work utilizing various handbuilding and wheel techniques. Should be taken in abcd sequence. Prerequisite: 202c. Fee: $19.98.

310—3 to 6 PAINTING. Intensive study of painting as a medium of expression. Individual rather than group problems are engaged. May be repeated to a maximum of 12 hours. Prerequisite: 202—9, including 202d. Fee: $7.98.

312a,b,c—9 (3,3,3) ADVERTISING AND GRAPHIC DESIGN I, II, III. (a) I: The basic tools of the advertising designer. Introduction to styles of type, lettering techniques, layout problems, and reproduction processes for advertisements and illustrations in papers, magazines, posters, television, and pamphlets. Creative exercises in designing with type and illustrations. (b) II: Includes indication techniques for layouts in television and print media, incorporating illustration, photography, and typography. (c) III: Emphasizes the development of intermediate skills in preparing art for reproduction. Intern experiences are encouraged. Prerequisites: 200—9, including 202f, plus 302a or equivalent. Fee: $19.98.

325—3 to 6 STUDIO. No more than 6 hours per quarter. May be repeated to a 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. Exploration of various drawing techniques and media while intensively studying the human figure in environments. May be repeated to a maximum of 12 hours. Prerequisite: 9 hours of drawing or consent of instructor. Fee: $7.98.

341—9 (3,3,3) INTRODUCTION TO CARTOONING AND ILLUSTRATION. An introduction to various aspects of cartooning and commercial illustration. (a) Emphasis on cartooning and development of the graphic story (i.e., "comic strip"), includes lettering techniques, introduction to photomechanical processes, and preparation of artwork for reproduction. (b) Exploration of story and advertising illustration. Introduction to illustration techniques. (c) Intermediate study in story and advertising illustration. Preparation of illustration for reproduction. Prerequisites: 100—15, 202b, d, e, f, or consent of instructor.

358—12 (3,3,3,3) PRINTMAKING. (a) Relief. A study of the materials, tools, and methods used in relief printing. (b) Intaglio. Fundamental etching, engraving, collographic, and embossing processes. (c) Serigraphy. An investigation of the various stencil processes used in screen printing. (d) Lithography. A study of the basic theories and processes of 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. The development of art programs emphasizing the scope and sequence of major goals, activities, and strategies important to the creative growth of children and youth. Prerequisite: junior standing or permission of instructor.

365—3 ART EDUCATION IN THE SECONDARY SCHOOLS. This is a course for education students specializing in art. A

teaching methodology course dealing with projects designed to develop awareness of technical and aesthetic needs of youth. The course will cover reading, discussion, planning and teaching with an emphasis on studio and art appreciation. Includes clinical experience at a selected high school.

377—9 (3,3,3) MULTIMEDIA. (a) Qualities of materials; (b) process and systems; (c) four dimensional work. Should be taken in sequence. Prerequisite: 100—15 or consent of instructor. Fee: $7.98.

384—3 to 6 WEAVING AND DESIGN IN TEXTILES. Beginning and advanced problems in frame and floor loom weaving, off-loom fiber techniques, batik, printing, and quilting. May be repeated to a maximum of 12 hours. Prerequisite: 202—9. Fee: $7.98.

386—3 to 6 JEWELRY AND DESIGN IN METALS. The basic processes involved in forming and finishing art objects of metal as well as the lost wax process of casting metal via vacuum, centrifugal, gravity and steam techniques are investigated. May be repeated to a maximum of 12 hours. Prerequisite: 202—9. Fee: $7.98.

393—12 (3,3,3,3) SCULPTURE. Problems in modeling, carving, casting, and construction. Prerequisite: 202—9, including 202a. Fee: $19.98.

401—3 to 6 RESEARCH IN PAINTING. May be repeated to a maximum of 12 hours. Prerequisite: 310—12. Fee: $7.98.

402—3 to 6 RESEARCH IN SCULPTURE. An exploration of current trends in sculpture-making, with an emphasis on the interaction of technique and idea. May be repeated for a total of 12 hours credit. Prerequisite: 393—12. Fee: $19.98.

405—3 SEMINAR II. Preparation for a professional career as an artist or artist-teacher at the college or university level with emphasis on changes in the professional artworld. Includes career analysis, portfolio preparation, museum and gallery relation and general problems confronting those who pursue careers in higher education. Course activities coordinated with the visiting artists' program. Prerequisite: 304 for undergraduates.

408—12 (3,3,3,3) ART EDUCATION FOR ELEMENTARY TEACHERS. (a) Art Education for the Handicapped. An investigation of the needs and characteristics of the special child and the related art curriculum. The "special child" includes the mentally, physically, and emotionally handicapped. (b) Development of Motivational and Instructional Materials for Art Education. The development of motivational and instructional materials used in the teaching of art concepts. Emphasis on designing learning centers, kits, and games, and other instructional materials for use in the classroom. (c) Methods and Materials for the Classroom Teacher. Integrating art for the classroom teacher in the elementary curriculum. A survey of appropriate curriculum models. (d) Crafts in the Elementary School. A study and experimentation of the use of the crafts in the elementary school and other educational and recreational programs. Emphasis on two and three dimensional activities which have application in the traditional and nontraditional program. A wide variety of media is explored. Prerequisites: (a) 300a; (b,c,d) 300a, student teaching, consent of instructor. Fee: $7.98.

410—3 to 6 RESEARCH IN PRINTMAKING. May be repeated to a 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 a total of 12 hours credit. Prerequisites: 302—9, 312—9, 341—3 or equivalent and/or consent of instructor.

416—3 to 6 GLASSWORKING. Techniques and assignments in basic methods of forming hot and cold glass. The development of creative ideas related to the use of glass as an art medium. May be repeated for total of 12 hours credit.

417—3 to 6 MULTIMEDIA II. Independent work in multimedia. May be repeated for total of 12 hours credit. Prerequisite: 377—6 or consent of instructor. Fee: $7.98.

418—3 METALSMITHING AND DESIGN. Traditional methods of forging metal with forge, hammer, and anvil are explored with emphasis toward application of these skills to the creation of sculpture. Prerequisite: 386—9 or 393 or consent of instructor.

420—3 to 6 RESEARCH IN CERAMICS. Supervised research in specific areas of technical and aesthetic interest. May be repeated for a total of 12 hours credit. Prerequisite: 305—12 or consent of instructor. Fee: $19.98.

424—9 (3,3,3) BAROQUE AND ROCOCO ART. A study of the visual arts throughout Europe during the seventeenth and eighteenth centuries. (a) Southern European Baroque. The requirements of the Catholic Counter-Reformation and its influence on painting, sculpture, and architecture in Italy and Spain. (b) Northern European Baroque. The spirit of the Baroque in Catholic Flanders, the Protestant Baroque of the Dutch Republic and French Classicism. (c) Eighteenth Century, Rococo, rationalist, romantic, and middle class styles during the eighteenth century, examined against the revolutionary shift from Baroque to modern society. May be taken independently. Prerequisite: 225—9 or consent of instructor.

430—3 to 6 STUDIES IN ART I. Advanced work for upper division undergraduate students or graduate students in area of specialization or multi-media work under the joint supervision of the respective areas: art education, ceramics, drawing, fiber/fabric, graphic design, jewelry, multi-media, painting, photography, printmaking or sculpture. May be repeated to a 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 a maximum of 12 hours. Prerequisite: 12 hours of 300-level art. Fee: $7.98.

447a,b,c—9 (3,3,3) ANCIENT ART. (a) Prehistoric times through Egypt and Mesopotamian, (b) Aegean and Greek civilizations, (c) Etruscan and Roman civilizations. Prerequisite: 225—9 and/or consent of instructor.

448—9 (3,3,3) EARLY CHRISTIAN AND MEDIAEVAL ART. (a) Early Christian and Byzantine Art. A survey of problems related to art and architecture produced in Christian communities and under the aegis of the Byzantine Empire until the fall of Constantinople. (b) Early Mediaeval and Romanesque Art. A

study of the development of architecture and art in Europe from the fall of the Roman Empire to the formulation of the Gothic style. (c) Gothic Art. A survey of major developments in architecture, sculpture, and painting in Europe from the earliest formulation of Gothic style to its decline in the Renaissance period. Prerequisite: 225a—3 or consent of instructor.

449—9 (3,3,3) RENAISSANCE ART. Architecture, sculpture, and painting from the waning of the Middle Ages to the beginnings of the Baroque period. (a) The Renaissance in Northern Europe. (b) The Renaissance in Italy and the south. (c) Mannerism in Europe. May be taken independently. Prerequisite: 225—9 or consent of instructor.

460—12 (3,3,3,3) RESEARCH IN ART EDUCATION. (a) Introduction to Styles and Topics of Research in Art Education. Review, analysis and criticism of current research in the field. (b) Readings in Selected Area of Research. Selection of a topic and development into a research study is explored through periodicals, books, and abstracts. (c) Design of Original Research Problems. Selection of a research assignment in one of the following areas: analyzing works of art in relation to another variable, curriculum development models, human development in the arts, alternative art programs. (d) Writing of the Selected Research Problem. Analyzing data, organizing related readings and developing the research study in final form. Prerequisite: (a) graduate standing or consent of instructor; (b) 460a; (c) 460b; (d) 460c.

466—12 (3,3,3,3) STUDIO IN ART EDUCATION. A studio course for art and elementary education majors as well as public school teachers. Explores concepts, techniques, and processes and their uses in the classroom. (a) Drawing and Painting for the Teacher. Work in the areas of drawing, watercolor, acrylic and oil paintings. Emphasis on the development of style and technique in these specialized areas. (b) Weaving for the Teacher. Work in the areas of on and off loom as well as wrapping, stitchery, and other related traditional techniques. (c) Ceramics for the Teacher. Work in the area of ceramics with emphasis on hand and wheel thrown techniques. Additional processes and approaches in the construction of ceramic ware. (d) Sculpture for the Teacher. Work with additive and subtractive methods of creating sculpture. Emphasis on the use of materials, techniques and processes used in creating three dimensional and relief forms. Prerequisites: admittance to Teacher Education Program, 300a and/or 365, student teaching. Fee: $7.98.

469—12 (3,3,3,3) THE ART OF AFRICA, OCEANIA, AND THE AMERICAS. (a) African Art. A study of the major stylistic regions of Sub-Saharan Africa with emphasis on the archaeological record, particularly as it relates to the Nok, Ife, and Benin Cultures. (b) Oceanic Art. A study of the arts of the peoples of Melanesia, Polynesia, and Micronesia. An assessment of their influences on 20th century European art. (c) Pre-Columbian Indian Art of the Americas. A study of the arts of the peoples of Mexico, Central and South America before the arrival of Columbus. (d) Post-Columbian Indian Art of the Americas. A summation of the decline of Mexican, Central, and South American cultures after European contact; the major focus is on the cultures and stylistic regions of North America. Prerequisite: 225—9 and/or consent of instructor.

481—9 (3,3,3) OBJECTIVES OF MODERN ART. A survey of the principal movements and theoretical ideas manifest in late nineteenth and twentieth-century art. Examination of the literature as it attempts to define the various developments in visual and plastic arts. (a) The Nineteenth Century, (b) 1900-1941, (c) 1941-Present. May be taken independently. Prerequisite: 225—9 or consent of instructor.

483—3 RESEARCH IN ART HISTORY. Individual research in the painting, sculpture, architecture, and related arts of the various periods. May be repeated to maximum of 12 hours. Prerequisite: 225—9 and/or consent of instructor.

484—3 to 6 RESEARCH IN WEAVING/TEXTILES. Independent and individual research in technical and conceptual problems in weaving and textiles. May be repeated to maximum of 12 hours. Prerequisites: 202h, 384. Fee: $7.98.

498—3 to 6 INTERNSHIP IN ARTS. Special and pertinent involvement in a work, study, or research activity designed and supervised by selected faculty members and the cooperating institution or organization. May be repeated to a maximum of 12 hours. Prerequisite: advanced undergraduate or graduate standing.

499—1 to 6 SENIOR THESIS. The nature of the final thesis is determined in respect to the student's major studio area and is directed by the student's major adviser. Not for graduate credit. Prerequisites: senior classification, consent of department.

JOURNALISM

101—4 JOURNALISM AND THE DAY'S NEWS. Study of the role of the press in modern society by surveying print and broadcast and how they cover the day's news; interpretation of the day's events in response to information and commentary from the media; attention to the development of mass media. A discussion centered course.

103—4 NEWS. Study of the newspaper story with experience in reporting, writing, and rewriting news; the fundamentals of copyreading.

201—8 (4,4) NEWS WRITING AND EDITING. Advanced experience in reporting and writing the news for newspapers and magazines; preparation of copy for publication in local media. (a) Campus and neighboring communities; (b) city and county government, police and courts, using home towns as beats. Prerequisite: 103.

210—8 (4,4) INTRODUCTION TO PHOTOJOURNALISM. Experience with cameras used in journalism; darkroom techniques; study of elements of good news and feature photography, weekly assignments covering news stories with camera; exercises in photo editing. Still photography, black and white, some color. Laboratory hours required. Prerequisites: 103, consent of instructor.

212—4 EDITING OF PHOTOGRAPHS AND ARTWORK. Assignment of illustration of newspaper and magazine stories; evaluation of photographs and artwork; selection, editing, and production of such artwork; study of values of photography; practical exercises in editing and displaying photography. Laboratory hours required. Prerequisite: 103.

245—4 THE CONTRIBUTIONS OF JOURNALISM TO LITERATURE. A study of the newspaper and magazine writings of such American authors as Ernest Hemingway, Mark Twain, William Cullen Bryant, Theodore Dreiser, and Stephen Crane; a study of the contemporary press for instances where writing exceeds everyday standards and may approach the status of literature; a look at history to determine where journalists—writers, photographers, cartoonists—have contributed to literature and art.

303—8 (4,4) NEWS EDITING AND DESIGN. (a) Advanced copy editing, headlining and makeup for newpapers, magazines and public relations; stress on simulating procedures of professional publication; role and performance of editors; creative editing; (b) Publication design and graphic arts. Weekly laboratory sessions required. Prerequisite: 201.

310—4 COLOR PHOTOGRAPHY IN MASS COMMUNICATIONS. How to see and use color. Shooting color positives. Printing from positive and negative film. Prerequisite: 210.

320—4 DEPTH REPORTING AND WRITING. Reporting contemporary events, problems, and issues in greater depth than required in 103 and 201; studying techniques for writing the long news story; interpretive and investigative reporting; analyzing and backgrounding the news; planning, reporting, and writing the series of articles. Prerequisite: 201 or Television-Radio 302.

321—4 PUBLIC AFFAIRS REPORTING. Affairs of city, county, and state government stressing research skills required to conduct public opinion polls, to interpret empirical data and to use scientific tools as aids for investigative and interpretive reporting. Practical assignments also with stories of socio-economic nature, such as urban renewal, poverty program, local politics. Precision reportage. Prerequisite: 201b or Television-Radio 302.

330—4 EDITORIALS. The work and the responsibility of the editor, editorial writer, and broadcast commentator with emphasis on persuasive writing and thinking. Problems, methods, policies, and styles of persuasion as they are applicable to editorials.

340—4 THE LAW OF JOURNALISM. Legal limitations and privileges affecting publishing, fair comment, criticism, contempt of court, right of privacy, copyright, and legal provisions affecting advertising.

345—4 HISTORY OF MASS COMMUNICATIONS. Development of American journalism with emphases upon the struggle for freedom of the press; outstanding men and institutions of mass communications; and social, political, and technological influences on and by print and broadcast journalism.

346—4 HISTORY AND PHILOSOPHY OF PHOTOJOURNALISM. Studying visual communicators from Matthew Brady and Lewis Hine to Henri Cartier-Bresson and W. Eugene Smith to understand the growth of photographic communication in the mass media and to gain insight into the motives behind photojournalism.

352—8 (4,4) MAGAZINE ARTICLE WRITING AND PRODUCTION. The nature of magazine operation as it applies to the staff member and the free lance writer; studies of nonfiction magazine articles with submission by students of articles for publication; experience in magazine editing and production. Prerequisites: 103, 391, or consent of instructor.

355—4 BUSINESS AND INDUSTRIAL PUBLICATIONS. The role of trade, company and institutional newspapers and magazines; how they function, how they are staffed, and how they are produced; relationship of management and administration to editorial policies. Articles will be written by students for submission to these specialized publications. Prerequisites: 103, and consent of instructor.

361—1 to 4 CONTEMPORARY READINGS IN JOURNALISM. Reading of new books about mass communications and meeting with assigned instructor to discuss 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 an area of journalism for reading and research, presenting a final written report to a faculty member who approves the plan for study and agrees to be consultant to the 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 the preparation of copy and layouts in the production of advertising for the print media. Prerequisite: 370 or Television-Radio 303.

380—8 (4,4) MASS COMMUNICATIONS AND PUBLIC RELATIONS. How reporting, writing, editing, photography, graphic arts, and broadcasting apply to public relations. (a) Study of principles and basic practices of public relations. (b) Public relations case studies.

385—4 THE WEEKLY NEWSPAPER. A study of the weekly newspaper as an editorial product and as a business. Aspects of news, opinion, advertising, production, distribution, and management. Round-table discussion with guest experts and practical experience in publishing the weekly newspaper. Prerequisite: 201.

391—4 FEATURE WRITING. How to plan and write features and special articles for newspapers, magazines and public relations.

402—2 to 8 CAMPUS PUBLICATIONS PRACTICUM. Study, observation, and participation in production of the J-Student, Focus magazine, Journalism Monograph, and other journalism laboratory or student publications and/or participation in a comparable professional setting, with 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 the various phases of journalism, under joint supervision of members of the journalism faculty and of the

media. Prerequisites: journalism 400-level reporting, advertising or photography coursework; consent of director of journalism.

435—4 SEMINAR IN PUBLICATIONS MANAGEMENT. A study of advertising, business and circulation phases of newspaper and magazine production with the aid of guest speakers and instructors; observation of professional techniques and operations; assignments in solving management problems.

462—2 to 4 HIGH SCHOOL PUBLICATIONS. Designed for prospective teachers of journalism and mass communications and advisers to publications, as well as for in-service teachers. The role of the school newspaper, editorial leadership and responsibility, reporting and writing school news, production techniques, the journalism or mass communications curriculum, experience producing a publication; preparing course outlines.

480—1 to 4 JOURNALISM PROBLEMS AND POLICIES. Students and faculty initiate significant topics drawn from journalism; members of class investigate topics, making reports in oral and written form. Prerequisite: junior standing in mass communications.

481—4 SPECIALIZED JOURNALISM. Study of and experience with areas of specialized journalism, like 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 an area in photojournalism for special study (i.e., photo essay, special reproduction techniques) and then combine theory and experience to solve problems in that area. May be repeated to include total of 8 hours credit. Prerequisites: 210, consent of instructor.

MUSIC

101—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.

104—4 FOUNDATIONS OF MUSIC. An overview of the principles and procedures applicable to the reading, writing, and perception of music including rhythm, pitch, notation, scales, keys, intervals, chord structures, symbols and performance terms, with reference to their application to musical form and design.

105—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 101.

111—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. Must be taken in sequence.

112—2 (1,1) CLASS APPLIED WOODWINDS. Practical training in basic principles of playing woodwind instruments of the band and orchestra. Introductory techniques and 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. Practical training in basic principles of playing brass instruments of the band and orchestra. Introductory techniques and methods for teaching these instruments in elementary and secondary schools. Must be taken in sequence.

114—1 CLASS APPLIED PERCUSSION. Practical training in basic principles of playing percussion instruments of the band and orchestra. Introductory techniques and methods for teaching these instruments in elementary and secondary schools.

115—3 (1,1,1) CLASS APPLIED VOICE. Training in the basic principles of correct singing and diction. Introductory techniques and methods for teaching singing in the elementary and secondary schools. Must be taken in sequence.

140, 240, 340, 440—2 or 4 PRIVATE APPLIED MUSIC. Offered at five levels in the areas listed below. 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 a concentration in Performance usually take 4 hours. Concentration in Music Education and all secondary concentrations usually take 2 hours. Prerequisite for 140: music concentration or secondary concentration or consent of music faculty. Prerequisite for higher levels: three quarters at the previous level on the 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. French Horn
m. Trumpet
n. Trombone
o. Tuba
p. Baritone
q. Voice
r. Organ
s. Harpsichord
t. Harp
u. Classical Guitar
v. Primitive Rhythms in Percussion

141, 241, 341, 441—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. Individual instruction in performance of various jazz styles. Offered at four levels in the areas listed below. Credit is 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 majoring in Performance usually take 4 hours; Music Education majors and Music minors usually take 2 hours. 441 courses are not for graduate credit. Prerequisite for 141: admission as Music major or minor and audition. Prerequisite for higher levels: three quarters at the previous level on the same instrument, and consent of instructor.

a. Jazz Piano
b. Jazz Percussion
c. Jazz Guitar
d. Jazz Bass

144—1 UNIVERSITY CHORUS. 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 those with little or no musical background. Recommended as a course preliminary to 300 (not for music concentrations). May be taken concurrently with 101.

201—3 (1,1,1) CLASS APPLIED PIANO. Minimum instruction for passing piano proficiency examination which is required of all music concentrations. Must be taken in sequence.

205—12 (4,4,4) THEORY OF MUSIC. Advanced harmonic techniques, modulation, altered chords, chromatic harmony, counterpoint, and introduction to contemporary harmonic principles. Must be taken in sequence. Prerequisite: 105c.

219a,b,c—9 (3,3,3) LYRIC DICTION. Concentrated study of (a) French, (b) German, and (c) Italian lyric diction utilizing solo vocal literature; emphasis on the IPA, diacritical marks, vowels, consonants, semiconsonants, diphthongs, and syllabification; concomitant analytical study of formal style. May be taken in any sequence. Prerequisite: consent of instructor.

222—1 UNIVERSITY BAND. May be repeated.

231a,b,c—3 (1,1,1) JAZZ KEYBOARD THEORY. The examination and reproduction of jazz harmonic structures, utilizing the piano as the means of expression and standard jazz tunes as practice materials. Must be taken in sequence. Prerequisites: 101c, 105c.

233—1 JAZZ LAB I. May be repeated. Prerequisite: consent of instructor.

240—2 to 4 PRIVATE APPLIED MUSIC. (See 140.)

241—2 or 4 PRIVATE APPLIED MUSIC: JAZZ. (See 141.)

244—1 COMMUNITY CHORAL SOCIETY. May be repeated.

300—3 MUSIC EDUCATION—ELEMENTARY. (For non-music concentration only.) Teaching music in the elementary grades. Prerequisite: 200 or equivalent.

301—9 (3,3,3) MUSIC EDUCATION. (a) Music in the elementary school curriculum, grades K-6. Analysis of instructional materials, development of rhythmic and melodic expressions, creative, instrumental, listening activities. Creating a musical environment in the classroom. (b) Junior high school: curriculum, organization, and administration of choral, instrumental, and general music classes; resource units; the adolescent voice. (c) senior high school: curriculum, organization and administration of choral, instrumental, and general music classes. May be taken in any sequence. For music concentration only.

307—4 RECREATIONAL MUSIC. For those interested in the less formal approach to music and for prospective leaders for recreational activities.

309—9 (3,3,3) ORCHESTRATION. The techniques of writing for orchestral instruments. Must be taken in sequence. Prerequisite: 205c.

312—9 (3,3,3) COMPOSITION. Original composition in the smaller forms. Must be taken in sequence. Prerequisite: 205c or consent of instructor.

318—6 (3,3) CONDUCTING. (a) general fundamental conducting patterns, size of beats, use of each hand; conducting experience with laboratory groups both choral and instrumental; discussion and study of musical terminology. (b) Choral and instrumental: continued conducting experience through laboratory group; study of rehearsal techniques, balance, blend, and the relationship of parts to the total ensemble; evaluation and analysis of literature suitable for school groups of 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. Analysis of the important musical forms and styles. Must be taken in sequence. Prerequisite: 205c.

330—6 (2,2,2) JAZZ IMPROVISATION. Theory and techniques of jazz improvisation, with emphasis on functional harmony, melodic form, special scales, tune studies, ear training, and development of style. Prerequisite: consent of instructor.

331a,b,c—3 (1,1,1) JAZZ KEYBOARD THEORY. The examination and reproduction of jazz harmonic structures, utilizing the piano as the 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. Comprehensive course for music majors incorporating the examination and analysis of the work of important jazz innovators. The course will involve historial research, transcription and analysis of the particular styles of the jazz innovators selected for study. Prerequisites: 205c, GHA 338.

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: GHA 230.

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.

401—3 PSYCHO-PHYSIOLOGY OF MUSIC. The essential human capacities, their relationship to musical potentials and development as well as with the acoustical foundations of the world of music.

409—6 (2,2,2) JAZZ ARRANGING. Designed to provide the student with the basic skills to arrange music for three jazz idioms: combo, big band, and studio orchestra. Areas of emphasis will include rhythm section continuity, orchestration, stylistic variety, the concept of tension and release, the examination of representative scores. A writing project will be required for each course section. Relevant provisions of copyright law will be presented. NOT FOR GRADUATE CREDIT. Prerequisite: 231c or consent of instructor.

411—12 (3,3,3,3) MUSIC LITERATURE. (a) Symphonic Literature. Development of the symphony and the symphonic poems to 1900. (b) Choral Literature. The literature of the larger vocal forms such as the cantata and oratorio to 1900. (c) Chamber Music Literature. Chamber music literature from the Renaissance to the present. (d) Special Areas. Study of a particular period, composer, style, or medium.

412—9 (3,3,3) COMPOSITION. Original composition in the larger forms for various media. Must be taken in sequence. Prerequisite: 312c or consent of instructor.

413—9 (3,3,3) PIANO LITERATURE. A survey of the entire spectrum of repertory for piano; methods of teaching the techniques of such literature. Taught in sequence. Prerequisite: 340k.

420—1 MUSIC EDUCATION PRACTICUM. A shop-laboratory course dealing with the 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 IMPROVISATION. Involves the examination and performance of a variety of jazz structures, with special emphasis on the affective nature of improvisation. Such concepts as real-time composition and the Leonard Meyer analytical approach are incorporated to improve the aesthetic quality of improvised solos. It is assumed that the principles of note-selection, time-feel, phrasing, and articulation as developed in 330 (Jazz Improvisation) have been successfully assimilated. NOT FOR GRADUATE CREDIT. Prerequisite: 330c or equivalent.

433—1 CONCERT JAZZ BAND. May be repeated. Prerequisite: by audition.

436—3 JAZZ EDUCATION. Jazz Education is designed to provide the student with the knowledge of basic skills necessary to teach 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 counterpoint; (b) eighteenth-century counterpoint; (c) larger contrapuntal forms with emphasis on fugue. Prerequisite: 205c.

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 the performance and production of operatic scenes, chamber operas, and operettas. Prerequisites: audition, 6 hours in applied theater.

461—9 (3,3,3) TEACHING TECHNIQUES AND MATERIALS. (a) Methods, (b) materials, (c) observation and teaching. Designed to meet the needs of applied students in which the problems of private studio teaching and college-level teaching are discussed. Must be taken in sequence. Prerequisite: 340k.

465—3 DEVELOPMENT AND TEACHING OF STRINGS. Place and function of string education in the elementary and secondary schools. Techniques of heterogeneous and homogeneous string teaching. Developing and sustaining interest in the string program. 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.

482—1 to 3 READINGS IN MUSIC HISTORY AND LITERATURE.

483—1 to 3 READINGS IN MUSIC EDUCATION.

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.

SPEECH COMMUNICATION

200—4 PERSUASIVE SPEAKING. Designed for students who desire increased proficiency in preparation and delivery of speeches.

210—4 INTRODUCTION TO SPEECH COMMUNICATION. An introductory course designed to acquaint students with the discipline of speech communication. Topics will include the historical foundations of the discipline, the major interest areas and methods of inquiry in the field, and career opportunities for speech communication professionals. Prerequisite: GSK 123 or equivalent.

223—4 ADVANCED INTERPERSONAL COMMUNICATION. An examination of personal growth potential inherent in everyday informal relationships. Focus on interpersonal needs, values, perceptions, expressions of identity, emotions, evaluation, power, etc. Graded on a pass/no credit basis. Prerequisite: GSK 123 or equivalent.

300—4 COMMUNICATION IN INTERVIEWING AND COUNSELING. Survey of the communicative aspects of interviewing and counseling, the causes of failure in such situations, and the roles that speech communication can play in re-establishing contact. Practice with critiqued video playbacks featured. For students entering fields of education, counseling, social work, personnel management, and law.

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. This course is an introduction to debate theories and performance, emphasizing skills in research and analysis, reasoning and the use of evidence, affirmative and negative case building techniques and strategies, and refutation techniques.

303—4 COMMUNICATION IN BUSINESS AND ORGANIZATIONS. A survey of non-written business communication from a managerial perspective, focusing on: the organizational communication environment; the systemic, dyadic, group, employee, and the public communication processes; and techniques and application of successful business communication. Prerequisite: GSK 123 or equivalent.

309—1 to 8 INDEPENDENT PROJECTS IN SPEECH COMMUNICATION. Independent 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. Focus on personal dimensions of intergroup communication, especially the interaction of black and white Americans. Prerequisite: GSK 123.

313—4 INTRODUCTION TO PUBLIC RELATIONS. An introductory public relations course for majors in any academic area. Designed to develop an understanding for and appreciation of the PR function in society. Focus on presentational skills in oral, written, and visual modes of public relations. Lectures, PR simulations, and guest practitioners.

330—4 THEORIES OF COMMUNICATION. An introduction to models of and approaches to the process of communication. Multidisciplinary content. A foundation course on which a later, more advanced study of communication strategies and effects is built.

403—4 ADVANCED STUDY OF COMMUNICATION IN BUSINESS. A study of organizational variables which affect communication patterns; systems, channels, and networks of internal communication; communication problems in business organizations and suggested solutions; organizational communication research methods; training in the evaluation of communication effectiveness, diagnosis of weakness and implementation of recommendations. Prerequisite: 303, 330 or consent of instructor.

409—4 SENIOR SEMINAR IN SPEECH COMMUNICATION. For speech concentrations. Designed to tie together the entire undergraduate program in speech communication. Emphasis on the field of speech in academic, social, and career settings. NOT FOR GRADUATE CREDIT. Prerequisites: 24 hours in speech, senior standing.

410—4 CRITICISM OF PUBLIC COMMUNICATION. An introduction to various methodologies and viewpoints in speech criticism as a prelude to the formation of student-developed concepts of the critical act. The role of speech criticism as a force in society. Prerequisite: GSK 123.

419—4 SPECIAL TOPICS IN SPEECH COMMUNICATION. The impact of contemporary culture, art, media, and values in the development of communication relationships in society. Focus on pertinent contemporary problems and topics. May be repeated for total of 12 hours credit.

424—4 INNOVATIONS IN INTERPERSONAL COMMUNICATION. Designed to critique commercial courses which purport to offer increased awareness of self and/or skills in interpersonal communication. Provides a format for exploring the value of various innovative theories/approaches as they relate to the field of speech communication. Prerequisite: GSK 123.

430—4 THEORIES OF PERSUASION. A survey of prominent literature on attitude change and the varieties of social influence. Emphasis on theories supporting and generating relevant research.

431—4 PSYCHOLOGICAL ASPECTS OF SPEECH COMMUNICATION. The selection of topics and subfields within psychology which complement most closely the concerns of speech communication: e.g., the psychology of behavior, motivation, learning theory, maturation, and self-esteem.

432—4 SOCIOLOGICAL ASPECTS OF SPEECH COMMUNICATION. The selection of topics and subfields 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. The role and impact of language in speech communication development, processes and behavior. Emphasis on communicative barriers resulting from intracultural and intercultural differences in language usage during speech communication interactions.

435—4 ANIMAL COMMUNICATION BEHAVIOR. An exploration of animal communication behavior among selected social species. Emphasis on the various means of communication employed, the communication function served, and on a comparison of the relative degrees of sophistication in communication behavior. Similarities to and differences from human communication. Prerequisite: consent of instructor.

460—4 ORAL COMMUNICATION IN THE ELEMENTARY SCHOOLS (K-6). Explores activities which may be incorporated into the elementary classroom to develop basic communication skills. Emphasis on the 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. An analysis of how human communication across the life-span is affected by the aging process. Investigates 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

100—0 to 2 SPEECH CLINIC. Designed for students with speech and hearing deviations who need individual help.

201—4 HUMAN COMMUNICATION AND ITS DISORDERS. Survey of the etiology, assessment, and management of communicative disorders with emphasis on the historical development of the field and of career opportunities.

231—4 PHONETICS. An introduction to the 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 the 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 the normal communication system. Prerequisite: 231 or consent of instructor.

360—4 HUMAN HEARING AND ITS DISORDERS. An orientation to the 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 involved are investigative, creative, or clinical. May be repeated up to 8 hours credit. Prerequisite: consent of instructor.

401—4 AUDITORY SENSATION AND SPEECH PERCEPTION. A study of the environment as a source of stimulation and the reception of this information by the vestibular and auditory sensory systems. The role of acoustic features for speech perception and language are examined. Causes of deficient perception are differentiated and discussed. Prerequisite: 360.

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. Prerequisite: consent of program director and clinical supervisor.

452—4 CLINICAL PROCEDURES IN SPEECH PATHOLOGY AND AUDIOLOGY. Principles underlying the clinical interview and client relationships. Procedures in obtaining, recording, and evaluating test results. Emphasis on principles of therapeutic methods. 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. In-depth study of 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. Prerequisite: consent of program director and clinical supervisor.

471—4 AURAL REHABILITATION. Basic principles in the management of the hearing impaired; auditory training, speech reading, speech conservation and counseling. Prerequisite: 360.

498—4 NON-ORAL COMMUNICATION SYSTEMS. A course designed to provide information about nonspeech approaches which can be used with children and adults to augment oral speech. The course will include manual systems, communication boards, electronic devices and other communication aids/prostheses that utilize words, pictures and other symbols. Emphasis on evaluation, teaching strategies and adaptation of systems. Focus: neurologically impaired, autistic, retarded. Prerequisites: 441—4, 444—4, and 445—4 or consent of instructor.

TELEVISION-RADIO

100—4 PROCESS AND EFFECTS OF MASS COMMUNICATION. Lecture. Examination of the theories, processes, and effects of the mass media in society. Interrelationships of the media.

200—4 SURVEY OF BROADCASTING. Lecture. The history of broadcasting, network structure, the industry as a part of American business, the Federal Communications Commission, and related areas.

201—4 BROADCAST WRITING. A study of the fundamentals of radio and television continuity writing including commercial copy, talks, interviews, music and feature programs. Prerequisite: typing skills.

202—4 BROADCAST PERFORMANCE. A skills course. Provides extensive studio practice in all forms of broadcast talent, including both commercial and voice-over announcing, on-camera host experiences for talk, and/or public affairs presentations. Preparation of own material for studio presentation. One lecture, four hours laboratory per week, intensive practice in studios.

230—5 RADIO PRODUCTION. A skills-content course. Production of programs for WSIE-FM and/or participation in preparation of programs for other broadcast agencies. Intensive use of tools of broadcasting. Work with faculty, staff, and students in planning and producing programs. One lecture-critique session, four laboratory hours per week.

252—4 TELEVISION LABORATORY. A skills-content course designed to acquaint the student with basic television equipment and principles of studio operation. Emphasis on the production of laboratory programs with students participating in various jobs involved in studio production. Prerequisite: consent of instructor.

301—5 TELEVISION PRODUCTION. A skills-content course. The use of scenic design and set construction, properties, lighting, special effects, graphics, costuming, make-up, and acting for television. Three lecture-critique sessions, four to six hours laboratory per week. Prerequisites: 252, consent of instructor.

302a—4 RADIO NEWS. The principles and philosphy of radio news. Instruction and exercises in writing news copy for radio, including broadcast on WSIE. Emphasis on style, format, and delivery. Recording news events and writing. Prerequisites: 201, Journalism 103.

302b—4 TELEVISION NEWS. Studies the principles and philosophy of television news. Emphasis on writing style and format, news program structuring and editing. Examines electronics news gathering, develops skills in taping, editing, and writing. Students tape and edit news stories on assignment. Prerequisites: 201, Journalism 103.

303—4 BROADCAST ADVERTISING. Radio and television as advertising media and comparison with other media. Planning a campaign, production techniques, agency relationships, cost factors. Extensive preparation of commercial materials. Merchandising, promotion, interpretation of research. Case studies. Prerequisite: 200 and/or consent of instructor.

356—4 MOTION PICTURE PRODUCTION FOR TELEVISION. The philosophies, techniques, and equipment used in the production of film for the television medium. Participation in film production learning skills of camera operation, lighting, sound recording, editing, and finishing. Prerequisite: consent of instructor.

359—4 DRAMATIC WRITING. A study of basic structure of drama: writing of scenes and analysis of short and long dramatic works. Term project is a play analysis paper or original short play. Individual students are given permission to work in the areas of television, film, or radio. Prerequisite: consent of instructor.

390—4 SPECIAL PROBLEMS IN MASS COMMUNICATIONS. Special projects, research, and independent reading in mass communications for students capable of individual study under the guidance of a faculty adviser. Prerequisite: consent of instructor.

400—4 SEMINAR IN MASS COMMUNICATIONS. Problem-solving term projects using inter-media approaches. A team-taught course involving many members of the faculty, both in the mass communications area and the faculty at large. Invited professional guests. Prerequisites: consent of instructor, completion of other broadcast concentration courses.

401—4 CRITICISM IN THE PUBLIC ARTS. Television, radio, and film programs as art forms. Comparison and contrast with others of the "lively" and fine arts. Social, ethical, aesthetic, and commercial evaluations. Development of critical standards, extensive viewing and hearing programs on videotape, film, and other. Prerequisite: senior standing.

402—4 SEMINAR IN BROADCAST MANAGEMENT. Management executives from stations are "guest faculty." Management responsibility, research goals, use of capital, advertising, public relations, etc. A research paper. Prerequisite: consent of instructor.

403—4 SEMINAR IN EDUCATIONAL BROADCASTING. Application of broadcasting skills and technology to the dissemination of information in a formal or an informal manner. Intended for those who expect to continue their education on the advanced degree level in educational broadcasting, who plan to enter educational broadcasting, or for teachers who will have responsibilities in the administration or use of the broadcast media as a part of their curriculum. Prerequisite: senior standing or consent of instructor.

404—4 RESEARCH IN BROADCASTING. The application of research techniques to the broadcast media. Evaluation of research. Participation in a research project designed by the class. Three class sessions per week, extensive arranged laboratories. Prerequisite: consent of instructor.

405—4 THE DOCUMENTARY FILM. Survey of the development of the documentary film from the beginnings to the present. Directed readings; viewing of representative films; criticism; discussion of the documentary film movement. Prerequisite: 356 or Philosophy 345.

406—4 SPECIAL EVENTS. Broadcasting on radio and television of special events. Emphasis on remote broadcasting. Training in

the preparation and production of one-time and/or occasional broadcasts. Live, audio, and videotaped program preparation. Prerequisite: consent of instructor.

407—12 (4,4,4) INTERNATIONAL COMMUNICATION. (a) History and growth of communications activities and institutions of the western and industrialized world, including the USA, Western Europe, the NATO countries and selected countries of the Far East. (b) Basic aspects of media theory and practice in communist-ruled societies. (c) Mass media in developing nations; modernization as it affects national development; uses of mass communication by governments, religious groups and businesses as they seek to communicate with people in nations other than our own.

408—4 TELEVISION AND RADIO REGULATIONS. Federal legislation with emphasis on Communications Act of 1934 and the regulations of the 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 the various phases of broadcasting, under joint supervision of members of the broadcasting faculty and of the media. Prerequisites: upperclass student in this concentration, consent of instructor.

450—4 SEMINAR IN SPECIAL PROBLEMS. Varied content. To be offered from time to time as need exists and as faculty interest and time permit. Prerequisite: consent of instructor.

466—8 (4,4) ADVANCED PRACTICES. Advanced work in which the student has completed all of the formal course work. Included are work in news, advertising, writing, announcing, and production-direction. Prerequisite: consent of instructor.

499—1 to 4 CONTEMPORARY READINGS IN TELEVISION-RADIO. Selected readings in-depth with a member of the faculty, with special attention to contemporary books and periodicals. May be repeated to a maximum of 4 hours. Prerequisites: consent of adviser, senior standing.

THEATER

100, 200, 300, 400—2 or 4 APPLIED THEATER. Offered at four levels in the areas listed below. Credit is given at 2 or 4 hours on each level. Consult Schedule of Classes and adviser for information regarding credit and offerings during a particular quarter. May be repeated three additional quarters at any level.

a. Acting
b. Business Management (200, 300, 400 only)
c. Costume Design-Production
d. Scene Design
e. Jazz Dance Techniques (400 level only)[1]
f. Fencing (100, 200 only)
g. Musical Theater (300, 400 only)
h. Ballet
i. Improvisation (300, 400 only)
k. Sound for Theater (200, 400 only)
l. Lighting (200, 300, 400 only)
m. Make-up
n. Rhythmic Structure (200, 400 only)
o. Dance Composition (200, 300, 400 only)
p. Rehearsal-Performance
q. Special Projects
r. Directing (300, 400 only)
s. Stagecraft (100, 200, 400 only)
t. Modern Dance Techniques (200, 300, 400 only)
u. Movement (100, 200, 400 only)
v. Voice
w. Scene Painting (200, 400 only)
x. Dunham Technique
y. Primitive Rhythms in Dance
z. Dance Rehearsal Performance (300, 400 only)

[1]May be repeated two additional times, up to a maximum of 12 hours credit. Prerequisites: advanced work in dance and consent of instructor.

200—2 or 4 APPLIED THEATER. (See 100.) Prerequisite: 100.

224—4 COMMUNICATIVE READING. Study and practice of techniques used in the oral presentation of various forms of literature: prose, poetry, and drama. Textual analysis, vocal and physical skills, and staging techniques as applied to performance situations.

300—2 or 4 APPLIED THEATER. (See 100.) Prerequisite: 200.

302—4 DANCE DESIGN. The nature of special design problems encountered in planning and executing stage environments for dance compositions. Set, costume, lighting, and make-up design. Project work includes theoretical, experimental, and practical work in the areas of classical and modern dance. Prerequisites: upperclass standing, consent of instructor.

400—2 or 4 APPLIED THEATER. (See 100.) Prerequisite: 300.

401—12 (4,4,4) HISTORY OF THE THEATER. A study of drama, performance, architecture, design, and cultural environment of (a) Primitive, Greek, Roman, Pre-Renaissance; (b) Renaissance, Neo-Classical; (c) Romantic and Modern.

402—4 (2,2) HISTORY OF DANCE. The development of dance from its beginnings to its present art form. (a) Beginnings through Renaissance. (b) Post-Renaissance to present. Need not be taken in sequence.

403—4 METHODS AND MATERIALS OF DANCE EDUCATION. Designed to acquaint the dance student with the principles and methodologies of dance instruction as related to the areas of ballet, modern, and jazz. Instructional work with the following populations: pre-school, elementary, junior and senior high, and adult. Emphasis on practical problem solution. Prerequisite: upperclass standing.

404a,b—8 (4,4) FORMS OF DRAMATIC ACTION. A two-quarter sequence dealing with the principles of dramatic action as exemplified in selected plays. Emphasis on the functional relationships between theatrical process and dramatic form. (a) tragedy; (b) comedy. Prerequisites: advanced standing, consent of the instructor.

409—4 HIGH SCHOOL PRODUCTION PROBLEMS. Designed to acquaint the prospective teacher with some of the problems of directing a curricular and co-curricular dramatic program in the high schools. Prerequisite: senior standing.

410—4 CREATIVE DRAMATICS. A study of the nature of creative dramatics and its use in classrooms and recreational programs both as a subject and as a teaching resource. Introduction to the theory and practice of creative dramatics as an educational process.

415—4 DANCE ANTHROPOLOGY. (Same as Anthropology 415.)

SCHOOL OF HUMANITIES

The School of Humanities offers degree programs in American Studies, English, French, German, Spanish, and Philosophy. It also offers master's degree programs in English and Philosophy.

The undergraduate programs in the Humanities focus upon an examination of the values of those actions, experiences, and institutions which create or affect the human condition. Emphasis is placed upon refining the student's ability to write and think effectively and to judge what is written and said for its elegance of expression and cogency of thought. An undergraduate major in the Humanities prepares students for careers which wed effective expression of thought with an understanding of Western culture and civilization. Such preparation affords career opportunities not only in teaching but in government and the corporate sector as well.

In addition to the degree programs and minor concentrations offered within its departments, the School of Humanities sponsors the Humanities Honors Program and the Writing Clinic.

HUMANITIES HONORS PROGRAM

Ronald Glossop, Coordinator

Each quarter the Humanities Honors Program offers at least one course designed specifically for the academically superior student at SIUE. Enrollment is open to any qualified student. Each course is a seminar; and enrollment, which is on a first-come first-served basis, is limited to fifteen students in any one course.

The basis of a course always comprehends multiple areas within the humanities. However, through cutting across several cultural and intellectual milieux, the course concentrates intensively upon one major topic or idea within them. It is never a survey course. Furthermore, the Honors Committee is careful not to duplicate or to encroach upon topics or areas presented regularly through the curricula of the departments of the University. The Program seeks to serve those qualified students whose desires to satisfy or to diversify their interests in the humanities are not met by existing curricula.

THE WRITING CLINIC

Jane Pennell, Director

The Writing Clinic offers assistance in writing papers, reports, or theses to any student. Self-instructional materials in organization, paragraphing, term paper writing, grammar, spelling, and vocabulary building are available. No enrollment or appointment is necessary. The Writing Clinic also extends its services to the public upon request. The Clinic is located in the Peck Building, Room 1404.

AMERICAN STUDIES

American Studies is an interdisciplinary approach to a study of American culture, past and present. It concentrates on American history, literature, and philosophy, but extends also into the fine arts, the American character, folklore, political science, economics, popular culture, and many other areas of study.

Studying America in this broad manner, the student avoids the traditionally narrow approach of a single discipline. Moreover, the student is better able to comprehend what is meant by the culture and civilization of America and the American. Finally, and perhaps most importantly, through American Studies the student is prepared to assume an intelligent role in America's future.

A major in American Studies provides a fine springboard for careers in such areas as government, business, journalism, editing, and museum work.

Bachelor of Arts Degree in American Studies

General Studies Requirements	60
Requirements for Major in American Studies	92
Foreign Language (two years of same language)	24
GHA 202	4
GSS 200, 201, 202	12
American Studies 490	4
English 309	8
Philosophy 385c, d, or e	4
Philosophy 386	4
Approved courses in history, social sciences, literature, philosophy, fine arts, and other areas. (At least two courses must be in speech or fine arts.)	32
Electives	40
	192

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 the following: 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.

ENGLISH LANGUAGE AND LITERATURE

Professors:

Ades, J. I.
Austin, J. C.
Bailey, D. S.
Duncan, R.
Gaston, P. L.
Havens, D.
Love, T. R.
Revard, S. P.
Richardson, B. H.

Slattery, W. C.
Spurgeon, D. A.
Zanger, J.

Associate Professors:

Bosse, R. B.
Butler, D. L. (Chairperson)
Collins, J. D.
Graham, E.
Kropp, L.
Lawrence, B.
Murphy, G.
Oldani, J.
Pennell, J.
Sullivan, A. D.

Assistant Professors:

Funkhouser, L.
Kittrell, J.
Meyer, W.
O'Gorman, G.
Robbins, F.
Schmidt, B. Q.
Stanley, R.
Ziegler, R.

Instructor:

Violette, P. E.

Thorough training in English is a necessity in almost every field. Inability to speak and write effectively is a frequent cause for dismissal from employment; conversely, the ability to communicate well is essential for promotion and richer opportunities in many professions.

Literacy, of course, includes knowledge of the significant ideas of the past and present and the ability to organize and express them, as well as one's own. The major concentration in English, besides offering an introduction to the world's literature, also includes a range of courses in writing. The student is thus given at several levels a training in perceiving and presenting his or her conceptions with judgment and clarity.

In a period when specific technical capability is often threatened by obsolescence, a discipline in literature and in writing and speaking can give a graduate the confidence to meet the challenge of changing needs whether the student's profession is teaching or whether it is a non-academic field.

Students should attend during the first week of class in all classes taught by members of the English faculty. It is the student's responsibility to pick up the course syllabus, attend the class, and undergo any pertinent diagnostic testing during that week. Absences during that week may be considered unexcused absences when the instructor totals absences to see whether the student has violated the class attendance policy.

Bachelor of Arts, English — Option I (General)

The major consists of 48 hours in English.

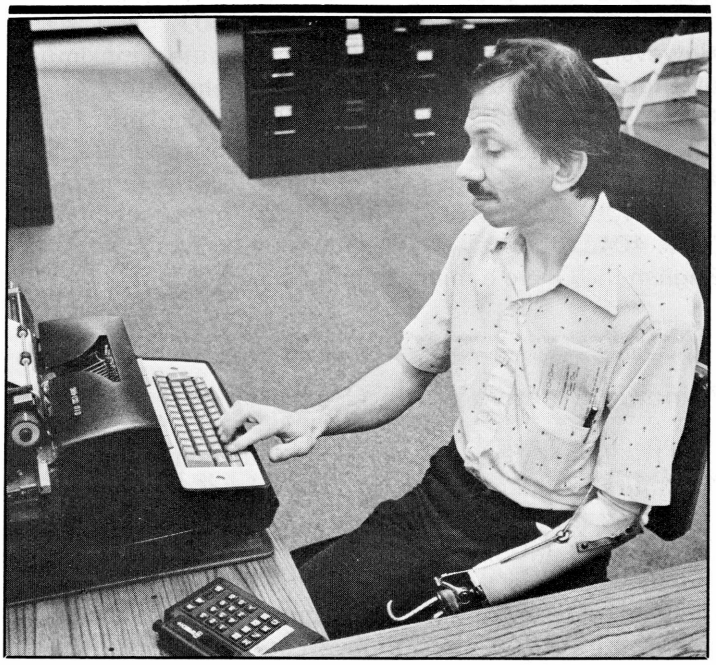
General Studies Requirements	60
Requirements for Major in English[1]	48
Language Systems (370, 371, 400, 402, 403)	4
Writing (325, 392a, b, 490, 492a, b)	4
Major Authors (404b, 471a,b, 473)	4
Surveys (302a, b, c, 309a, b)	12
Electives in English (300-499)	24
Foreign Language (one year of same language)	12
Free Electives (under the General Studies Program)	12
Minor	24-28
Additional Electives	36-32
	192

Option II (Preprofessional)

An English major 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 above B.A. in English except that two years of a foreign language are required, and the student must take English 301. Students are encouraged to take these courses early in their careers. Thus, English electives are reduced by 4 hours, and additional electives are reduced by 12 hours.

General Studies Requirements	60
Requirements for Major in English[1]	48
Language Systems (370, 371, 400, 402, 403)	4
Writing (325, 392a, b, 490, 492a, b)	4
Major Authors (404b, 471a,b, 472)	4
Surveys (302a, b, c, 309a, b)	12
Criticism (301)	4
Electives in English	20
Foreign Languages (two years of same language)	24
Free Electives (under the General Studies Program)	12
Minor	24-28
Additional Electives	24-20
	192

[1]At least 16 of these 48 hours must be in 400-level courses. At least 12 of these 48 must be in English literature courses, and at least 8 of these 48 hours must be in American literature courses. Students must maintain a C average in all English courses accepted toward a degree.



Bachelor of Science Degree, English, School of Education

General Studies Requirements	60
General Studies Courses for English Majors	8
Student should select two courses from this list: GHA 101, 202, 203, 204, 205, 206, 207, 209, 303, 305, 306, 307, 308	
Requirements for Major in English[1]	52
A. Language Systems	8
369, 370, 371, 400, 402, 403, 416	
B. Expression and Analysis	8
301, 325, 392a, 392b, 418, 490 (required), 492a, 492b, 495	
C. Literature	24
D. Teacher Preparation 485 (required)	4
E. Electives in English	8
Minor of Approved Supporting Courses[2]	28
Professional Education Courses (See Secondary Education requirements)	37
Electives	12
	197

[1]At least 24 of these 52 hours must be in courses in the 400-level. Students must maintain a C average in all English courses accepted toward a degree.
[2]Student, in consultation with the Undergraduate Adviser, may use these hours 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, and others.

Minor Requirements[3]

A 24-hour minor in English includes courses at the 300 level and above. Courses, of which there must be at least two from the 400 level, should be selected with the approval of the student's adviser and in consultation with the English Department undergraduate adviser.

Minor in Linguistics Requirements

The minor in linguistics requires a minimum of 24 hours normally consisting of at least six of the following 300- and 400-level linguistics courses: English 370[4], 371[4], 400, 402, 403, 405a, b, 406, 407, 416[4], 418. However, the student may elect to substitute a maximum of 8 hours from the following courses: English 404a, 404b; Greek 160a, 160b, 160c, 250a, 250b, 250c; Latin 162a, 162b, 162c, 250a, 250b, 250c. The student should select at least one course in each of the following: phonology (370[4], 405a), syntax (371[4], 400, 405b), historical change (403, 404a, b, 406, 407). A student who has a major in English may have a minor in linguistics.

[3]Students must maintain a C average in all English courses accepted toward a degree.
[4]English 370 was previously numbered 391b; 371 was 300; 416 was 391c.

Minor in Creative Writing 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 392a, 492a, 498); Poetry (English 392b, 492b, 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 or 492 course that is outside the student's chosen program. A more complete description of the creative writing minor can be obtained at the English office or from the English undergraduate adviser.

FOREIGN LANGUAGES AND LITERATURE

Professors:

Allsup, G.
Baltzell, J. H.
Francis, C.
Guenther, P. (Chairperson)
Osiek, B. T.

Associate Professor:

Romani, D. L.

Assistant Professors:

Cassanelli, R.
Griffen, T.
Zaytzeff, V.

Our world, regardless of the diversity of its parts, is one entity which lives by a system of complex relationships. Modern man cannot exist in isolation from the rest of the whole. The pragmatist need only think of international trade and world politics as they are daily being discussed in the media. Those whose concerns go beyond the material should understand that the cherished goods of our civilization are no one's sole possession and that familiarity with them is imperative if we are to avoid leading "the unexamined life not worth living."

Such interdependence hinges upon communication. The chief instrument of communication is language. Though it may appear that, at this point in history, English is the world's lingua franca, it is dangerous to proceed by that assumption. Among the many languages spoken throughout the world, there are at least a dozen whose international importance matches that of English. Unfamiliarity with any of those must, in the long run, put this nation at a disadvantage in an age of increasing competition for world leadership.

A language department cannot promise to train people to fluency in many different languages. But it is our goal to see that educated Americans know at least enough of one or another of the major foreign languages to be able to communicate in everyday life. Such knowledge will, above all, greatly enlarge the intellectual scope of the speaker and enhance his or her ability to comprehend the complexities under which we live. We have no right to expect that every activity throughout the world be carried out in English, which is the native tongue of but one-sixth of the world's population; it is also unrealistic to believe that most of us will never leave home or remain unaffected by events abroad. Finally, the fear of difficulties attaching to the study of languages should not deter anyone seeking a higher education; no country save ours conceives of higher education as exclusive of languages. The task may not be easy; the rewards can be great.

Career Opportunities

The present lack of interest in foreign languages in the U.S. notwithstanding, the pendulum will swing back, simply by force of circumstance, and teachers of foreign languages will again be in demand. There will also always be a need for translators and interpreters. More promising, at this time, however, is the study of languages in support of another field of study. Those who hope to advance in such areas as literature, philosophy, history and the sciences must expect to have to deal with materials in one or another foreign language; music students, especially vocalists, will not be able to compete in their field without some mastery of either German or Italian; the terminology of many social sciences as well as that of psychology is heavily indebted to French and German; in all those academic fields, languages serve as an irreplaceable tool. Moreover, the percentage of U.S. residents who are not native speakers of English is increasing, thus posing a challenge to people in public service, in the healing arts, especially nursing, and in social work. Above all, the multi-national extent of practically all business operations of any importance anywhere in the world makes the cooperation of linguists an absolute necessity. There are also areas of government, not only in the Foreign Service, which cannot be effectively operated without such assistance.

Languages, therefore, remain an attractive choice, regardless of the student's career interests, for a second major or for a strong minor.

Degree Requirements

Bachelor of Arts Degree, Foreign Languages and Literature

Foreign Language Option

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in a Foreign Language 48-50
203; 301; 302 or 304; 303 or 305; and a sequence of three 4-hour literature surveys in the same language 28
Electives beyond 203 in a foreign language (and culture) 20-22
Minor Requirements 28
203; 301; 302 or 304; 303 or 305; and a sequence of three 4-hour literature surveys in the same language 28
Electives 56-54
192

Foreign Literature Option

General Studies Requirements (Waive GHA-8) 60
Requirements for Major in a Foreign Literature 48-50
203; 301; 302 or 304; 303 or 305; and a sequence of three 4-hour literature surveys in the same language 28
Electives beyond 203 in a foreign literature (and culture) 20-22
Minor Requirements 28
203; 301; 302 or 304; 303 or 305; and a sequence of three 4-hour literature surveys in the same language 28
Electives 56-54
192

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.

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 and elementary education major 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.

PHILOSOPHY

Professors:

Barker, J. A.
Broyer, J.
Corr, C.
Glossop, R.
Linden, G. W.
Runkle, G.

Associate Professors:

Danley, J.
Emblom, W.
Hamrick, W.
Hudlin, E.
Keene, C. (Dean, School of Humanities)
Kim, S-K.
Lawrence, E.
Nabe, C.
Paxson, T.
Pletcher, G. (Chairperson)
Ruth, S.
Simons, M.
Wolf, R.

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? and Do human beings have free will? These pursuits also involve inquiring into the reasons we have for our beliefs about these issues, and thus philosophers are forced to consider the additional issues of what kinds of reasons are good reasons.

An important feature of the philosophy program at SIUE is the philosophy faculty. At present there are nineteen members of the Department, all of whom have doctoral degrees. Furthermore, most of the classes, even the beginning courses, are taught by regular staff members. Yet philosophy classes are small enough that students get personal attention from teachers who are committed to teaching and who enjoy working with students. This commitment to teaching is reflected in the fact that members of the philosophy faculty have regularly been chosen as recipients of all-University teaching awards.

Career Opportunities

The value of philosophy lies in its ability to help one grow and develop into a more complete person — a person who has gained an appreciation of what it means to be a human being. Philosophy is relevant to one's occupation as a wage-earner because it will help him or her to become a more sensitive and enlightened person. 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 planning various types of government careers — in the Foreign Service, for example, or with the National Institute 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 Studies Requirements (Waive GHA—8)	60
Requirements for Concentration in Philosophy	52
Foreign Language (on intermediate level)	8
Philosophy 490	4
Three courses in Area I with no historical overlap[1]	12
One course in each of the other Areas	16
Three more philosophy electives	12
Secondary Concentration	30-40
Electives	40-50
	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 200 early in their career (the hours for this course will be counted toward the major if it is taken within the first 12 credit hours after the student has declared a philosophy major). Also, if a student is seriously contemplating graduate work in philosophy, it is recommended that he or she satisfy the language requirements in either French or German and that he or she take Philosophy 230, 376, 385a, and 385c.

Area Requirements

I. History of Western Philosophy. 385a, b, c, d, e—History of Western Philosophy sequence. 484a, b, c—History of Western Political Theory sequence.

II. Metaphysics and Epistemology. 300—Metaphysics. 301—Philosophy of Religion. 355—Philosophy of Education. 391—Theory of Knowledge.

III. Logic and Methodology. 230—Deductive Logic. 306—Phenomenology. 307—Philosophy of Science. 308—Twentieth Century Analytic Philosophy. 430—Symbolic Logic.

IV. Theory of Value. 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. 342—Social and Political Philosophy. 345—Aesthetics of Film. 360—Philosophy of Art. 376—Ethical Systems. 412—Contemporary Issues in Bio-Ethics. 470—Topics in Business Ethics.

V. Philosophy and World Culture. 302—World Religions. 380—Chinese Philosophy. 386—American Philosophy. 402—Hindu Thought. 403—Buddhist Thought.

Minor Requirements

A minor in philosophy consists of 24 hours in philosophy courses. One may count GHA 322 and either GSM 283 or GSS 283 toward these 24 hours, but other General Studies courses cannot be counted toward the requirements.

HUMANITIES MINOR PROGRAMS

Minor in Black American Studies

The Black American Studies minor is multi-disciplinary with courses in seven departments and in General Studies.

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: General Studies: GHA 205, 338; Anthropology 311, 411; Art 469a; English 341, 342a, 342b, 342c; Government 342, 442; History 316a, b, c; Sociology 304, 402, 409.

For additional information regarding this minor or any of the courses, contact Rudolph Wilson, Building II, Room 1122. A description of the program and a schedule of courses offered each quarter are available at the office.

Minor in 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; the improvement of literacy levels by close attention to the grammatical and syntactical structure of Latin and/or Greek and by the careful analysis of texts; and to expanding a general working vocabulary, as well as the special vocabulary of such fields as medicine, law, theology, and foreign languages derived from classical 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. A student may be excused from the required courses through placement examinations, but generally not from the required number of hours in one or both languages. The placement examinations determine the level at which the student begins.

Courses

Greek 101—4, 102—4, 103—4 Introduction to Greek; 201—4, 202—4, 203—4 Intermediate Greek; 499—24 (4,4,4,4,4,4) Readings in Ancient Greek; Latin 101—4, 102—4, 103—4 Introduction to Latin; 201—4, 202—4, 203—4 Intermediate Latin; 400—24 (4,4,4,4,4,4) Readings in Latin; Foreign Languages and Literature 401—4 Comparative Latin and Greek Grammar; GHA 141—4 Building Vocabulary Through Latin and Greek Word Elements; 203—4 Literary Masterpieces of Antiquity; 209—4 Classical Mythology and Its Influence; History 100—4 Survey of Ancient Civilization; 306—12 (4,4,4) History of Rome; 338—8 (4,4) History of Greece; 408b—4 History of Ancient Near East: 1200 B.C. to 330 B.C.; Philosophy 385a—4 History of Western Philosophy: Ancient; Philosophy/Government 484a—4 Ancient and Medieval Political Theories; Art 225a—3 History of World Art: Ancient and Classical; 447—9 (3,3,3) Ancient Art.

Certain electives require advance approval due to their having variable content. These are the following: Humanities 301—3 to 4, 302—3 to 4, 303—3 to 4 Humanities Honors; 400—1 to 4 Symposium in the Humanities; Comparative Literature 210—12 (4,4,4) Literature and Society; Foreign Languages and Literature 390—2 to 6 Readings; History 300—2 to 8 Special Topics; Philosophy 490—2 to 12 Special Problems; 495—2 to 12 Independent Readings.

For further information contact the Director of Classical Studies.

Minor in 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 less 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 an especially appropriate minor 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 area for those interested in preparing themselves for their role as citizens in a democracy.

Requirements

The minor in Peace Studies requires 28 hours. No courses used by the student for his or her 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 GIS 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. Advisement assistance with regard to this program can be obtained in Room 2212 of the Peck Building.

Required Courses (20 hours): GIS 340, Government 370, 472, or 474a, History 440b, and at least one of the following (others in the group may be taken as electives): GSS 388, Philosophy 342, History 424b, Economics 425, Government/Philosophy 484c.

Elective Courses (20 hours): GIS 260; GSS 315; Aerospace Studies 100; Anthropology 305a, b, 452; Government 474b, Government/Philosophy 484a, b; 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, Reading in Sociology.

Minor in Women's Studies

Women's Studies is a new interdisciplinary field of study with a variety of tasks: with an affirming and positive stance towards women, to inquire critically into the beliefs, attitudes, and values surrounding women and womanhood; to investigate from a variety of perspectives the nature of women—their experiences, their bodies, their abilities—in order to replace myth with understanding; to examine and evaluate critically assumptions held about women in the traditional academic disciplines; to explore alternative arrangements for women and men on all levels of our society—sociological, economic, personal; to develop skills in women heretofore closed to them by stereotypical expectations.

Ultimately the goal of Women's Studies is to offer the student new attitudes, understanding, and expectations of women's lives.

The Women's Studies Program at SIUE offers a minor composed of courses from a number of disciplines. The courses to be offered for the minor and their instructors will be announced each quarter by the Women's Studies Program. Only those courses and instructors so designated will count towards the minor.

Some of the courses which may be credited to Women's Studies with the approval of the Women's Studies Director are: GHA/GSS 282, GHA 305, GSM 233, GSS 313, Anthropology 426, Comparative Literature 210, English 341, Foundations of Education 451, History 313, 390, Humanities 301, 302, 303, Philosophy 320, 321, Psychology 414, Sociology 408, Women's Studies 490, 495, 499.

Students interested in the minor should contact the Director of Women's Studies in Room 2219 of the Peck Building.

Requirements

The minor in Women's Studies consists of 28 hours in courses designated as Women's Studies; not more than 12 hours may be taken on the General Studies level. A grade-point of 3.50 is required in Women's Studies courses.

COURSES

AMERICAN STUDIES

300—4 THE WOMAN IN AMERICAN FOLKLORE. A study and analysis of the image of the woman as revealed in the oral traditions and customary examples of American folklore and folklife; types, motifs, and folk texts are examined through actual student fieldwork.

480—4 POPULAR LITERATURE IN AMERICA. A study of literary media, genre, and works not generally considered in literature courses or other courses but which are representative of popular tastes, or have helped form popular taste and hence American character.

490—4 SEMINAR IN AMERICAN STUDIES. A study of American culture with a view towards crossing the boundaries of traditional disciplines. Prerequisite: senior standing or consent of instructor.

498—4 FOLKLORE RESEARCH METHODS. A study of the methods of collecting, classifying, recording, archiving, and comparing verbal folklore (e.g., tales, speech), partly-verbal folklore (e.g., superstitions, folk games) and non-verbal lore (e.g., gestures, material culture, arts) with application to specific fieldwork. Prerequisite: consent of instructor.

ENGLISH

100—1 COMPOSITION LAB. Individualized instruction in composition skills, using the facilities of the English Department Writing Clinic. May be repeated for total of 2 hours credit, e.g., concurrently with both GSK 101 and GSK 102. Pass/No Credit only. Not counted toward major or minor in English.

201—4 INTERMEDIATE COMPOSITION. A course in English composition for students in all disciplines who have completed GSK 102 or their equivalents. Development of expository themes, including analysis of audience, choice of rhetorical strategies, organization of materials. Emphasizes clear and direct writing and logical organization of information without grammatical and mechanical error. Prerequisites: GSK 101 and 102 or equivalent.

301—4 BASIC LITERARY CRITICISM AND SCHOLARSHIP. An introduction to critical terminology, practice in criticism, discussion of literary theories. Practical application of elementary research methods.

302—12 (4,4,4) SURVEY OF ENGLISH LITERATURE. (a) Beginnings to 1660, excluding Milton, (b) 1660-1830, including Milton, (c) 1830 to present. May be taken in any sequence, but chronological sequence is recommended.

309—8 (4,4) SURVEY OF AMERICAN LITERATURE. (a) To 1860, (b) since 1860. May be taken in either sequence.

325—4 TECHNICAL WRITING. Designed for students in engineering and the sciences. Principles of technical writing with emphasis on organization, style, grammar, and usage. Practice in writing technical reports, instruction, outlines, and summaries. Special instruction in library procedure and writing the annotated library research paper. Prerequisites: GSK 101, 102.

340—4 LITERATURE OF THE THIRD WORLD. Reading and discussion of the literary works of selected writers from Third World countries from antiquity to the present. An analysis of the social, political, historical, philosophical, and literary problems.

341—4 THE BLACK WOMAN IN AMERICAN LITERATURE. A study of poems, novels, short stories, essays, dramas, biographies and appropriate historical documents, portraying roles of black women in America.

342—12 (4,4,4) BLACK LITERATURE IN AMERICA. (a) Black American Poetry. Themes and techniques of major modern black poets; (b) Black American Novel. Representative major black novels in terms of ideas, values, techniques; (c) Black American Drama. Survey of twentieth century black drama.

369—4 GRAMMAR FOR TEACHERS. For those who will teach grammar in elementary, middle, or secondary schools. The grammar taught in the course will cover the content of texts which are currently used in the schools. The uses of grammatical analysis in teaching formal spoken and written usage will be demonstrated and practiced. Projects with actual school texts will be included in the course requirements. Prerequisite: junior standing or consent of instructor.

370—4 FUNDAMENTALS OF THE ENGLISH LANGUAGE: SOUND PATTERNS AND WORD CONSTRUCTION. The production of English sounds and word formations. Dialectal variations. The relationship of sounds to the spelling system. Recommended for language, speech, reading, education concentrations, and all foreign students. Prerequisite: junior standing or consent of instructor.

371—4 PRINCIPLES OF ENGLISH SYNTAX. A study of word relationships in English. Recommended for language, speech, reading, and education concentrations as well as English concentrations and linguistics minors. Prerequisites: GSK 101, 102; junior standing or consent of instructor.

392a—4 FICTION WRITING. Emphasis on the writing of short stories together with a study of plot, point of view, description, dialogue, and other elements in the rhetoric of fiction. Class conducted as a workshop devoted to discussion and evaluation of student manuscripts. Prerequisite: GSK 101 or GSK 102, consent of instructor.

392b—4 POETRY WRITING. Major emphasis on the writing of poetry, but with study of the fundamentals of poetry, including prosody, figurative language, symbolism, and theories of poetry. Readings in poetry. In-class critiques of student writing by students and instructor to develop objective analysis as means of improvement. Prerequisites: completion of freshman composition, sophomore standing.

400—4 A SURVEY OF LINGUISTIC THEORIES AND CONCEPTS. (See Anthropology 401.) A survey of linguistic concepts and theories. Recommended for anthropology students, linguistic students, and for those preparing to teach English. Prerequisite: junior standing.

402—4 LINGUISTICS AND LITERATURE. An examination of the ways in which linguistic analysis can illuminate a literary text. Open to interested students in any discipline. Prerequisite: junior standing or consent of instructor.

403—4 THE HISTORY OF THE ENGLISH LANGUAGE. A survey of the development of the language from Indo-European to modern English with special emphasis on Middle and Early Modern English changes. Prerequisite: junior standing or consent of instructor.

404—8 (4,4) MIDDLE ENGLISH LITERATURE. (a) Middle English literature excluding Chaucer; (b) Chaucer: *Canterbury Tales.* May be taken separately. Prerequisite: junior standing.

405—8 (4,4) METHODS AND THEORIES OF LANGUAGE ANALYSIS. (a) Procedures for identifying, describing, and constructing models of the smallest units in a linguistic system. Discussions of the relations between phonic, phonemic, and feature analysis concepts as currently formulated. Construction of an actual model of a grammar as limited by evidence in tape recordings of American English. (b) Procedures for identifying language units as large as or larger than a word. The usefulness of slot and filler, distributional, immediate constituent, and transformational generative models is tested in their applicability to the structure of spoken and written English statements. May be taken independently. Prerequisite: junior standing.

406—4 OLD ENGLISH GRAMMAR. Introduction to Old English grammar and readings. Prerequisite: junior standing or consent of instructor.

407—4 (INTERMEDIATE) READINGS IN OLD ENGLISH. Intermediate level readings in Old English. Prerequisite: 406 or consent of instructor.

410—4 RESEARCH REPORT WRITING. Fundamentals of preparing a thesis, major paper, or research report. Introduction to the use of research tools, methods of information gathering, analysis and classification of material. Stress on clarity of style and organization. Not applicable to requirements for the B.A. or M.A. in English. Prerequisite: junior standing.

412—12 (4,4,4) ENGLISH NONDRAMATIC LITERATURE. (a) Poetry and Prose of the English Renaissance: Sidney through Spenser, (b) 17th Century, (c) Poetry and Prose of the Augustan Age: Dryden through Pope, (d) Poetry and Prose of the Age of Johnson. May be taken separately. Prerequisite: junior standing.

413—4 SPENSER. Reading and analysis of *The Faerie Queene, Amoretti,* and other major poems. Prerequisite: junior standing.

416—4 LINGUISTICS AND OTHER DISCIPLINES. Applications of linguistics to dialect, child language teaching, language disability, and literary interpretation. Investigation of recent research done in these fields by language scholars and development of project or paper in concentration or area of interest. Prerequisites: GSK 101 and 102; junior standing or consent of instructor.

418—4 APPLIED SEMANTICS. Applications of theories of verbal meaning to the interpretation of actual texts. Prerequisite: junior standing.

420—8 (4,4) AMERICAN POETRY. (a) Trends in American poetry to 1900 with a critical analysis of the achievement of the more important poets. (b) The more important poets since 1900. May be taken separately. Prerequisite: 309a or 309b.

421—12 (4,4,4) ENGLISH POETRY. (a) Romantic poets: Blake through Keats; (b) Victorian poets: Tennyson, Browning, Arnold, and the Pre-Raphaelites; (c) modern British poets. May be taken separately.

431—12 (4,4,4) MAJOR AMERICAN WRITERS. Significant writers of short fiction and nonfictional prose from 1800 to the present. (a) 1800-1865, (b) 1865-1918, (c) 1918-present. Prerequisite: junior standing.

438—4 INTELLECTUAL BACKGROUNDS OF AMERICAN LITERATURE. The relationship of basic ideas in America to American literature. Prerequisite: 309a or 309b.

442—4 ROMANTIC PROSE. Fiction of Austen, Scott, Mary Shelley, Peacock, the Gothic novelists, prose of Lamb, Landor, Hazlitt, DeQuincey; criticism, journals, and letters.

443—4 VICTORIAN PROSE. The chief writers of nonfictional prose from the late romantics to 1900. Prerequisite: 302c.

447—4 AMERICAN HUMOR AND SATIRE. A consideration of the writers and forms of 19th and 20th century humor.

454—12 (4,4,4) ENGLISH FICTION. (a) 18th Century: Defoe through Jane Austen. (b) Victorian Novel: 1830-1900. (c) The English Novel in the 20th Century. May be taken separately. Prerequisite: junior standing.

456—4 MODERN CONTINENTAL FICTION. Selected major works of European authors such as Mann, Silone, Camus, Kafka, Malraux, Hesse.

458—8 (4,4) AMERICAN NOVEL. (a) The novel in America from its beginnings to the early 20th century. (b) Trends and techniques in the American novel from the early 20th century to the present. Prerequisite: junior standing.

460—12 (4,4,4) ENGLISH DRAMA. (a) Elizabethan drama from the beginning of the drama in late Middle Ages through its flowering in such Elizabethan playwrights as Greene, Peele, Kyd, Marlowe, Heywood, Dekker, but excluding Shakespeare; (c) Restoration and 18th century drama: after 1660, representative types of plays from Dryden to Sheridan; (d) Modern British Drama. Prerequisite: junior standing.

464—4 MODERN CONTINENTAL DRAMA. The continental drama of Europe since 1870; representative plays of Scandinavia, Russia, Germany, France, Italy, Spain, and Portugal.

468—8 (4,4) AMERICAN DRAMA. (a) The beginnings of American drama to World War I; (b) Modern American drama. Prerequisite: junior standing.

471—8 (4,4) SHAKESPEARE. (a) Comedies and histories, (b) tragedies and nondramatic works. May be taken separately.

473—4 MILTON.

475—4 MODERN ADOLESCENT LITERATURE. Extensive and critical reading of modern literature (primarily fiction) that young people between the ages of 11 and 17 are reading, particularly that literature which they are reading out of choice and not from compulsion. Secondly, an attempt to assess this age group as an audience so that, finally, practical teaching approaches can be created to enhance the reading enjoyment of this group. Prerequisite: junior standing.

485—4 PROBLEMS IN THE TEACHING OF ENGLISH. Aims, methods, materials, tests, and programs of English instruction in the high school, including supervised practicum integrated with the other aspects of the course. A tutorial course normally taken concurrently with Secondary Education 401a, b, or prior to Secondary Education 352. Prerequisite: consent of instructor.

488—8 (4,4) TEACHING STANDARD ENGLISH AS A SECOND LANGUAGE. (a) Classroom techniques. (b) Laboratory methods. Prerequisite: junior standing.

490—4 ADVANCED COMPOSITION. Expository writing. May be repeated once for credit with permission. Prerequisite: junior standing.

492a—4 ADVANCED FICTION WRITING. Emphasis on the writing of fiction that strives for literary excellence. Classroom conducted as a workshop, devoted to discussion and evaluation of student manuscripts. Readings in fiction; problems of fiction examined in the work of established writers. Prerequisites: completion of freshman composition; junior standing or consent of instructor.

492b—4 ADVANCED POETRY WRITING. Major emphasis on the writing of poetry. In-class critiques of student writing by instructor and fellow students to develop objective analysis as means of improvement. Prerequisites: completion of freshman composition; junior standing or consent of instructor.

494—4 LITERARY EDITING. An introduction to the basic principles of literary editing with special emphasis on fiction and poetry. Prerequisites: GSK 101-102; junior standing or consent of instructor.

495—4 HISTORY OF CRITICAL THEORY. Historical survey of 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. NOT FOR GRADUATE CREDIT. May be repeated for total of 8 hours credit. Prerequisites: GSK 101, 102; junior standing or consent of instructor.

499—2 to 4 READINGS IN ENGLISH. For English students only. Departmental undergraduate adviser's approval required. May be repeated to maximum of 6 hours.

FOREIGN LANGUAGES

The student who has completed one year of foreign language in high school begins with the first quarter of the first year course. The student who has completed two years of high school foreign language begins with the intermediate course.

Proficiency examinations may be taken for credit.

GENERAL FOREIGN LANGUAGE

390—2 to 6 READINGS. Readings in selected works of representative writers in the student's special field of interest. Offered in French, Spanish, German, Russian, Italian, Latin, and Greek. Primarily for students with no foreign language concentration, but may be taken for credit in foreign language concentra-

tion with consent of faculty chairperson. Prerequisites: 203, consent of department chairperson.

401—4 COMPARATIVE LATIN AND GREEK GRAMMAR. A survey of the structural similarities and differences between Latin and Greek as they developed from Primitive Indo-European and as they relate with other Indo-European languages. Prerequisites: Latin, Greek, English 401, or 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 for all majors intending to teach foreign languages. Prerequisite: one quarter of any 300-level course, or consent of department chairperson.

491—2 to 8 CULTURAL AND LANGUAGE WORKSHOP. Fills the need for practical studies in areas such as comparative or contrastive linguistics, advanced methodology and techniques in foreign languages, preparation for career oriented programs, in-depth study of foreign cultures, travel-study abroad, applied language study, and supervised projects in foreign studies. Prerequisite: advanced standing or graduate standing.

FRENCH

101—4 ELEMENTARY FRENCH. Open to students who have had no previous work in French.

102—4 ELEMENTARY FRENCH. Continuation of 101. Prerequisite: 101.

103—4 ELEMENTARY FRENCH. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE FRENCH. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Prerequisite: 103 or two years of high school French or consent of department chairperson.

202—4 INTERMEDIATE FRENCH. Continuation of 201. Prerequisite: 201.

203—4 INTERMEDIATE FRENCH. Continuation of 202. Prerequisite: 202.

220—2 INTERMEDIATE FRENCH CONVERSATION. (a) Practice in conversation. Prerequisite: 123 or equivalent.

301—4 ADVANCED FRENCH GRAMMAR AND USAGE. A study of grammatical problems on an advanced level, development of correct usage, and vocabulary building in the French language. Prerequisite: equivalent of two years of college French or consent of department chairperson.

302—4 ORAL COMMUNICATION. Oral work of a practical nature for advanced students. Prerequisite: 203 or consent of department chairperson.

303—4 ADVANCED FRENCH COMPOSITION. Practical composition for advanced students. Prerequisite: 203 or consent of department chairperson.

304—4 ORAL INTERPRETATION. Contrastive analysis of English and French applied to oral interpretation. Prerequisite: 203 or consent of department chairperson.

305—4 WRITTEN INTERPRETATION. Contrastive analysis applied to written interpretation. Prerequisite: 203 or consent of department chairperson.

306—4 CONTEMPORARY PROFESSIONAL READINGS. Selections of publications related to the professions and concerns in contemporary France. Prerequisite: 203 or consent of department chairperson.

307—4 BUSINESS FRENCH. Exercises in business correspondence emphasizing the acquisition of contemporary business vocabulary and idiomatic structures. A study of the cultural background of French business and publicity. Prerequisite: 203 or consent of department chairperson.

308—4 FRENCH PHONETICS. Articulatory phonetics as a means to form native French pronunciation habits with emphasis upon the difficulties encountered by speakers of American English. Prerequisite: 203.

311—4 CONTEMPORARY FRANCE. Study of significant aspects of French culture. Prerequisite: 250c or consent of department chairperson.

351—4 SURVEY OF FRENCH LITERATURE (17TH CENTURY). Corneille, Racine, Moliere, Pacal and other writers of the 17th century with reference to the political and social environment of the period. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF FRENCH LITERATURE (18TH CENTURY). Montesquieu, Voltaire, Diderot, Rousseau, and others, with references to the social, political, and philosophic environment of the 18th Century. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF FRENCH LITERATURE (EARLY 19TH CENTURY). Representative writers of the early 19th century: Chateaubriand, Hugo, Balzac, Stendhal, and others. Prerequisite: 203 or consent of department chairperson.

451—4 FRENCH LITERATURE (LATE 19TH CENTURY). From realism to symbolism: Flaubert, Zola, Baudelaire, Verlaine, and others. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

452—4 MODERN FRENCH LITERATURE (1900 - 1940). Representative writers from the "fin de siecle" to World War II with special emphasis upon the novel: Proust, Mauriac, Gide, and others. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453—4 MODERN FRENCH LITERATURE (1940 TO THE PRESENT). The post war works of Camus, Sartre, the anti-novel, Genet, Beckett, Ionesco, and others. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Integration of the specialized major courses and the development of French drama including analysis of major

and typical works, practice in direction and interpretation with emphasis on oral expression.

455—2 SEMINAR. (See 454).

456—2 SEMINAR. (See 454).

457—4 FRENCH DRAMA IN THEORY AND PRACTICE. The history and development of French drama including analysis of major and typical works, practice in direction and interpretation with emphasis on oral expression. Prerequisite: 203 or consent of department chairperson.

458—4 FRENCH DRAMA IN THEORY AND PRACTICE. (See 457.) Prerequisite: 457.

499—2 to 9 READINGS IN FRENCH. Readings in selected areas of French language, literature, culture, and civilization. Individual work or small groups under direct supervision of one or more members of the foreign language faculty. Prerequisites: 203, consent of department chairperson.

GERMAN

101—4 ELEMENTARY GERMAN. Open to students who have had no previous work in German.

102—4 ELEMENTARY GERMAN. Continuation of 101. Prerequisite: 101.

103—4 ELEMENTARY GERMAN. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE GERMAN. Development of comprehension of the spoken language and oral expression, reading or modern prose selections, simple composition. Prerequisite: 103 or two years of high school German or consent of department chairperson.

202—4 INTERMEDIATE GERMAN. Continuation of 201. Prerequisite: 201.

203—4 INTERMEDIATE GERMAN. Continuation of 202. Prerequisite: 202.

301—4 ADVANCED GERMAN GRAMMAR AND USAGE. A study of grammatical problems on an advanced level, development of correct usage, and vocabulary building in the German language. Prerequisite: equivalent of two years of college German or consent of department chairperson.

302—4 ORAL COMMUNICATION. Oral work of a practical nature for advanced students. Prerequisite: 203 or consent of department chairperson.

303—4 ADVANCED GERMAN COMPOSITION. Practical composition for advanced students. Prerequisite: 203 or consent of department chairperson.

304—4 ORAL INTERPRETATION. Contrastive analysis of English and German applied to oral interpretation. Prerequisite: 203 or consent of department chairperson.

305—4 WRITTEN INTERPRETATION. Contrastive analysis applied to written interpretation. Prerequisite: 203 or consent of department chairperson.

306—4 CONTEMPORARY PROFESSIONAL READINGS. Selections of publications related to the professions and concerns in contemporary Germany. Prerequisite: 203 or consent of department chairperson.

307—4 BUSINESS GERMAN. Exercises in business correspondence emphasizing the acquisition of contemporary business vocabulary and idiomatic structures. A study of the cultural background of German business and publicity. Prerequisite: 203 or consent of department chairperson.

311—8 (4,4) CONTEMPORARY GERMANY. Study of significant aspects of German culture. Prerequisite: 203 or consent of department chairperson.

351—4 SURVEY OF GERMAN LITERATURE (MIDDLE AGES THROUGH STORM AND STRESS). Survey of German literature from the Middle Ages through the period of Storm and Stress. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF GERMAN LITERATURE (CLASSICISM THROUGH REALISM). Survey of German literature from the period of Classicism through the period of Realism. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF GERMAN LITERATURE (NATURALISM TO THE PRESENT). Survey of German literature from the period of Naturalism to the present. Prerequisite: 203 or consent of department chairperson.

411—4 GERMAN CIVILIZATION. Intensive study of the German speaking areas of the world with emphasis on the anthropological and sociological aspects of their respective cultures (Austrian, German, Swiss, "Reichsdeutsch," etc.), lectures, reports. Prerequisite: senior standing in German language.

451—4 LITERATURE AND HISTORY OF THE GERMAN THEATER. Introduction to the history and literature of the German stage, from the Middle Ages to modern times, involving dramatic literature as well as the development of the stage itself in terms of public and artistic functions, techniques and influence, etc. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

452—4 FAUST. Analysis of both parts of Goethe's masterpiece, its background, meaning, and impact on world literature together with a general survey of the life and times of the author. Prerequisite: 203 or consent of department chairperson.

453a—STUDIES IN GERMAN LITERATURE (MIDDLE AGES THROUGH STORM AND STRESS). Study of German literary masterpieces selected from one or more of the periods from the Middle Ages to the Storm and Stress. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453b—4 STUDIES IN GERMAN LITERATURE (CLASSICISM THROUGH REALISM). Study of German literary masterpieces selected from one or more of the periods from Classicism to Realism. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453c—4 STUDIES IN GERMAN LITERATURE (NATURALISM TO THE PRESENT). Study of German literary masterpieces selected from one or more of the periods from Naturalism to the present. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Integration of the specialized major courses and the development of a comprehensive view of the major field in terms of its relationship to the growth of Western civilization.

455—2 SEMINAR. (See 454).

456—2 SEMINAR. (See 454).

457—4 STUDIES IN GERMAN LITERATURE (TOPIC OPEN). Study of German literary masterpieces selected from one or more literary periods. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

499—2 to 9 READINGS IN GERMAN. Readings in selected areas of German language, literature, culture, and civilization. Individual work or small groups under direct supervision of one or more members of the foreign language faculty. Prerequisites: 203, consent of department chairperson.

GREEK

101—4 INTRODUCTION TO GREEK. Open to students with no previous work in Greek.

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. (See 201). Prerequisite: 103 or equivalent.

203—4 INTERMEDIATE GREEK. (See 202). Prerequisite: 103 or equivalent.

250—12 (4,4,4) INTERMEDIATE GREEK. Development of reading facility. Reading of selected masterpieces in history, poetry, and philosophy. May be taken out of sequence. Prerequisite: 103 or equivalent.

499—24 (4,4,4,4,4,4) READINGS IN ANCIENT GREEK. (a) Selected readings designed to develop basic lexical and structural competence. (b) Continuation of a. (c) Study of a selected masterpiece of Greek literature. (d) Masterpieces in 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.

ITALIAN

101—4 ELEMENTARY ITALIAN. Open to students who have had no previous work in Italian.

102—4 ELEMENTARY ITALIAN. Continuation of 101. Prerequisite: 101.

103—4 ELEMENTARY ITALIAN. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE ITALIAN. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Prerequisite: 103 or two years of high school Italian or consent of department chairperson.

202—4 INTERMEDIATE ITALIAN. Continuation of 201. Prerequisite: 201.

203—4 INTERMEDIATE ITALIAN. Continuation of 202. Prerequisite: 202.

311—4 ITALIAN CULTURE AND CIVILIZATION. Study of significant aspects of Italian culture in a historical perspective. Designed to improve intercultural understanding and to continue the development of all language skills. Prerequisite: 203 or consent of department chairperson.

499—2 to 9 READINGS IN ITALIAN. Readings in selected areas of Italian language, literature, culture, and civilization. Individual work or small groups under direct supervision of one or more members of the foreign language faculty. Prerequisites: 203, consent of department chairperson.

LATIN

101—4 INTRODUCTION TO LATIN. Open to students with no previous work in Latin.

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 of the Latin language taught through reading selections from classical, medieval, and renaissance Latin. Prerequisite: 103 or equivalent.

202—4 INTERMEDIATE LATIN. Prerequisite: 103 or equivalent.

203—4 INTERMEDIATE LATIN. Prerequisite: 103 or equivalent.

499—24 (4,4,4,4,4,4) READINGS IN LATIN. (a) Basic principles of the Latin language taught through reading selections from classical, medieval, and renaissance Latin. (b) Continuation of a. (c) Continuation of b. (d), (e), (f) The second-year level. Content varies with instructor. 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 college study of another language, or the equivalent, or consent of instructor.

RUSSIAN

101—4 ELEMENTARY RUSSIAN. No previous knowledge of Russian required.

102—4 ELEMENTARY RUSSIAN. Continuation of 101. Prerequisite: 101.

103—4 ELEMENTARY RUSSIAN. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE RUSSIAN. Development of comprehension of the spoken language and oral expression, reading of modern prose selections, simple composition. Prerequisite: 103 or two years of high school Russian or consent of department chairperson.

202—4 INTERMEDIATE RUSSIAN. Continuation of 201. Prerequisite: 201.

203—4 INTERMEDIATE RUSSIAN. Continuation of 202. Prerequisite: 202.

499—2 to 9 READINGS IN RUSSIAN. Readings in selected areas of Russian language, literature, culture, and civilization. Individual work or small groups under direct supervision of one or more members of the foreign language faculty. Prerequisites: 203, consent of department chairperson.

SPANISH

101—4 ELEMENTARY SPANISH. Open to students who have had no previous work in Spanish.

102—4 ELEMENTARY SPANISH. Continuation of 101. Prerequisite: 101.

103—4 ELEMENTARY SPANISH. Continuation of 102. Prerequisite: 102.

201—4 INTERMEDIATE SPANISH. Development of the spoken language and oral expression, reading of modern prose selections, simple composition. Prerequisite: 103 or two years of high school Spanish or consent of department chairperson.

202—4 INTERMEDIATE SPANISH. Continuation of 201. Prerequisite: 201.

203—4 INTERMEDIATE SPANISH. Continuation of 202. Prerequisite: 202.

301—4 ADVANCED SPANISH GRAMMAR AND USAGE. A study of grammatical problems on an advanced level, development of correct usage, and vocabulary building in the Spanish language. Prerequisite: equivalent of two years college Spanish or consent of faculty chairperson.

302—4 ORAL COMMUNICATION. Oral work of a practical nature for advanced students. Prerequisite: 203 or consent of department chairperson.

303—4 ADVANCED SPANISH COMPOSITION. Practical composition for advanced students. Prerequisite: 203 or consent of department chairperson.

304—4 ORAL INTERPRETATION. Contrastive analysis of English and Spanish applied to oral interpretation. Prerequisite: 203 or consent of department chairperson.

305—4 WRITTEN INTERPRETATION. Contrastive analysis applied to written interpretation. Prerequisite: 203 or consent of department chairperson.

306—4 CONTEMPORARY PROFESSIONAL READINGS. Selections of publications related to the professions and concerns in contemporary Spain. Prerequisite: 203 or consent of department chairperson.

307—4 BUSINESS SPANISH. Rapid grammar review, daily writing practice in all types of commercial communications, and guided writing of the different forms of business documents in Spanish. Prerequisite: 203 or consent of department chairperson.

308—4 SPANISH PHONETICS. Analysis of the sounds of Spanish and their manner of production; intonation; levels of speech; oral practice. Prerequisite: 203 or consent of department chairperson.

311—4 CONTEMPORARY SPAIN. Study of significant aspects of Spanish culture. Prerequisite: 203 or consent of department chairperson.

312—4 CONTEMPORARY SPANISH AMERICA. Analysis of significant aspects of Spanish-American culture designed to improve intercultural understanding and to develop language skills. Oral discussions, readings, oral and written reports. Prerequisite: 203 or consent of department chairperson.

351—4 SURVEY OF SPANISH LITERATURE (MIDDLE AGES AND RENAISSANCE). Survey of Spanish literature from the 12th to the 16th Century; the epic, *El Cantar del Cid,* ballads, lyric poetry, chronicles and other prose works. Prerequisite: 203 or consent of department chairperson.

352—4 SURVEY OF SPANISH LITERATURE (GOLDEN AGE AND NEOCLASSICISM). Survey of Spanish literature of the 16th through 18th Centuries: Cervantes, Tirso de Molina, Lope de Vega, Calderon de la Barca, Quevedo, Gracian, Iriarte, Samaniego and others. Prerequisite: 203 or consent of department chairperson.

353—4 SURVEY OF SPANISH LITERATURE (ROMANTICISM TO PRESENT). Survey of Spanish literature from Romanticism until the present, including such writers as Zorilla, Becquer, Galdos, Ortega, and Benet. Prerequisite: 203 or consent of department chairperson.

371—4 SURVEY OF SPANISH-AMERICAN LITERATURE (COLONIAL PERIOD/ROMANTICISM). Spanish-American literature from the colonial period through romanticism. Prerequisite: 203 or consent of department chairperson.

372—4 SURVEY OF SPANISH-AMERICAN LITERATURE (FROM INDEPENDENCE THROUGH THE MEXICAN REVOLUTION). A survey of Spanish-American literature from Independence through the Mexican Revolution. Prerequisite: 203 or consent of department chairperson.

373—4 SURVEY OF SPANISH-AMERICAN LITERATURE (END OF MODERNISM TO THE NEW NARRATIVE). A survey

of Spanish-American writers from First World War until the present. Prerequisite: 203 or consent of department chairperson.

451—4 MODERN SPANISH LITERATURE (19TH CENTURY). Spanish literature of the 19th Century as influenced by trends of European thought of the period: Galdos, Bazan, Benavente, and others. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

452—4 MODERN SPANISH LITERATURE (20TH CENTURY). Spanish literature of the 20th century with emphasis of the novel, essay, and poetry: Unamuno, Ortega y Gasset, Garcia Lorca, and others. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

453—4 MODERN SPANISH LITERATURE (POST CIVIL WAR). Spanish literature of the post-Civil War period, with emphasis on the novel, drama, and poetry. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

454—2 SEMINAR. Integration of the specialized major courses and development of a comprehensive view of the major field in terms of its relationships to the growth of Western Civilization.

455—2 SEMINAR. (See 454).

456—2 SEMINAR. (See 454).

457—4 DON QUIXOTE. A study of the great novel of Cervantes. Prerequisite: any 300-level Spanish course or consent of department chairperson.

461—4 SPANISH STYLISTICS. Study of writing style in Spanish and its application to the development of skill in written expression. For those who wish to do advanced work in the principles of Spanish grammar and composition. Prerequisite: 9 hours of 300-level courses.

471—4 SPANISH-AMERICAN LITERATURE (SHORT STORY AND NOVEL). The new Spanish-American short story and novel of the last two decades of the twentieth century. NOT FOR GRADUATE CREDIT. Prerequisite: 203 or consent of department chairperson.

499—2 to 9 READINGS IN SPANISH. Readings in selected areas of Spanish language, literature, culture, and civilization. Individual work or small groups under direct supervision of one or more members of the foreign language faculty. Prerequisites: 203, consent of department chairperson.

HUMANITIES

301—4 HUMANITIES HONORS. Variable content. May be taken more than once as long as the content differs. Decisions about repeated credit will be 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. (See 301).

303—4 HUMANITIES HONORS. (See 301).

310—8 (4,4) ESPERANTO. Development of the ability to read, write, speak, and understand Esperanto, the international language developed by Ludwik Zamenhof. Must be taken in sequence.

400—1 to 4 SYMPOSIUM IN THE HUMANITIES. Usually a short-term course in subject matter beyond the areas covered regularly by the standard curricula. Subject matter may vary each time course is offered. Credit toward concentration is at discretion of department. May be repeated up to 8 hours credit. Prerequisite: senior standing or consent of instructor.

450—4 CHILDREN AND DEATH. An examination of death, dying, and bereavement as they occur in or are related to childhood and adolescence. The development of children's concepts and attitudes about death, methods and materials for death education, strategies for counseling, and ethical dimensions.

PHILOSOPHY

200—4 INTRODUCTION TO PHILOSOPHY. Survey of the traditional branches and problems of philosophy, such as religion, metaphysics, epistemology, ethics, political theory, aesthetics, and history.

230—4 INTRODUCTION TO DEDUCTIVE LOGIC. An introduction to formal, deductive logic, with emphasis on the use of formal techniques for analyzing correct reasoning. Propositional logic, syllogistic and class logic, predicate logic, and the applications of logic to philosophical problems.

300—4 METAPHYSICS. Presentation of answers to the most general problems of existence. An attempt to unify all scientific approaches to reality through the laying down of common principles.

301—4 PHILOSOPHY OF RELIGION. An analysis of problems in the psychology, metaphysics, and social effects of religion. The nature of mystical experience, the existence of God, and problems of suffering, prayer, and immortality.

302—4 WORLD RELIGIONS. A historical and comparative study of the principal religions of the world. Particular attention is given to such non-Christian faiths as Hinduism, Buddhism, and Islam.

306—4 PHENOMENOLOGY. An introduction to the dominant movement in contemporary continental philosophy. Attention to the central works of representative thinkers, e.g., Husserl, Heidegger, Sartre, Merleau-Ponty, and Ricoeur, in order to expose the problems, doctrines, and methods which characterize phenomenology as a mode of philosophizing. Prerequisite: sophomore standing.

307—4 PHILOSOPHY OF SCIENCE. An examination of the structure of science with emphasis on such problems as causality, explanation, confirmation, and the differences between the relations among the various sciences.

308—4 TWENTIETH CENTURY ANALYTIC PHILOSOPHY. An introduction to the dominant movement in contemporary philosophy in English speaking countries. Attention to the central works of representative thinkers, e.g., G. E. Moore, Bertrand

Russell, Gilbert Ryle, and Ludwig Wittgenstein, in order to explain the problems, doctrines, and methods which characterize analytic philosophy as a mode of philosophizing. Prerequisite: sophomore standing.

310—4 PHILOSOPHY OF LAW. A survey of four basic theories of the nature of law: natural law, legal positivism, legal realism, and sociological jurisprudence. An attempt to answer such persistent questions as the meaning of a legal system, the nature of the rules and to what extent law consists of rules, the meaning of legal obligation and how it differs from ethical obligation, and what distinguishes laws from orders enforced by threats.

311—4 ENGINEERING, ETHICS, AND PROFESSIONALISM. Through case studies, lectures, and discussions the student will be introduced to significant ethical and legal issues which arise in and affect professional engineering. The course will deal with such topics as codes of ethics, engineering and the public interest, employer-employee relationships, and recent Supreme Court decisions. Prerequisite: junior standing.

312—4 ETHICS IN THE MEDICAL COMMUNITY. An examination of selected moral problems in the field of medicine such as consumer protection in health-delivery systems, truth-telling in the health professional-patient relationship, medical experimentation on human subjects, suffering and dying, and procreative decisions.

320—4 PHILOSOPHICAL CONCEPTIONS OF WOMAN. An examination of the 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. (Same as Women's Studies 321.) Analysis of society from a feminist perspective through a critical examination of major theoretical works of the women's movement. Prerequisite: GHA 282 strongly recommended.

342—4 SOCIAL AND POLITICAL PHILOSOPHY. Analysis of the philosophical problems of social and political theory and conduct, and their expression in social and political organization and values. Prerequisite: sophomore standing.

345—4 THE AESTHETICS OF FILM. An examination of the major genres of film and film theory. Prerequisite: sophomore standing or consent of instructor.

360—4 PHILOSOPHY OF ART. The significance of art as a human activity, its nature and standards as seen in the problems of criticism, and the relation of art to other forms of knowledge.

380—4 CHINESE PHILOSOPHY. The historical development of Chinese thought from Confucius and Lao Tzu to Mao Tse-Tung.

385—20 (4,4,4,4,4) HISTORY OF WESTERN PHILOSOPHY. (a) Greek and Roman. (b) Medieval and Renaissance. (c) Classical Modern (17th and 18th centuries). (d) 19th Century. (e) 20th Century.

386—4 AMERICAN PHILOSOPHY. A survey of American philosophic thought from colonial days to the present, with emphasis on such recent thinkers as Peirce, James, Royce, Dewey, and Santayana.

391—4 THEORY OF KNOWLEDGE. A study of the various kinds of knowledge, of the foundations of knowledge in thought and perception, and of the rational and empirical elements constituting the structure of knowledge.

402—4 HINDU THOUGHT. A historical survey of Indian philosophy from the Upanishads to Vedanta. Prerequisite: 302.

403—4 BUDDHIST THOUGHT. An investigation of Buddhist philosophy from Theravada through Zen. Prerequisite: 302.

412—4 CONTEMPORARY ISSUES IN BIO-ETHICS. (See Biology 412.)

430—4 SYMBOLIC LOGIC. Use of symbols as tools for analysis and deduction. Study of truth tables, Boolean Expansions, propositional calculus and quantifiers, logic of relations, and their functions in logistic systems.

470—4 TOPICS OF BUSINESS ETHICS. An examination of the ethical dimensions arising within the economic and business framework with 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 Government 484.) (a) Ancient and Medieval. (b) Renaissance and Early Modern. (c) Recent. May be taken separately.

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 12 hours. Prerequisite: consent of instructor.

495—2 to 6 INDEPENDENT READINGS. Independent study in philosophy on a tutorial basis. May be repeated to a maximum of 12 hours. Prerequisite: consent of instructor and department chairperson.

WOMEN'S STUDIES

321—4 SOCIAL PHILOSOPHIES OF THE WOMEN'S MOVEMENT. (See Philosophy 321.)

390—2 to 4 SELECTED TOPICS. A course for juniors and seniors which treats particular issues or areas directly relevant to the experience of women. Varied content. May be repeated to a maximum of 8 hours.

490—2 to 8 SPECIAL PROBLEMS. Seminar for qualified seniors and graduate students to pursue specific topics in depth. Varied content. Prerequisite: consent of instructor.

495—2 to 4 INDEPENDENT READINGS IN WOMEN'S STUDIES. Independent reading and research in the area of women's studies. Form and content to be arranged with instructor and approved by women's studies adviser. May be repeated up to 8 hours. Prerequisite: approval of women's studies adviser.

499—4 PRACTICUM IN WOMEN'S STUDIES. A practical experience in some phase of women-oriented activity proposed by the student and a recognized organization. Involves at least 10 hours a week with the organization plus an academic component

such as a paper. Examples: work with Rape Crisis Center, Oasis Shelter for Women, Women's Studies Program. Generally reserved for qualified students with at least 12 credit hours in Women's Studies (or equivalent related experience). Prerequisite: consent of Director of Women's Studies.

SCHOOL OF NURSING

FACULTY

Professor:
Forni, P. R. (Dean)

Associate Professors:
Birnbaum, M. A.
Perry, G.
Welch, M. J.

Assistant Professors:
Bell, D. E.
Cady, L. M.
Cohen, S. M.
Gresley, R. S.
McDonnell, B. C.
Merritt, S. L.
Mitchell, S. I.
Ruddy-Wallace, M. W.
Rumfelt, J. J.
Steele, L. L.
Sykes, R. K.
Walker, B. B.

Instructors:
Allen, N.
AuBuchon, B. L.
Baccus, M. G.
Canfield, R.
Custer, M. S.
Heater, B. S.
Heitmeier, J. E.
Jones, C. S.
Marshall, F. G.
Pinnell, N. L.
Steele, R.L.
Strader, M.
Strieker, E. L.
Ward, L. D.

Visiting Instructor:
Schmidt, C. A.

Assistants:
Freed, P. E.
Schwind, D.

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 life span. 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.

Career Opportunities

The professional nurse is in great demand across the country. Opportunity for employment exists in a variety of health care settings, including hospitals, nursing homes, offices, industry, schools and clinics. Graduates of this program are able to find immediate employment upon graduation. Students have numerous opportunities for part-time employment while attending school.

ADMISSION REQUIREMENTS

The baccalaureate program consists of foundational courses in the arts and sciences, as well as the nursing component which is concentrated at the upper division level. Foundational courses are available in the General Studies program and various departments on campus. Students are admitted into the School of Nursing every quarter during the academic year. Admission to the University does not guarantee acceptance into the School of Nursing.

Students seeking admission to the School of Nursing should consult an adviser (692-3956) for admission requirements. Prior to admission to the School, applicants must complete the course prerequisites.

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 in 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.

Admission criteria for the School include: (1) successful completion of prerequisite courses with grades of C or above, (2) minimum overall grade-point average of 3.50, and (3) completed application on file in the School of Nursing within the time deadline.

An application is considered complete when the application, official transcripts of all college coursework, record of current course enrollment, and most recent cumulative grade-point average are in the applicant's file. Applicants are responsible for ensuring that materials are received (Box 66, School of Nursing) by February 1 for fall admission, July 1 for winter admission, and October 1 for spring admission. Applicants' files completed after those dates will be reviewed on a space available basis.

Applicants are accepted from a list of students whose cumulative grade-point averages are 3.5 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. 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 and are encouraged to reapply for a subsequent quarter.

Transfer students follow the same procedures and must meet the same criteria. In addition, transfer students send a transcript and school bulletin to the School of Nursing for approval 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 as is required of generic students. Registered Nurses must also present proof of licensure upon application. Missouri licensure is required for Registered Nurse students who use Missouri agencies as part of their clinical experience as a student. Early application is *not* required for the Registered Nurse.

Nursing courses taken in any program other than NLN accredited baccalaureate level programs do not transfer. Registered Nurses may receive up to 48 hours of credit by testing out of courses in the nursing major. Any student who feels capable of meeting the objectives may petition to take the proficiency examination for selected nursing courses. Some credit may also be obtained 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 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 Examinations for licensure as a Registered Nurse.

Clinical experiences are an integral part of the nursing major. Health care agencies in Metro-East and in St. Louis cooperate with the School in providing opportunities to practice clinical skills.

Bachelor of Science Degree, School of Nursing

(For students seeking admission to the School of Nursing)

General Studies Requirements (Waive GSM-8) 60

Level I Courses 58
- Anthropology: GSS 210-4[1] ..... (4)
- Biology: 210-4[1]; 312a-5[1], 312b-5 14
- Chemistry: 110-12[1] 12
- Humanities: GHA 322-4, Elective-4 ..... (8)
- Nursing 170-4[1] 4
- Nursing 201 through 242 20
- Psychology: GSS 260-4[1], Psychology 305-4 ..... (4)+4
- Science and Mathematics: GSM Elective-4 ..... (4)
- Skills: GSK 101-4[2], 102-4[2], 123-4[2] ..... (12)
- Social Science: GSS Elective-4 ..... (4)
- Sociology: GSS 130-4[1], Sociology 340-4 ..... (4)+4

Level II Courses 52
- Interdisciplinary Studies: GIS Elective-4 ..... (4)
- Nursing 301 through 344 48
- Psychology: Psychology 465-4 4
- Skills: GSK 152 or 162-4 ..... (4)
- Science and Mathematics: GSM Elective-4 ..... (4)

Level III Courses 22
- Humanities: GHA Electives-8 ..... (8)
- Nursing Electives 6
- Nursing 401 through 442 16

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[1]Satisfactory completion (C or above) of these courses or their equivalent is prerequisite to admission to the School of Nursing.

[2]Satisfactory completion (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. After admission to the School students must maintain a cumulative grade-point average of 3.0 or above to continue in nursing.

All nursing majors are required to file reports of annual physical examinations. Some clinical courses have requirements for specific tests such as X-rays or nose culture. The Student Handbook for Nursing Students contains full details.

SPECIAL COSTS

Students wear a uniform while in clinical practice. See the Student Handbook for details. Additionally, students should be prepared to purchase a variety of health care equipment, such as a stethoscope, bandage scissors, and a second-sweep watch. Certain textbooks used throughout the curriculum must be purchased the first three quarters. These cost approximately $175.00.

Costs for special tests, such as nose cultures required by clinical agencies, are payable to the Bursar.

The School pin, available only at graduation, costs $38.00 at this time. The pin may be purchased at the University Bookstore.

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.

COURSES

Courses on the 200, 300, and 400 level are open only to those students who are majoring in nursing.

151—2 PROFESSIONAL NURSING PERSPECTIVES. This is an introductory course for registered nurses returning to school. Students will explore the professional components of nursing utilizing a historical approach. Content relative to attitudinal change will be developed around the themes of assertiveness, client advocacy, and autonomy. Prerequisite: R.N. licensure.

170—4 LIFE SPAN DEVELOPMENTAL CONCEPTS. A developmental study of the individual from conception to senescence, with emphasis on physiologic, psychologic, and social development. Prerequisite: general psychology or consent of instructor.

201—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN MAINTAINING EQUILIBRATION I. This course focuses on the nursing care of individual clients who are in various stages of the health maintenance process. Emphasis is placed on study of the School of Nursing's conceptual framework and aspects of health maintenance relating to the concepts of client-environment interaction, metabolism, perception and coordination, immunity and inflammation, and oxygenation. Prerequisites: admission to School of Nursing; concurrent enrollment in 211, 221, 231, and 241 is expected; concurrent enrollment in, or completion of, Biology 312b.

202—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN MAINTAINING EQUILIBRATION II. This course focuses on the nursing care of individual clients whose health maintenance process is threatened by stressors. Particular emphasis is placed on the application of biological, psychological and social concepts to the nursing care of individuals in various phases of the health maintenance process due to stressors affecting one or more of the following: reproductive status, perception and coordination, fluid and electrolyte dynamics, and oxygenation. Prerequisites: completion of Quarter 5 nursing courses; concurrent enrollment in 212, 222, 232 and 242 is expected; Biology 312b.

211—2 PROFESSIONAL NURSING PROCESSES: NURSING PROCESS I. Utilizing a historical perspective, students study the nursing process as the contemporary framework for providing professional nursing care to individuals. The phases of assessment, including diagnosis and planning, will be emphasized. Prerequisites: admission to School of Nursing; concurrent enrollment in 201, 221, 231, 241 is expected; concurrent enrollment in, or completion of, Biology 312b.

212—2 PROFESSIONAL NURSING PROCESSES: NURSING PROCESS II. A further study of the nursing process as the contemporary framework for providing professional nursing care. The phases of intervention and evaluation will be emphasized. Focus is also directed toward the effects of nursing practice standards upon the quality of health care delivery, including the strengths and limitations of professional nursing practice. Prerequisites: completion of Quarter 5 nursing courses; concurrent enrollment in 202, 222, 232, and 242 is expected; Biology 312b.

221—2 INTERPERSONAL RELATIONS I. The focus of this course is the development of intra- and interpersonal performance systems. The study of role and role behaviors as these influence/determine the individual's self-concept is presented. The effect of the role perceptions and expectations on nursing practice is explored. The communication process necessary for establishing and maintaining intra- and interpersonal relationships is examined. Students will be encouraged to examine personal feelings, attitudes and values that affect nursing practice as well as previous experiences that may influence nurse-client (system) relationship. Prerequisites: admission to School of Nursing; concurrent enrollment in 201, 211, 231 and 241 is expected; concurrent enrollment in, or completion of, Biology 312b.

222—2 INTERPERSONAL RELATIONS. This course focuses on threats to the maintenance of intrapersonal performance systems. Stress as a human phenomenon arising from developmental and situational events is presented. The student studies the defense and coping strategies used by the individual to aid in accommodating to stressors in the environment. The nurse's role in prevention of stress and providing therapeutic support for the client undergoing stress is explored. Prerequisites: completion of Quarter 5 nursing courses and Biology 312b; concurrent enrollment in 202, 212, 232, and 242 is expected.

231—1 PSYCHOMOTOR NURSING SKILLS I. Students are introduced to simple skills of client care which provide the foundation for maintaining client equilibration. Basic skills of health assessment are presented including history taking and four basic methods of physical evaluation. These psychomotor skills are correlated with didactic content from concurrent nursing courses and practiced in simulated clinical situations (nursing laboratory). Prerequisites: admission to the School of Nursing; concurrent enrollment in, or completion of 201, 211, and 221; concurrent enrollment in 241 is expected, concurrent enrollment in, or completion of, Biology 312b.

232—1 PSYCHOMOTOR NURSING SKILLS II. This course includes selected nursing skills drawn from concepts presented in the Conceptual Basis and Interpersonal Relations courses. Moderately complex skills are introduced; these skills are utilized in assisting selected clients in the maintenance of equilibration. Prerequisites: completion of Quarter 5 nursing courses; completion of, or concurrent enrollment in, 202, 212, and 222; concurrent enrollment in 242 is expected; Biology 312b.

241—2 NURSING MAINTENANCE PRACTICUM I. Through planned learning experiences in a variety of clinical practice settings, students assist individual clients to maintain health. Nursing strategies which assist clients to deal with usual life stressors are utilized. Application of nursing process components and simple psychomotor skills to the care of clients is expected. Prerequisites: admission to the School of Nursing; concurrent enrollment in, or completion of, Biology 312b; concurrent enrollment in, or completion of, other Quarter 5 nursing courses.

242—2 NURSING MAINTENANCE PRACTICUM II. Utilizing a variety of structured health care settings, students explore the supportive role of the nurse in assisting clients to maintain individual optimal health status. Emphasis is placed on the use of nursing knowledge and skills with clients whose health maintenance process is threatened due to a change in one or more of the following: reproductive status, perception and coordination, fluid and electrolyte dynamics, and oxygenation. Prerequisites: completion of Quarter 5 nursing courses; Biology 312b; completion of, or concurrent enrollment in, other Quarter 6 nursing courses.

301—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION I. This course focuses on the nursing care of clients and their families who are in various stages of the restorative health process. Particular emphasis is placed upon the application of biological, psychological and

social concepts to the study of clients facing one or more of the following crises: pregnancy, infection, injury and other emergencies, surgical therapy, and a change in female reproductive status. Prerequisites: completion of Quarter 6 nursing courses and Sociology 340; concurrent enrollment in 311, 331, and 341 is expected.

302—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION II. This course focuses on the nursing care of clients and their families who are in various stages of the restorative health process due to disturbances in one or more of the following: immunity and inflammation, coordination, and oxygenation. Prerequisites: completion of Quarter 7 nursing courses; Psychology 305; concurrent enrollment in 312, 332, and 342 is expected.

303—5 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN RESTORING EQUILIBRATION III. This course focuses on the nursing care of clients and their families who are in various stages of the restorative health process due to disturbances in one or more of the following: fluid and electrolyte balance, metabolism, and 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. The course focuses on the nursing care of clients and their families who are in various stages of the restorative health process due to 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: MANAGEMENT I, THE MANAGEMENT OF DECISION MAKING. Emphasis in this course will be on the process of decision-making and the management of decisions as they relate to nursing practice and moral and ethical issues. Prerequisites: completion of Quarter 6 nursing courses and Sociology 340; concurrent enrollment in 301, 331, and 341 is expected.

312—2 PROFESSIONAL NURSING PROCESSES: TEACHING-LEARNING. The place of teaching in nursing practice is explored. Each component is presented in depth. Focus is on assessment of learning needs, formulation of teaching plans, and evaluation of health teaching. Prerequisites: completion of Quarter 7 nursing courses and Psychology 305; concurrent enrollment in 302, 332, and 342 is expected.

313—2 PROFESSIONAL NURSING PROCESSES: RESEARCH I. This course introduces the student to the research process with emphasis on the components which comprise an adequate research study. The focus is on examining professional nursing resources and literature. 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 HEALTH CARE DELIVERY. This course is designed to enable the nursing student to gain insight into the theories, concepts and principles of health care administration and management as these relate to professional nursing practice. Emphasis is on developing the level of understanding needed by professional nurses to manage health care services. Prerequisites: completion of Quarter 9 nursing courses and Psychology 465; concurrent enrollment in 304, 324 and 344 is expected.

324—2 INTERPERSONAL RELATIONS III. The focus of the course is the use of the group process in promotion, restoration and maintenance of health. Leadership functions and strategies utilized by the nurse working with client groups will be stressed. 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. This course focuses on performance of nursing assessment and restorative intervention skills associated with labor and delivery, the neonate, emergencies, infection control, surgical therapies, and female reproductive status. Prerequisites: completion of Quarter 6 nursing courses and Sociology 340; concurrent enrollment in, or completion of, 301 and 311; concurrent enrollment in 341 is expected.

332—2 PSYCHOMOTOR NURSING SKILLS IV. This course focuses on performance of nursing assessment and restorative intervention skills with clients of all ages who experience a change of status in one or more of the following: immunity, coordination, and oxygenation. Prerequisites: completion of Quarter 7 nursing courses and Psychology 305; concurrent enrollment in, or completion of, 302 and 312; concurrent enrollment in 342 is expected.

333—2 PSYCHOMOTOR NURSING SKILLS V. This course focuses on performance of nursing assessment and restorative intervention skills with clients of all ages who experience a change of status in one or more of the following: perception, fluid and electrolyte balance, and metabolism. Synthesis opportunities are included. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in, or completion of, 303 and 313; concurrent enrollment in 343 is expected.

341—3 NURSING RESTORATION PRACTICUM I. Utilizing components of the nursing process, the focus of the course is the changing family during intrapartum and postpartum periods as well as restorative nursing care of clients facing one or more of the following: infection, emergencies, surgical therapy and a change in female reproductive status. Clinical applications involved in making decisions and alternative nursing strategies are included. Prerequisites: completion of Quarter 6 nursing courses and Sociology 340; concurrent enrollment in, or completion of, other Quarter 7 nursing courses.

342—3 NURSING RESTORATION PRACTICUM II. Emphasis in this course is on the use of restorative nursing skills with pediatric and adult clients who experience disturbances which affect one or more of the following: immunity and inflammation, coordination, and oxygenation. Practice with the teaching/learning process and observation of various professional nurse roles is included. Prerequisites: completion of Quarter 7 nursing courses and Psychology 305; concurrent enrollment in, or completion of, Quarter 8 nursing courses.

343—3 NURSING RESTORATION PRACTICUM III. Emphasis in this course is on the use of restorative nursing skills with pediatric and adult clients who experience disturbances which affect one or more of the following: fluid and electrolyte balance,

metabolism, and proliferation of cells. Field experiences include the study of different professional nursing roles. Prerequisites: completion of Quarter 8 nursing courses; concurrent enrollment in, or completion of, other Quarter 9 courses.

344—3 NURSING RESTORATION PRACTICUM IV. Emphasis in this course is on the use of restorative nursing skills with clients who experience perceptual difficulties. Experience in using principles of management and group process skills in selected settings is also provided. 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. This elective course provides an opportunity for the student to improve and expand an area of personal interest by investigation and pursuit through an individually planned experience. Carried out under the guidance of an instructor, the student develops an area of inquiry that will be studied throughout the quarter. 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. This elective course is planned for students to pursue an internship for further development of professional skills. The student will have the opportunity to practice psychomotor skills, organizational skills, interpersonal relationship skills and explore professional issues of concern. Planned experiences will be in the clinical area under the guidance of an instructor/staff. Prerequisite: satisfactory completion of courses through Quarter 7 of the nursing curriculum.

353—2 NURSING CARE OF EXCEPTIONAL CHILDREN AND OTHER FAMILIES. An elective designed to increase the student's ability to utilize the nursing process in the care of the exceptional child. Students will have a number of planned experiences in state and community agencies. Students will focus their learning upon a selected category of exceptional children and, when feasible, work with skilled professionals in the care of these children. Prerequisites: satisfactory completion of Quarter 9 nursing courses, consent of instructor.

355—2 NURSING OF THE HIGH RISK INFANT. An in-depth study of high risk infants who are premature, small-for-gestational age, large-for-gestational age and post-mature, and of the application of the nursing process in caring for these infants. Prerequisite: satisfactory completion of Quarter 9 nursing courses and/or consent of instructor.

357—4 HEALTH ASSESSMENT. The focus of this course is on health assessment of the adult and child. This course is designed to teach students the basic skills required for assessment of the adult and child, i.e., taking a comprehensive health history, performing a physical examination and recording the findings. Prerequisite: consent of instructor.

401—3 CONCEPTUAL BASIS FOR ASSISTING THE CLIENT IN PREVENTING DISEQUILIBRATION I. This course focuses on the evaluation of the health needs of clients in the community in order to support the health promotion process; levels of prevention, principles of epidemiology and cultural variables affecting health are studied as they relate to preventive nursing concepts and practice. 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. This course focuses on communities as clients in various stages of the health maintenance, restoration or promotion process. Content related to community optimum level of functioning and social systems of the community which affect the health care system is studied. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 11 nursing courses; concurrent enrollment in 412 and 442 is expected.

411—2 PROFESSIONAL NURSING PROCESSES: MANAGEMENT III, THE MANAGEMENT OF CHANGE. This course introduces the student to the concept of change, and the need for the managing of change within the health care system and the nursing profession. The focus is on managing change in professional nursing relationships. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 10 nursing courses; concurrent enrollment in 401 and 441 is expected.

412—2 PROFESSIONAL NURSING PROCESSES: RESEARCH II. This course emphasizes the importance of research to the practice of nursing. Identification of nursing research problems will be accomplished and strategies to test the associated hypotheses will be devised. NOT FOR GRADUATE CREDIT. Prerequisites: completion of Quarter 11 nursing courses; concurrent enrollment in 402 and 442 is expected.

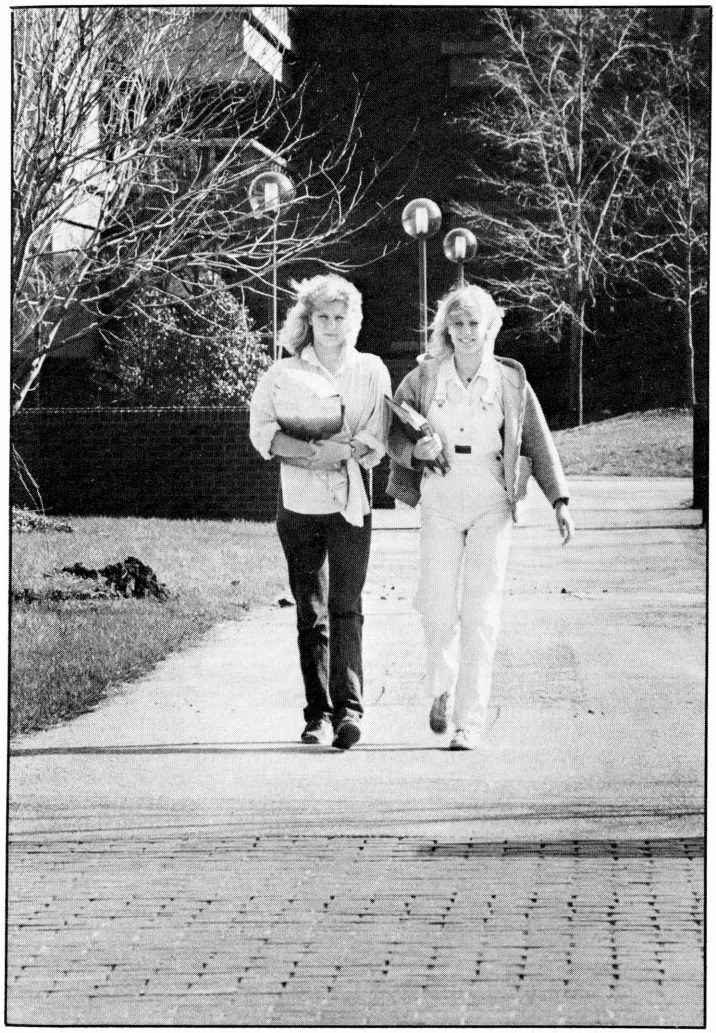
441—3 PREVENTIVE NURSING PRACTICUM I. Within the framework of prevention levels, students will apply nursing strategies in the care of clients in a variety of community-based settings. Emphasis will be placed on promoting change in order to strengthen the coping abilities of clients/populations at risk. Prerequisites: completion of Quarter 10 nursing courses; concurrent enrollment in, or completion of, other Quarter 11 nursing courses. NOT FOR GRADUATE CREDIT.

442—3 to 6 PREVENTIVE NURSING PRACTICUM II. This course offers the student an opportunity to synthesize concepts of prevention at the primary, secondary or tertiary level of health care. Professional nursing processes will be utilized with clients in a selected structural, functional or special interest community group. 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. This course is a nursing elective designed to provide the student with the opportunity to relate knowledge of the interactions of pharmacologic classification to the effect of complex drug interactions. Discussions will center around possible nursing actions that lead clients toward equilibration while they are receiving multiple drugs. NOT FOR GRADUATE CREDIT. Prerequisite: consent of instructor.

495—4 PRIMARY PREVENTION IN COMMUNITY MENTAL HEALTH NURSING. Examination of mental health problems of selected target populations within inner cities or rural areas. Short term primary prevention programs are implemented by nursing students under faculty supervision. Focus of the pro-

grams is to reduce the incidence of new cases of mental disorders and disability in a population. Prerequisites: senior or graduate level nursing major.



SCHOOL OF SCIENCE AND ENGINEERING

The School of Science and Engineering provides quality education in the natural sciences, mathematics, and engineering at the bachelor's degree level and at the master's degree level. These programs provide basic training for those who will eventually progress to doctoral work and also develop broad scientific and technological skills for those who choose technical or teaching careers. As the need arises, we develop programs in interdisciplinary areas, such as environmental science, and in direct job-training, such as the programs at the Environmental Resources Training Center. By means of continuing education programs, technical consulting and cooperation, we seek to serve local institutions, industries, communities, and governments.

Scientific study is progressive in nature and students must be careful to satisfy all the necessary prerequisites before enrolling in each course. Students are encouraged to select a major field of study early in their academic careers so as to insure an orderly progress toward meeting degree requirements.

Admission

1. Admission to a major program requires both declaration of major by the student and admission to the program by the major department. Following the declaration of major, the student will be advised by the department.

2. Formal admission to a major program requires a grade-point average of 3.0 or higher in work in the department and also a grade-point average of 3.0 or higher in work at SIUE. Transfer students may be admitted at the discretion of the department.

3. A department may defer formal admission until the student has satisfied additional admission requirements established by the department.

Academic Status

1. A student may be suspended by the department in any of the following circumstances:

a) a grade-point average of 2.0 or less in any quarter;
b) a drop of the cumulative grade-point average in the major to less than 3.0;
c) withdrawal and/or incomplete grade in half or more of the courses in which the student is enrolled during two successive quarters of registration; or
d) any combination of three withdrawal, incomplete, or failing grades in a single course required by the major.

2. A student may be suspended by the department upon failing to meet other requirements set by the department.

3. A student suspended by the department may be readmitted upon meeting conditions specified by the department at the time of suspension.

Graduation Requirements

1. Graduation from the School 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 Arts or the Bachelor of Science degree with a major in the School 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 department;
b) a grade-point average of 3.0 or higher in all courses in the major area numbered above 299;
c) at least 16 hours of SIUE credit in courses in the major area numbered above 299 with a grade-point average of 3.0 or higher; and
d) at least 9 hours of credit in the major in courses numbered above 299 must be earned at SIUE within two years preceding the completion of requirements for the degree being sought.

3. A candidate for the Bachelor of Science degree in education with a major in the School must have at least 48 hours, or at least 36 if two 27 hour minors are completed in other areas of study. These hours must be in one major with a grade-point average of 3.0 or higher as well as 3.0 or higher in all major courses numbered above 299.

Minor Requirements

A minor within the School must include at least 27 hours of credit with a grade-point average of 3.0 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.
Broadbooks, H. E.
Keating, R. C.
Kulfinski, F. B.
Kumler, M. L.
Levy, M. R.
Myer, D. G.
Thomerson, J. E.
Wittig, G. C.
Zahalsky, A. C.

Associate Professors:

Eder, D. J.

Nair, S. (Chairperson)
Parker, N. R.
Ratzlaff, K. O.

Assistant Professors:

Brugam, R. B.
Wilson, C.

Adjunct Faculty:

Austin, M., Instructor, Med Tech
Bauer, J. D., Professor, Med Tech
Beiermann, M. K., Instructor, Med Tech
Bobowski, S., Professor, Med Tech
Buckles, N., Instructor, Med Tech
Gavin, M., Instructor, Med Tech
Hoegl, J., Instructor, Med Tech
Palermo, V., Professor, Med Tech
Penning, H. L., Professor, Med Tech
Popoff, C., Professor, Med Tech
Soto, P. J., Professor, Med Tech
Torrey, J., Assistant Professor, Med Tech
Van Fossan, D., Professor, Med Tech
Visintine, J., Instructor, Med Tech
Wilner, G. D., Professor, Med Tech

The study of biology includes the whole domain of living things. Its themes extend from the molecular through the cellular and organismic to the population levels of biological organization. Biology includes the study of the pattern of cellular structure, the underlying biochemical pathways, the 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. As these threads are examined and interwoven, the human relationship to the whole world of life becomes apparent. Like all sciences, biology is both cumulative and open-ended in its discoveries. It has to do with the wonders of life, the excitement of discovery, and the challenge of the unknown.

Students who are curious about how living things are put together, how they function, or how they are interrelated with their environment may want to study biology.

Career Opportunities

A variety of careers are available for people with basic or advanced training in biology. These include careers in subfields like bacteriology, botany, ecology, environmental biology, fisheries biology, genetics, horticulture, microbiology, molecular biology, parasitology, physiology, wildlife management, immunology, 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 large majority of students entering schools of medicine, dentistry, optometry, osteopathy, veterinary science, chiropractic and podiatry are biology majors. A basic training in biology is also appropriate for many careers in allied health sciences, including nutrition, pharmacy, occupational therapy and physical therapy. Certain of these careers may require more specialized training.

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 shift.

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, the student is informed in writing of the advisement procedures including the name of the faculty adviser assigned to the student. Each student should see his or her adviser prior to the registration period each quarter. Enrollment in biology courses requires prior approval of the adviser. Biology, particularly specializations in Medical Sciences and Medical Technology, require a definite time sequence if the course requirements are to be completed in four years; and it is thus very important that students seek advisement early in their academic careers. Appointments for advisement may be made by calling the Biology Office at 692-3927.

Sample programs which would permit a student to receive a bachelor's degree in biology under one specialization or another in four years may be obtained from the adviser. The adviser will be pleased to assist the student in preparing a tentative sample program to suit his or her specific needs.

Academic Requirements

A. Academic Standards

All students pursuing a major in the biological sciences must adhere to the following academic standards:

1. A grade of C or better is required in the introductory biology courses (100 and 101 or the equivalent) before a student can proceed into any of the courses numbered above 299.
2. No more than 5 hours of D may be counted in the 52 hours that are required for a major in the biological sciences.
3. Students may take 491 and 493 as electives but these will not fulfill the 400-level requirements.

B. Residency and Other Requirements

Majors in the biological sciences must complete at least 24 of the 52 hours in Biology at SIUE. At least two

400-level courses must be included in the 24 hours. Biology major credit 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.

Minors in the biological sciences must complete at least 12 of the 27 hours in biology at SIUE. Minors and other students whose program requirements do not include Chemistry 125 may substitute Chemistry 110 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 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 specific subdisciplines like Botany, Microbiology, Physiology, Cellular and Molecular Biology, Genetics, and Zoology by completing their electives through courses in these areas. Courses available in each subdiscipline are listed at the end of this section.

Bachelor of Arts, Bachelor of Science Degrees, Biological Sciences

General Studies Requirements	52
(Waive GSM-8 and substitute 8 hours of courses included in the requirements below.)	
Biology Requirements	52
Either 100 and 101 or 200[1]; 301a, 302a, 302c, 303a	24-28
Electives above 299 (except 312)	28-24
A minimum of three courses at the 400 level is required.	
Chemistry Requirements	29
125, 126, 241, 245a	29
Mathematics/Physics Requirements	16-19
MSCS 150 or GSM 101 OR Physics 206 (or 211 and 212)	12-15
A course in statistics (GSM 244 or equivalent)	4
Electives	43-40
	192

[1]Biology 200 is an accelerated course which will be available only to students meeting special prerequisites. See course description.

Subdiscipline Electives

Botany: Electives available include: Biology 419—Plants and Environment; 421—Economic Botany; 447—Topics in Plant Physiology; 455—Plant Anatomy; 456—Plant Microtechnique; 470—Field Botany; 471—Phycology.

Microbiology: Electives available include: Biology 304a—Introduction to Microbiology; 304b, c—Medical Microbiology; 404a—Microbial Physiology; 413—Microbial Genetics; 465a—Immunology; 471—Phycology.

Physiology: Electives available include: 302d—Physiology; 402a, b—Molecular Biology Laboratory; 404a—Microbial Physiology; 406—Cell Organelles and Inclusions; 441—Mammalian Physiology; 444—Integrative Physiology and Laboratory; 445—Endocrinology; 447—Topics in Plant Physiology.

Cellular and Molecular Biology and Genetics: Electives available include: 400—Molecular Biology; 402—Molecular Biology Laboratory; 404a—Microbial Physiology; 405—Techniques in Cell and Tissue Culture; 406—Cell Organelles and Inclusions; 410—Advanced Genetics; 411—Human Genetics; 413—Microbial Genetics; 445—Endocrinology; 465a—Immunology.

Zoology: Electives available include: Biology 314—Functional Morphology of Vertebrates; 315—Embryology; 423—Principles of Parasitism; 435—Ethology; 441—Mammalian Physiology; 445—Endocrinology; 480—Field Zoology; 483—Principles of Entomology; 485—Ichthyology; 486—Herpetology; 487—Ornithology; 488—Mammalogy; 489—Biology of the Primates.

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. It stimulates our own intellectual curiosity while providing 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 modes of human activity which are environmentally responsive.

A student selecting this specialization will take a planned sequence of basic ecology courses which include: 1) ecological principles; 2) a course in aquatic ecosystems; and 3) a course in terrestrial ecosystems. In addition, a variety of elective support courses are also available, and a student 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.

Bachelor of Arts, Bachelor of Science Degrees, Biological Sciences with a Specialization in Ecology

General Studies Requirements	52
(Waive GSM-8 hours and substitute 8 hours of courses included in the requirements below.)	
Biology Requirements	52
Either 100 and 101 or 200[1]; 301a, 302a, 302c, 303a, 325, 425, 426	36-40
Electives above 299 (except 312)	
Must include at least one course from 303b; 419; 420; 423; 443; 470; 471; 480; 483; 485; 486; 487; 488	16-12
Chemistry Requirements	29
125, 126, 241, and 245a	
Mathematics/Physics Requirements	26-27
MSCS 150	8
Physics 206 or 211 and 212	14-15
A course in statistics (GSM 244 or equivalent)	4
A course in computer language is recommended	4
Electives	33-32
	192

[1]Biology 200 is an accelerated course which will be available only to students meeting special prerequisites. See course description.

Medical Sciences Specialization

The pre-health professions curriculum will provide the necessary preparation to qualify an individual for entry into Medical, Dental, Veterinary, Optometry, Osteopathy, Chiropractic and Podiatry schools, as well as into many other allied health programs.

A student considering a health-related profession should demonstrate above-average ability in the natural sciences. These individuals should also exhibit general and special traits commonly associated with health practitioners, e.g., persistence, curiosity, good judgment, initiative, emotional maturity, and attention to details. The predental student should also have or develop good manual skills and ability to make acute judgments on space and shapes.

The biology program described below is designed to provide the student with a rigorous course of study which will satisfy the entrance requirements of the professional schools, as well as award the student 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 into 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.

A Preprofessional Committee maintains a centralized recommendation service to aid the students seeking entry into professional schools during the application process. The chairperson of this Committee is available in the Biology Department to help and advise such students with regard to application procedures.

Bachelor of Arts, Bachelor of Science Degrees, Biological Sciences with a Specialization in Medical Science

General Studies Requirements	52
(Waive GSM-8 and substitute 8 hours of courses included in the requirements below.)	
Biology Requirements	52
Either 100 and 101 or 200[1]; 301a, 302a, 302d, 303a, 304a; 314 or 315; and 301e or 400	37-47
Electives above 299 (except 312)	15- 5
A minimum of three courses at the 400-level is required. 400a, b, c will be considered as equivalent to two 400-level courses.	
Chemistry Requirements	29
125, 126, 241, 245a	
Mathematics/Physics Requirements	22-23
MSCS 150	8
Physics 206 or 211 and 212	14-15
Electives	37-36
	192

[1]Biology 200 is an accelerated course which will be available only to students meeting special prerequisites. See course description.

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, the degree will be awarded at the end of the first year of professional school upon application by the student and receipt of the first year's transcript.

Medical Technology Specialization

This degree specialization is designed for those students who wish to become certified Medical Technologists—MT (ASCP). Medical technologists should have a firm understanding of the theory behind 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, and immunology, blood and organ banking, microbiology, and 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 dramatically 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 Tech-

nology 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 fundamental knowledge and skills in biology, chemistry, physics, and mathematics are to be mastered, as well as the general education courses. The fourth calendar 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 any student in the program. Fifty-five hours of University credit will be awarded students who successfully complete the internship program. The credits will be assigned for courses in blood banking, chemistry, coagulation, hematology, microbiology, mycology, parasitology, serology, urinalysis, and other courses as specified in the affiliation agreement with each affiliate. The student is awarded the Bachelor of Science in Biology / Medical Technology degree by SIUE upon completion of all four years of this program. At this time the student is eligible to apply for examination by the Board of Registry of the American Society of Clinical Pathologists and, if successful, is certified as an MT (ASCP).

Students in this program should seek advisement early in their academic careers from the Biology/Medical Technology adviser since there is a definite time sequence for the completion of these requirements and careful scheduling is needed in order to complete the academic portion of their program in three years.

Bachelor of Arts, Bachelor of Science Degrees, Biological Sciences with a Specialization in Medical Technology

General Studies Requirements	52
(Waive GSM-8 and substitute 8 hours of courses included in the requirements below.)	
Biology Requirements	42
Either 100 and 101 or 200[1]; 301a, 302a, 302d, 303a, 304. (312 may be substituted for 302a and 302d)	35-39
Electives above 299	7- 3
Chemistry Requirements	34
125, 126, 241, 245a, 335	
Mathematics/Physics Requirements	13-17
GSM 101 and GSM 144	9
A course in statistics (GSM 244 or equivalent) or MSCS 150	4- 8
Clinical Internship at Hospital School of Medical Technology	55
	196-200

[1]Biology 200 is an accelerated course which will be available only to students meeting special prerequisites. See course description.

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; a minimum grade of C is required in each of the following courses: 100, 101, 301a, 302a, c, 303a; 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.)

Minor Requirements

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 in courses numbered above 300.

Requirements include:

1) Either Biol. 100, 101 (or Biol. 200).

2) At least two biology courses from the following group: 301a (Cell Biology), 302a (Animal Life), 302c (Plant Life), 302d (Physiology) OR 312 (Human Anatomy and Physiology), 303a (Genetics), 325 (Basic Ecological Principles and Concepts).

3) Electives: The remaining hours may be completed with any courses in the biological sciences except 491 and 493. No more than 4 hours may be counted from GSM 230, 231, 232, 233, 234, 236. (GSM 130 and 131 are not available for minor credit.)

CHEMISTRY

Professors:
Bain, R. L.
Bouman, T. D.
Drew, H. D.
Firsching, F. H.
Hall, S. K.
Matta, M. S. (Chairperson)
Patrick, T. B.
Rands, D. G.
White, J. E.
Wilbraham, A. C.

Associate Professor:
Spencer, J. A.

Assistant Professor:
Viola, R. E.

Instructor:
Staley, D. D.

Adjunct Professor:
Landis, M. E.

Students who want to major in chemistry, or think that they may, should visit or call the Department of Chemistry (Room SL 2325; telephone 692-2042) as soon as possible. They will be assigned to a faculty adviser who will help them plan an academic program. Early advisement will enable them to complete their program with minimum conflicts and within the shortest possible time.

Career Opportunities

The undergraduate chemistry curriculum prepares one for a variety of careers. Many chemistry majors choose to continue their studies with graduate work in chemistry or biochemistry. Others are accepted by schools of medicine, dentistry, veterinary medicine, and pharmacy. Still others begin a career in industry upon graduation. Most industrial chemists work for companies involved in making everyday necessities, such as drugs, plastics, fertilizers, and semi-conductors.

Opportunities to make significant contributions to society are available to chemistry graduates who have additional training in other fields, such as computer science, ecology, economics, law, library science, marketing, medicine, and technical writing.

Degree Requirements

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. There are three specializations 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. These 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 Science and Engineering.

Bachelor of Science Degree, Chemistry - American Chemical Society (ACS) Approved Program

The B.S. degree does not require a minor. Students must, however, be able to read a foreign language and solve chemical problems on a computer before they graduate. Advisers will help students decide how best to meet these requirements.

General Studies Requirements (8 hours of GSM may be replaced with 8 hours from the science courses listed below)	52
Chemistry Requirements	68-69
Chemistry 125a, b, c	11
Chemistry 126a, b, c	4
Chemistry 241a, b, c	12
Chemistry 245a, b,	4
Chemistry 335	5
Chemistry 345	3
Chemistry 361a, b, c	12
Chemistry 365a, b	4
Chemistry 411	4
Chemistry 432a	4
Chemistry 451a[1]	3
Chemistry Elective[2]	2-3
Mathematics Requirements	16
MSCS 150a, b	8
MSCS 260a, b	8
Physics Requirements	14
Physics 211a, b, c	12
Physics 212a, b	2
Additional Science Elective (may be Chemistry)	2-4
Other Electives	40-37
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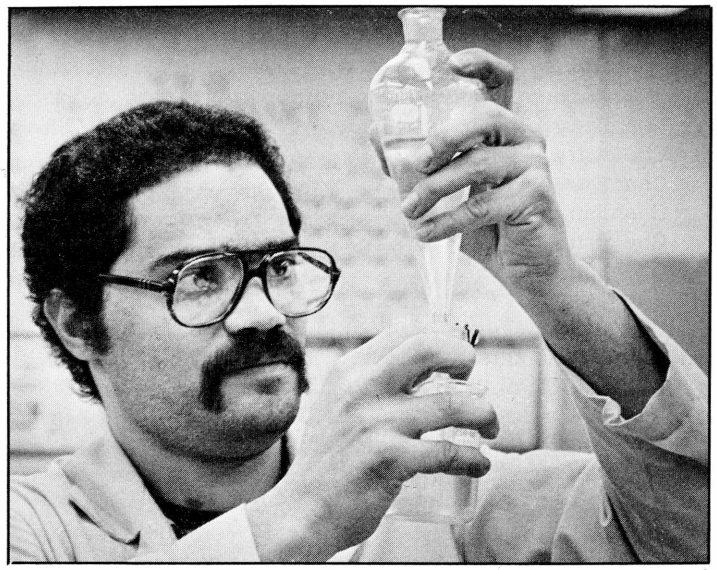
[1]Biology 301e (3) or Biology 400a (3) may be substituted for this course.
[2]Chemistry 396 or a chemistry course at the 400 level.



Bachelor of Arts Degree, Chemistry

The flexibility of the chemistry requirements for the B.A. degree is described above. The requirement as to a minor is flexible also with two alternatives. Students may take a minor and satisfy the requirements established by the department offering that minor and by the School of Science and Engineering, 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. The supporting courses must be approved by advisers.

Bachelor of Arts Degree, Chemistry - Basic Program

General Studies Requirements (8 hours of GSM may be replaced with 8 hours from the science courses listed below)	52
Foreign Language Requirement	12
Chemistry Requirements	56-62
Chemistry 125a, b, c	11
Chemistry 126a, b, c	4
Chemistry 241a, b, c	12

Chemistry 245a 2
Chemistry 335 5
Chemistry 361a, b, c, 365a, b 10-16
Chemistry Electives 12
Mathematics Requirements 8
MSCS 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
Other Electives 16-36

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Bachelor of Arts Degree, Chemistry, Medical Science Specialization

General Studies Requirements (8 hours of GSM may be replaced with 8 hours from the science courses listed below) 52
Foreign Language Requirement 12
Chemistry Requirements 51-57
Chemistry 125a, b, c 11
Chemistry 126a, b, c 4
Chemistry 241a, b, c 12
Chemistry 245a, b 4
Chemistry 335 5
Chemistry 451[1] 3
Chemistry 361a, b, c, 365a, b 10-16
Chemistry Electives 2
Mathematics Requirements 8
MSCS 150a, b 8
Physics Requirements ..... 12 or 15
Physics 211a, b, c or 206a, b, c ..... 12 or 15
Biology Requirements 12
Biology 200 4
Biology 301a 5
Biology Electives 3
Other Electives (additional Chemistry and Biology recommended) 48-36

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[1]Biology 301-3 or Biology 400a-3 may be substituted for this course.

Pre-medical students who enter a medical school after the junior year may obtain approval to apply appropriate medical school courses to complete the requirements for a major in chemistry.

Bachelor of Arts Degree, Chemistry, Secondary Education Specialization

General Studies Requirements (8 hours of GSM may be replaced with 8 hours from the science courses listed below) 52
Foreign Language Requirement 12
Chemistry Requirements 51-57
Chemistry 125a, b, c 11
Chemistry 126a, b, c 4
Chemistry 241a, b, c 12
Chemistry 245a 2
Chemistry 335 5
Chemistry 361a, b, c, 365a, b 10-16
Chemistry 245b or 311 or 451a 2-3
Chemistry Electives 6-5
Mathematics Requirements 8
MSCS 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
Secondary Education 401a, b, c 33
Secondary Eduation 487 4
Physical Education 6
Other Electives 10-1

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Scheduling for the third and fourth years involves coordination between the chemistry and secondary education programs. The student 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 3 hours must be taken at SIUE. Chemistry 105 is not acceptable for a minor. Students must obtain written approval from the Department of Chemistry for a program which does not include Chemistry 125a, b, c or 126a, b, c. This approval should be requested early in your program planning.

ENGINEERING AND TECHNOLOGY

Professors:

Anderson, T. P. (Dean, School of Science and Engineering)
Brown, J.
Duffey, H.
Hanna, S. J. (Chairperson)
Hord, W. E.
Jones, L. C.
Kokoropoulos, P.
Korn, A.
Rutledge, R.
Wallace, N.

Associate Professors:

Arnold, G.
Bengtson, H. H.
Bollini, R.
Cote, D. N.
Rossow, M. P.
Snell, L. M.

Assistant Professors:

Pocreva, R. S.
Sastri, T.

Instructor:

Pierce, R.

Adjunct Professors:

Bryant, J. O., Jr.
Godhwani, A.
Soloman, R.

The Department of Engineering and Technology offers programs leading to 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 Department also offers the Bachelor of Science degree with a major in Construction. The construction program is designed to provide the 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 Department should seek advisement from the Department 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 with an engineering minor may enroll in these courses with the permission of their minor adviser. Any other student wishing to enroll in 300- or 400-level engineering courses may do so only with the permission of the Chairperson of the Department of Engineering and Technology.

All students enrolled in pre-engineering or one of the engineering fields must purchase a scientific pocket calculator and their own drafting instruments. In addition, they are required to purchase their technical textbooks.

ADMISSION TO PRE-ENGINEERING

Students are admitted to the pre-engineering program after admission to the University and completion of the following requirements.

1. Completion of GSM 144, College Algebra (or high school equivalent), with a grade of C or better and currently enrolled in MSCS 125, Pre-Calculus, or higher mathematics course.
2. Cumulative grade-point average of 3.0.

ADMISSION TO ENGINEERING MAJOR

Admission to the engineering major (Civil Engineering, Electrical Engineering and Industrial Engineering) requires completion of the pre-engineering program as described below. Application forms for admission to the major are available in the Department of Engineering and Technology office (SL 0332) and should be filed in the Departmental office no later than April 15 of the sophomore year.

PRE-ENGINEERING

The first two years of all engineering programs offered by Southern Illinois University at Edwardsville are common to all disciplines and form the basis of the pre-engineering program. Successful completion of the pre-engineering program allows the student to select a major in one of the engineering disciplines. The student does not have to select a specific major until late in the sophomore year.

The pre-engineering program is composed of the courses listed below:

Communications Skills: GSK 101, 102, 123; Engineering 101a; Mathematics, Statistics and Computer Science 172.

Engineering Science: Engineering 110, 200, 260a, b, 270.

Mathematics: Mathematics, Statistics and Computer Science 150a, b, 260a, b, c, 305.

Physical Science: Chemistry 125a, b, 126a, b, Physics 211a, b, c, 212a, b.

Although humanities and social sciences 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 the student must complete 12 hours in one of the general areas of humanities or 8 hours in each of two areas of humanities. Language courses are not accepted toward this requirement. In addition, 8 hours in one of the general areas of social sciences, other than economics, must be completed. These requirements may be, but are not necessarily, satisfied by the completion of the University General Studies requirements.

All students, both those enrolled at SIUE and those wishing to transfer to SIUE, must apply for admission to one of the engineering majors no later than April 15 preceding the fall quarter they wish to begin their junior year. In general this will be during the last quarter of the pre-engineering program.

SAMPLE PROGRAM: PRE-ENGINEERING

Freshman Year

FALL		*WINTER*		*SPRING*	
GSK 101	- 4	GSK 102	- 4	GSK 123	- 4
Math 150a	- 4	Math 150b	- 4	Math 260a	- 4
Chem 125a	- 4	Chem 125b	- 4	Phys 211a	- 4
Chem 126a	- 1	Chem 126b	- 1	Math 172	- 2
GHA Elec.	- 4	Engr 101a	- 2		
Engr 110	- 0				
	17		15		14

Sophomore Year

FALL		*WINTER*		*SPRING*	
Math 260b	- 4	Math 260c	- 4	Math 305	- 4
Phys 211b	- 4	Phys 211c	- 4	Engr 200	- 4
Phys 212a	- 1	Phys 212b	- 1	Engr 270	- 4
Engr 260a	- 4	Engr 260b	- 4	GHA Elec.	- 4
GHA Elec.	- 4	GHA Elec.	- 4		
	17		17		16

Transfer Students

A transfer student wishing to enter pre-engineering or one of the engineering majors must contact the Depart-

ment of Engineering and Technology for a transfer credit evaluation at least 30 days prior to the start of the quarter during which entry is desired. The student must supply copies of the pertinent transcripts and any other materials, such as course descriptions, syllabi, etc., that may be needed to perform the evaluation. Note that those students transferring at the junior and senior level must also meet the April 15 deadline for applying for admission to an engineering major.

Only courses passed within the last 10 years with a letter grade of A, B, or C will be considered for transfer credit applying to any course bearing an Engineering, Chemistry, MSCS, or Physics number. In addition, courses that were not part of an ABET accredited engineering program will normally not be considered for transfer credit toward any 300 or 400-level engineering course. The final decision of the acceptance of transfer credit applied to engineering courses shall be that of the faculty of the Department of Engineering and Technology.

Academic Requirements

A student in an engineering major must meet all University retention standards. In addition, satisfactory progress towards the engineering degree must be maintained. The progress of each student will be evaluated during the summer quarter. A grade-point average of at least 3.0 on a scale of 5.0 must have been maintained. A full-time student must have completed at least 24 credit hours of coursework leading to the engineering degree within the preceding 12 calendar months. Any student who has not made satisfactory progress may be removed from the engineering major.

A student who is preparing for a career in engineering is bound to the same code of ethics as the practicing engineer. Any violation of this code will result in disciplinary action which may include dismissal from the engineering program. Copies of the code of ethics are available in the Engineering and Technology Office.

An engineering major on Scholastic Suspension may apply for readmission by written application to the Undergraduate Admissions and Retention Committee. The committee will give its recommendations to the Chairperson of the Department who will then make a recommendation to the Dean. If the student is readmitted, the conditions of the readmission must be met, or the student will be removed from the engineering major.

CIVIL ENGINEERING

Civil engineering is defined by the American Society of Civil Engineers as "the profession in which a knowledge of the mathematical and physical sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the progressive well-being of mankind in creating, improving, and protecting the environment, in providing facilities for community living, industry, and transportation, and in providing structures for the use of mankind." 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's well-being. They plan and design water facilities, treatment plants, elaborate structures requiring the specialized knowledge of both civil-environmental engineers and chemists. Environmental engineers are also responsible for the engineering work associated with control of water and air pollution.

The structural engineer is 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.

The transportation engineer is involved in planning, designing, and constructing the nation's transportation systems. The transportation engineer assists in the local and regional transportation planning processes and in 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 the transportation engineer, who also considers how transportation facilities affect environmental factors, including air and noise pollution. The transportation engineer is involved along with professionals from other disciplines in the effort to improve the quality of life through the development of a safe, efficient, and economical national transportation network.

Bachelor of Science in Engineering Degree

(Major in Civil Engineering)

General Studies Requirements	60
Chemistry 125a, b-8, 126a, b-2	(4)+6
Economics 201, 305	(4)+4
Engineering 110-0, 101a-2, 200-4, 230-3, 260-8, 263-3, 270-4, 300-3, 314-4, 316-4, 319-4, 320-3, 321-1, 340a-4, 370-4, 376-4, 380-4, 419-3, 421-1, 440-4, 442-4, plus 16 hours of engineering electives	87
Mathematics 150-8, 172-2, 260-12, 305-4	(4)+22
Physics 211-12, 212-2	14
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SAMPLE PROGRAM: CIVIL ENGINEERING

Junior Year

FALL		*WINTER*		*SPRING*	
Engr 230	- 3	Engr 314	- 4	Engr 340a	- 4

Engr 263	- 3	Engr 319	- 4	Engr 376	- 4
Engr 300	- 3	Engr 370	- 4	Engr 380a	- 4
Engr 316	- 4	Econ 305	- 4	GSK Elec.	- 4
Econ 201	- 4				
	17		16		16

Senior Year

FALL		*WINTER*		*SPRING*	
Engr 440	- 4	Engr 421	- 1	Engr 320	- 3
Engr Elec.	- 8	Engr 442	- 4	Engr 321	- 1
GSS Elec.	- 4	Engr Elec.	- 4	Engr Elec.	- 4
		Engr 419	- 3	GSS Elec.	- 4
		GSS Elec.	- 4	GIS Elec.	- 4
	16		16		16

ELECTRICAL ENGINEERING

Electrial engineering deals with electricity, man's most versatile servant. It is concerned with electrons, magnetic fields, and electric fields — all invisible phenomena.

Electrical engineers specialize in tiny 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 automation and control. Also electrical engineers may be involved in the design of power plants and transmission systems to satisfy the increasing demands for electrical energy.

Some examples of present uses of electricity are: electric power systems spanning the continent; worldwide communication systems incorporating transmission modes by wire, wireless, radio, television, microwave, and satellite links. Space ships, electronic knives, microwave ovens, washing and sewing machines, transportation vehicles and manufacturing processes all use electrical energy and controls to serve society. The range of applications of electrical engineering is very wide; for this reason it is a fascinating and challenging profession in which to earn a living.

Bachelor of Science in Engineering Degree

(Major in Electrical Engineering)

General Studies Requirements 60
Chemistry 125a, b-8, 126a, b-2 ..... (4)+6
Economics 201, 305 ..... (4)+4
Engineering 110-0, 101a-2, 200-4, 260-8, 270-4, 301-3, 326-3, 327-3, 330-8, 341-4, 350-4, 351-4, 352-4, 353-3, 401-2, 402-4, 444-3, 445-1, plus 16 hours engineering electives 80
Mathematics 150-8, 172-2, 260-12, 305-4 ..... (4)+22
Physics 211-12, 212-2, 302-8 22
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SAMPLE PROGRAM: ELECTRICAL ENGINEERING

Junior Year

FALL		*WINTER*		*SPRING*	
Engr 301a	- 1	Engr 301b	- 1	Engr 301c	- 1
Engr 350	- 4	Engr 351	- 4	Engr 352	- 4
Engr 326	- 3	Engr 327	- 3	Engr 353	- 3
Phys 302a	- 4	Phys 302b	- 4	Engr 330a	- 4
Econ 201	- 4	Econ 305	- 4	GSK Elec.	- 4
	16		16		16

Senior Year

FALL		*WINTER*		*SPRING*	
Engr 401a	- 1	Engr 401b	- 1	Engr 445	- 1
Engr 330b	- 4	Engr 341	- 4	Engr Elec.	- 8
Engr 402	- 4	Engr 444	- 3	GSS Elec.	- 4
Engr Elec.	- 4	Engr Elec.	- 4	GIS Elec.	- 4
GSS Elec.	- 4	GSS Elec.	- 4		
	17		16		17

INDUSTRIAL ENGINEERING

Industrial engineering is a very special profession having an extraordinary breadth of application. The basic objectives of the field relate to productivity—the most effective use of each dollar spent for materials, equipment, manpower, etc. The United States faces a crisis in productivity that is expected to last for many years. During the decade an ever-increasing number of products commonly used by the American consumer have been manufactured in other countries. A large percentage of the total number of electric blankets, radios, and watches bought by Americans are now imported due to the face that these products can be made at a lower cost in other countries.

The uniqueness of the educational curriculum and the extraordinary breadth of application of the industrial engineer's knowledge create a special niche for the industrial engineer in the future of this country and the world. The uniqueness of the training is brought about by the combination of topics related directly or indirectly to productivity, properly interspersed and balanced with engineering science, physical science, and mathematics. The latter three subjects are exceedingly important because a productivity problem almost invariably is made up of several different physical effects, which can be dealt with effectively and properly only if one has a sound knowledge of the underlying causes. The industrial engineer is also broadly exposed to the world of human relations, including labor relations and motivation techniques.

Bachelor of Science in Engineering Degree

(Major in Industrial Engineering)

General Studies Requirements 60
Accounting 233 4
Chemistry 125a, b-8, 126a, b-2 ..... (4)+6
Economics 201, 305 ..... (4)+4
Engineering 110-0, 101a-2, 200-4, 260-8, 270-4, 300-3,

303-3, 320-3, 321-1, 332, 348, 410, 432, 458, 460, 471, 472, 474, 479, plus 12 hours of engineering electives 80
Mathematics 150-8, 172-2, 260-12, 305, 380 ..... (4)+26
Physics 211-12, 212-2 14

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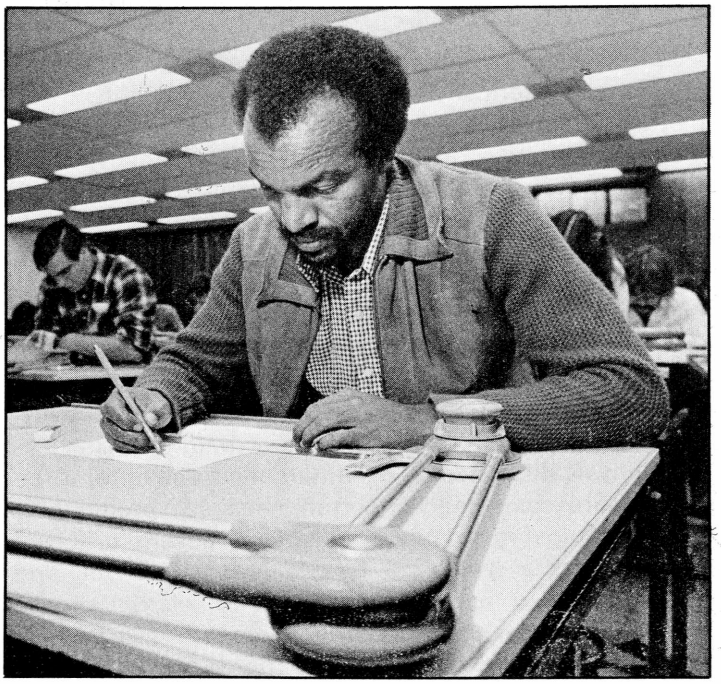
SAMPLE PROGRAM: INDUSTRIAL ENGINEERING

Junior Year

FALL		*WINTER*		*SPRING*	
Engr 303a	- 1	Engr 303b	- 1	Engr 303c	- 1
Engr 332	- 4	Engr 410	- 4	Engr 320	- 3
Engr 348	- 4	Engr 471	- 4	Engr 321	- 1
Econ 201	- 4	Econ 305	- 4	Engr 432	- 4
Math 380	- 4	GSK Elec.	- 4	Engr 472	- 4
				Acct 233	- 4
	17		17		17

Senior Year

FALL		*WINTER*		*SPRING*	
Engr 300	- 3	Engr 479	- 4	Engr 474	- 4
Engr 458	- 4	Engr 460	- 4	Engr Elec.	- 4
Engr Elec.	- 4	Engr Elec.	- 4	GSS Elec.	- 4
GSS Elec.	- 4	GSS Elec.	- 4	GIS Elec.	- 4
	15		16		16



CONSTRUCTION

The objective of the construction program is to provide the 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.

The construction industry is one of the largest components of the present economy. Its labor force includes skilled and unskilled labor, engineers, accountants, financial analysts, and business managers to mention a few. The scope of construction includes everything from the most meager project costing a few hundred dollars to projects whose total cost may be billions of dollars. The nature of the industry is such that the continuing changes in technology produce a need for personnel specifically trained in the managerial and scientific techniques of construction.

Bachelor of Science Degree

(Major in Construction)
General Studies Requirements 60
Accounting 230, 232 8
Chemistry 110a 4
Economics 201, 331 ..... (4)+4
Engineering 101a-2, 263-3, 260a, 270 13
Finance 320 4
Management 342, 390 8
Mathematics 150a, b, 260a ..... (4)+8
Physics 211a, b, c ..... (4)+8
Construction 102, 201, 202, 264, 301, 302, 321-3, 331-3, 332-3, 341, 351, 352, 375-2, 403, 411, 451, 475-2 ... 62
Electives 13

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SAMPLE PROGRAM: CONSTRUCTION

Freshman Year

FALL		*WINTER*		*SPRING*	
Math 150a	- 4	Math 150b	- 4	Math 260a	- 4
GSK 101	- 4	GSK 102	- 4	GSK 123	- 4
Chem 110a	- 4	GHA Elec.	- 4	GSS Elec.	- 4
Const 101	- 1	Const 102	- 4	Engr 263	- 3
Engr 101a	- 2				
	15		16		15

Sophomore Year

FALL		*WINTER*		*SPRING*	
Phys 211a	- 4	Phys 211b	- 4	Phys 211c	- 4
Econ 201	- 4	Acct 230	- 4	Acct 232	- 4
Const 264	- 4	Const 201	- 4	Const 202	- 4
GSS Elec.	- 4	GHA Elec.	- 4	Engr 260a	- 4
	16		16		16

Junior Year

FALL		*WINTER*		*SPRING*	
Const 301	- 4	Const 302	- 4	Const 332	- 3
Const 321	- 3	Const 331	- 3	Const 341	- 4
Engr 270	- 4	Const 351	- 4	Const 352	- 4
GIS Elec.	- 4	Const 375a	- 1	Const 375b	- 1
		GSS Elec.	- 4	GHA Elec.	- 4
	15		16		16

Senior Year

FALL		*WINTER*		*SPRING*	
Const 403	- 4	Const 475a	- 1	Const 411	- 4
Econ 331	- 4	GBA 342	- 4	Const 451	- 4
GHA Elec.	- 4	GBA 390	- 4	Const 475b	- 1
Elec.	- 5	GSK Elec.	- 4	Fin 320	- 4
		Elec.	- 4	Elec.	- 4
	17		17		17

MATHEMATICS, STATISTICS, AND COMPUTER SCIENCE

Professors:

Bennewitz, W. C.
Clemans, K. G.
Garder, A.
Ho, C.
Isaacson, J. D.
Lazerson, E. E. (President)
Lindstrum, A. O.
Livingston, M.
Oursler, C. C.
Pendergrass, R. N. (Chairperson)
Steinberg, D. I.
Stephen, G. G.
Sturley, E. A.
Wilson, H. K.

Associate Professors:

Hattemer, J. R.
Holden, L. S.
Pal, A.
Phillips, P. H.
Verderber, N. L.

Assistant Professor:

Gerardy, R. W.

The offerings of the Department of Mathematics, Statistics, and Computer Science are designed to enable a student to pursue one of several programs in preparation for careers in mathematics, statistics, or computer science. Typical careers are those of the professional mathematician, statistician, or computer scientist in academia, government, or industry; the programmer; the systems analyst; the actuary in the insurance industry; and the teacher in schools or community colleges.

Four programs are described below. Each of them can be varied in emphasis by judicious choice of electives, and our advisers are prepared to suggest selections appropriate to different career goals or interests. Such areas may, for example, include operations research, numerical analysis, and pure or applied mathematics. All programs, however, must include the departmental core which consists of 150, 260, 272, and 321. Optimally, the core should be started no later than the second quarter of the freshman year and should be completed by the end of the sophomore year. The prospective major should note that 125 or equivalent high school preparation is prerequisite for 150. The Department of Mathematics, Statistics, and Computer Science offers an extensive preparatory program for students needing skills development.

Upon choosing a major in mathematics, statistics, or computer science, the student should apply to the Department for the assignment of an adviser; together they will plan and place on record a program of study. Student majors in this Department are required to consult with their advisers prior to registration for the following quarter. Students who will not attend summer classes must consult with their advisers in the spring quarter preceding any fall quarter in which they expect to enroll.

Prospective teachers can meet certification requirements in a program, described below, that leads to a Bachelor of Science degree from the School of Education.

All students for whom mathematics, statistics, or computer science is a major or minor should familiarize themselves with the regulations of the School of Science and Engineering which includes the requirement that a minimum average of 3.00 be attained in courses constituting a major or minor. Any student who receives a grade of D in a course prerequisite for another mathematics course should retake the prerequisite course before proceeding.

Degree Requirements

The distinction between the B.A. and B.S. degrees is the language requirement. Any major in this Department may choose to be awarded the B.A. degree rather than the B.S. degree if his or her electives include 12 hours credit in a foreign language which is not English or his or her own native language.

Bachelor of Arts, Bachelor of Science Degrees, Mathematics, Statistics, and Computer Science

General Studies Requirements 60
(Physics 211a, b-8 replaces 4 hours GSM)
Departmental Core Requirements 32
Physics 211a, b ..... (4)+4
Mathematics, Statistics and Computer Science 150, 260, 272, 321 28
Additional Requirements 100
SPECIALIZATION 1 (MATHEMATICS)
Mathematics, Statistics and Computer Science 305, 323, 421a, 450a, 463a, 465a, 480a, 440 28
9 hours from 421b, 450b, 463b, 465b, 480b, 441 9
Electives 63
(Students who intend to pursue graduate studies or become industrial mathematicians should, in consultation with their advisers, elect an appropriate selection of courses from Mathematics, Statistics, and Computer Science 421c, 442, 450c, 463c, 465c.)
SPECIALIZATION 2 (STATISTICS)
Mathematics, Statistics and Computer Science 305, 480, 481, any 12 hours from 482, 484, 485, 487, and a 27-hour minor 55

Electives 45
SPECIALIZATION 3 (COMPUTER SCIENCE)
Mathematics, Statistics and Computer Science 273, 323, 365, 372, 373, 374, 380, 470, 472a, 473, Management Information Systems 400, and 15 hours, including at least one sequence, from Mathematics, Statistics and Computer Science 475, 476, 477, 478 59
Electives 41

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Bachelor of Science Degree, Mathematics, Statistics, and Computer Science, School of Education

General Studies Requirements 60
Departmental Core Requirements 32
Physics 211a, b ..... (4)+4
Mathematics, Statistics and Computer Science 150, 260, 272, 321 28
Additional Requirements 47
Mathematics, Statistics and Computer Science 420a, b and 435a, b or 435a, c plus 8 hours of mathematics, statistics and computer science electives at the 300 level or higher 20
Minor 27
Professional Education Requirements (See Secondary Education) 32
Electives 21

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Minor Requirements

Students majoring in other departments who wish to obtain a minor in the Department of Mathematics, Statistics, and Computer Science should declare the minor at the Office of Academic Advisement.

A minor in mathematics must include 150, 13 hours from mathematics, statistics, and computer science courses numbered 200 or higher, and 6 hours from mathematics, statistics, and computer science courses numbered 300 or higher. An easily delineated minor consists of 150, 260, 321, and one of 305, 323, 365, 380; 272 is also recommended.

A minor in computer science must include 272, 273, 373, and 472a and total 27 or more hours. A recommended minor consists of 272, 273, 372, 373, 472a, 473, and 475a. NOTE: this minor does not require a knowledge of calculus. A knowledge of COBOL is, however, prerequisite for 475a. This prerequisite can be satisfied by completion of Management Information Systems 400.

No General Studies course or mathematics, statistics, and computer science course numbered less than 125 may be used as a component of a minor, and at least 6 hours at the 300 level or higher must be taken in this Department. A grade-point average of 3.00 must be maintained in the minor.

Students majoring in the Department of Mathematics, Statistics, and Computer Science may obtain minors in other departments. Several possibilities are listed below.

Business (Economics): Economics 200, 201, 440, 441, 465, and 8 hours from 310, 341, 355, 430, 467.

Business (Management Information Systems): Accounting 230, 232, Management Information Systems 381 or 428, 400, 401, Marketing 371, Production 315.

Engineering (Digital Hardware): Engineering 200, 201, 326, 327, 482, 483.

Physics: Physics 211, 302, 312a and 5 hours from 308, 312b, 405.

PHYSICS

Professors:

Aly, H. H.
Boedeker, R. R.
Braundmeier, A. J.
Hakeem, M. A.
Henderson, G. A.
Kang, I-J. (Chairperson)
McAneny, L. R.
Swamy, P. N.

Associate Professors:

Hill, R. C.
Zurheide, F. W.

Assistant Professor:

Chow, H-C.

Physics is a discipline which used to be called Natural Philosophy. This older name gives a clear indication of what physics is all about. In physics we 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 us to predict properties of nature which have so far not been observed.

The study of physics will lead the student 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 the subject physics students are made aware of the various applications which lead to the topics that are so much in the news today. For example, solid state theory of semiconductors and transistors brings the student into contact with electrical engineering and the electronics industry; statics and dynamics introduce 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 degree program 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. Unlike the Bachelor of Science program the Bachelor of Arts degree requires one year of foreign language, and there is somewhat more freedom in the student's choice of 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 then becomes merely a matter of personal preference. Students wishing to pursue a career in teaching may obtain certification with either degree by meeting the 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, career opportunities are varied. The first that come to mind are the obvious ones of teaching at levels from kindergarten to graduate school and basic research in physics. In addition to these there are many possibilities in industry, e.g., computer service, technical development, quality control, etc., where a technical background is necessary, but not, perhaps, as specialized as a degree in engineering may provide. Many problems in energy resource development and conservation are clearly dependent on basic and applied physics concepts.

Degree Requirements

Bachelor of Arts Degree, Physics

General Studies Requirements (Waive GSM-8.) 60
Requirements for Major in Physics 74
- Foreign Languages (equivalent of one year) ..... (12)
- Chemistry 125a, b, 126a, b 10
- Mathematics 150a, b, 260a, b 16
- Physics 100, 211a, b, c, 212a, b, 302a, b, 308a, b, 312a, b, 405a, b, plus 2 hours of lab above 400 and 5 hours electives above 302 48

Minor 3-27
Electives 55-31

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Bachelor of Science Degree, Physics

General Studies Requirements (Waive GSM-8.) 60
Requirements for Major in Physics 82
- Chemistry 125a, b, 126a, b 10
- Mathematics 150a, b, 260a, b, c, 305 24
- Physics 100, 211a, b, c, 212a, b, 302a, b, 308a, b, 312a, b, 405a, b, 415a, 418 plus 1 hour elective 48

Minor 3-23
Electives 47-27

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Bachelor of Science Degree, Physics, School of Education

The Department of Physics in cooperation with the Department of Secondary Education has developed a broad teaching field program in the field of physical science. This program was developed in order to encourage people to teach physical science, chemistry, earth science, and physics at the pre-college level. The program is designed for students who have shown verbal rather than mathematical formalities that the student will obtain an appreciation for the important role played by the physical sciences in the development of our Western culture.

General Studies Requirements (Waive GSM-8.) 60
Requirements for Major in Physical Science 75
- GSM 101, 110, 111, 306 and two courses (8 hours) from GSM 283, 300, 301, 302, or 305 24
- Chemistry 125a, b, c, 126a, b, c 15
- Physics 206a, b, c 15
- Science and Technology 402, 403, 415 13
- Mathematics 150 8

Professional Education Courses (See Secondary Education) 37
Electives 20

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Minor Requirements

A minor in physics includes 211, 212, 302, and 5 elective hours above 302 to total 27 hours. Minors are encouraged to consult with the minor adviser concerning the 5 elective hours.

COURSES

BIOLOGICAL SCIENCES

100—4 DIVERSITY OF LIFE: INTRODUCTION TO ORGANISMAL BIOLOGY. An introduction to the diversity of organisms, Mendelian and population genetics, ecology and evolution. Three hours lecture and one laboratory per week. (100 and 101 may be taken in either sequence.)

101—4 UNITY OF LIFE: INTRODUCTION TO CELL BIOLOGY AND PHYSIOLOGY. An introduction to cellular organization and metabolism, molecular genetics and the physiology of plants and animals. Three hours lecture and one laboratory per week. (Biol. 100 and 101 may be taken in either sequence.) Prerequisites: high school biology or Biology 100, high school chemistry or Chemistry 105 or concurrent enrollment in Chemistry 125a and 126a.

200—4 INTRODUCTION TO BIOLOGICAL SCIENCES. An introduction to the major unifying concepts among the biological sciences, metabolism, physiology, organization, genetics, evolution, and ecology. Students completing Biol. 100 and/or 101 may not earn credit for Biol. 200. Three hours lecture, one laboratory per week. Prerequisites: Chemistry 125 and 126 with a C grade or better; high school biology; adviser approval required.

210—4 BACTERIOLOGY. A treatment of cytology; theories and techniques of staining; physiology and classification of microorganisms; and their medical relationships. Three hours of

lecture and one laboratory hour per week. Prerequisite: GSM 130.

215—4 SANITARY MICROBIOLOGY. The microbiology of water, wastes, and sewage from the standpoints of significance, ecology, and conversion of organic matter. Laboratory work includes aseptic techniques, sterilization of culture media, plate counts, use of selective and differential culture media, staining techniques, and microscopy. Two hours lecture, two laboratories per week. Prerequisites: GSM 130, Sanitation Technology 101, 203, 204.

301a—5 CELL BIOLOGY. Cell structure and function. Structure, organization, and function of cells, organelles, and macromolecules. Four hours lecture and one laboratory per week. Prerequisites: 101 (or200), Chemistry 241a.

301e—3 BASIC BIOCHEMISTRY. The relation between the structure and function of biologically important macro-molecules. Nucleic acids, proteins, and carbohydrates,with emphasis on the regulation of their biosynthesis and degradation. The importance of these ideas to modern biology. Three hours lecture per week. Prerequisite: Chemistry 241c or 305c.

302a—5 ANIMAL LIFE. A survey of animal groups from protozoans through mammals. Emphasis on functional systems as they relate to phylogeny. Three hours lecture, and two laboratories per week. Prerequisite: 100 (or 200).

302c—5 PLANT LIFE. Structure, nutrition, growth, differentiation and reproduction in the plant kingdom. Three hours lecture, two laboratories per week. Prerequisite: 100 (or 200).

302d—5 PHYSIOLOGY. Function and regulation in animals. Four hours lecture, one laboratory per week. Prerequisites: 101 (or 200), 302a, Chemistry 125a, b.

303a—5 GENETICS. Mechanisms of inheritance, gene action, and genetic diversity. Four hours lecture, one laboratory per week. Prerequisites: 100 (or 200), Chemistry 125a.

303b—3 EVOLUTION. Evolutionary change including population genetics, ecological factors, selection, and speciation. Three hours lecture per week. Prerequisite: 100 (or 200).

304a—5 INTRODUCTION TO MICROBIOLOGY. The biology of bacteria, molds, yeasts, and viruses. Structure, growth, and the significance of these organisms in medicine, industry, and the environment. Three hours lecture and two laboratories per week. Prerequisites: 101 (or 200), Chemistry 125a.

304b—3 MEDICAL MICROBIOLOGY. Cultural and immunological properties of medically important bacteria and viruses and their epidemiology. Concepts of pathogenicity, antibiotic action, and drug resistance. Three hours lecture per week. Prerequisite: 304a.

304c—3 MEDICAL MICROBIOLOGY LABORATORY. Methods for isolating pathogenic bacteria and determining their significant properties and immunological features. Two laboratories per week. Prerequisite: 304b or concurrent enrollment.

307—4 ANIMAL HISTOLOGY. Principles of the structure and function of animal tissues and the techniques used to study them. Three hours lecture, one laboratory per week. Prerequisites: either 100, 101, or 200; Chemistry 125a, b.

312—10 (5,5) HUMAN ANATOMY AND PHYSIOLOGY. (a) The structure and function of the human body. Tissues, skeletal, muscular, and nervous systems. (b) Continuation of a. Endocrine, circulatory, respiratory, digestive, and urinary systems. Four hours lecture, one laboratory per week. Prerequisite: (a) college chemistry; (b) 312a.

314—5 COMPARATIVE ANATOMY OF VERTEBRATES. An evolutionary approach to comparative form, function, and development of vertebrate organisms with emphasis on both fossil and living forms. Two hours lecture, and three laboratories per week. Prerequisite: 302a.

315a—3 EMBRYOLOGY. Morphogenesis and differentiation in animals with emphasis on vertebrates. Three hours lecture per week. Prerequisites: 101 (or 200), 302a.

315b—2 EMBRYOLOGY LABORATORY. Emphasis on embryology of vertebrate forms. Two laboratories hours per week. Prerequisite: concurrent enrollment in 315a.

325—4 BASIC ECOLOGICAL PRINCIPLES AND CONCEPTS. The scope of ecology, population ecology, models of population growth, competition, predation, diversity and stability of ecosystems, community structure, ecological energetics. Prerequisite: 302a or c.

400—9 (3,3,3) MOLECULAR BIOLOGY. (a) The genetic capabilities of living organisms expressed in the structure and function of proteins. (b) The relation between the structure and function of biological molecules and the control of metabolism. (c) The structure and function of nucleic acids in the control of protein synthesis. Must be taken in sequence. Prerequisites: 303a, Chemistry 241a,b.

402a,b—6 (3,3) MOLECULAR BIOLOGY LABORATORY. A two-quarter laboratory course in molecular biology, including experiments in biochemistry, cell biology, and microbial physiology. Two laboratories and one discussion hour per week. Prerequisites: 301a, 301e, 400a, 404a, or equivalent.

404a—3 MICROBIAL PHYSIOLOGY. Bacterial growth, biochemical and genetic regulation of metabolism, effects of the physical and chemical environment. Three hours lecture per week. Prerequisites: 301a, 304a.

405—4 TECHNIQUES IN CELL AND TISSUE CULTURE. Principles, methods and application of eucaryotic cell and tissue culture. Growth, behavior, differentiation and metabolism of cells in culture. One hour instruction, six hours laboratory work per week. Prerequisites: senior standing, consent of instructor.

406a—3 CELL ORGANELLES AND INCLUSIONS. The function, structure, and formation of selected organelles and inclusion of eucaryotic cells. Current literature is covered in some detail and discussion sessions are held. Three hours lecture per week. Prerequisite: 301a.

407—5 (3,2) ELECTRON MICROSCOPY. (a) Theory, demonstration, exercises and review; two hours lecture and one hour

demonstration per week. (b) Laboratory; six laboratory hours per week. Prerequisite for a: junior standing; for b: concurrent or recent enrollment in 407a, consent of instructor.

410—4 ADVANCED GENETICS. A study of quantitative inheritance, chromosomal evolution and organization, the regulation of gene action, and recent advances in genetics. Prerequisites: 303a, GSM 244.

411—3 HUMAN GENETICS. Principles of human genetics; human chromosomes; Mendelian characters in man; genetic inference; pedigrees, twins, populations—mutation—genetics of races. Genetics and medicine. Three hours lecture per week. Prerequisite: 303a.

412—4 CONTEMPORARY ISSUES IN BIO-ETHICS. (Same as Philosophy 412.) An examination of certain contemporary moral issues in the life sciences including moral problems raised by recombinant DNA research, genetic screening, genetic testing, eugenics and population control, in vitro fertilization, and cloning. Prerequisite: consent of instructor.

413—3 MICROBIAL GENETICS. A study of gene action in microorganisms including such topics as the genetic code, the mechanism and types of mutation, DNA structure, replication and transcription, gene expression and the mechanisms and importance of transfer of genetic material between organisms. Prerequisites: 301a, 303a, 304a.

416—3 ABNORMAL EMBRYONIC DEVELOPMENT. A survey of abnormal development in the human embryo, its nature, genetic and environmental causes, and prognosis. Three hours lecture per week. Prerequisite: 315a or equivalent.

419a—3 PLANTS AND ENVIRONMENT. The environmental relationships of those phases of geology, soils, climatology, zoology, chemistry and physics which are related to the welfare of living plants. A study of the environmental complex and ecologic adaptation. Prerequisite: 302c.

419b—1 LABORATORY IN PLANTS AND ENVIRONMENT. Experiments and field problems in studying environmental and plant relationships. Prerequisite: 419a or concurrent enrollment.

420a—3 PLANT COMMUNITIES. A study of the plant communities as components of ecosystems centered on an understanding of how these communities originate, develop, and maintain themselves. Quantitative measurements and interpretations of successional dynamics are stressed. Three hours lecture per week. Prerequisite: 325.

421—4 ECONOMIC BOTANY. The influence of plants and plant cultivation on the economic, social, and cultural history of man. An introduction to economically important plants and their products, especially as sources of food, shelter, clothing, drugs, and industrial raw materials; current problems of agriculture, plant industry, and medicine; the use and conservation of natural plant resources. Prerequisite: 302c or GSM 232.

423—4 PRINCIPLES OF PARASITISM. Principles dealing with parasitic relationships. Study of types of association, morphologic and physiologic adaptations of parasites, defensive mechanisms, immunity, and specificity. Selected examples from animals are used to illustrate the general principles and life histories. Two hours lecture, two laboratories per week. Prerequisite: 302a.

425—4 AQUATIC ECOSYSTEMS. Biogeochemistry of, community structure of, and man's impact on aquatic systems throughout the world. Consideration of lakes, streams, and oceans. Laboratory mainly concerns local freshwater communities. Three hours lecture, one laboratory per week. Field trips required. Prerequisite: 325 or equivalent.

426—4 TERRESTRIAL ECOSYSTEMS. Community structure, biogeochemistry, and historical development of terrestrial ecosystems around the world. Laboratory mainly concerns local terrestrial communities. Three lecture, one laboratory per week. Field trips required. Prerequisite: 325 or equivalent.

430—4 ENVIRONMENTAL MICROBIOLOGY. An examination of the ecological interrelation between microbes and animal and plant life, and the interaction of microorganisms with our terrestrial and aquatic environment. Three hours lecture, and one laboratory per week. Prerequisite: 304a or consent of instructor.

435—4 ETHOLOGY. A survey of animal interactions and the response of animals to environmental stimuli. Three hours lecture, and one laboratory per week. Prerequisite: 302a.

441—3 MAMMALIAN PHYSIOLOGY. Nervous and endocrine coordinating processes, sensory function, circulation, respiration, alimentation, and regulation of body fluids, with special reference to man. Three hours lecture per week. Prerequisites: organic chemistry and 302d or 312.

443a—3 ENVIRONMENTAL PHYSIOLOGY. Physiological ecology of vertebrates with emphasis on physiological effects of environmental stress; e.g., oxygen deprivation, temperature, salinity, and industrial pollution. Three hours lecture per week. Prerequisites: 302d, 441 or consent of instructor.

443b—1 LABORATORY IN ENVIRONMENTAL PHYSIOLOGY. Experiments dealing with physiological responses of animals to environmental variables. Prerequisite: 443a or concurrent enrollment.

444a—3 INTEGRATIVE PHYSIOLOGY. Mechanisms of response and integration with emphasis on the role of the nervous system. Three hours lecture per week. Prerequisites: 302d or 312b, plus either MSCS 150a or Physics 206c or Physics 211c.

444b—1 LABORATORY IN INTEGRATIVE PHYSIOLOGY. Experiments dealing with integrative role of the nervous system. Prerequisite: 444a or concurrent enrollment.

445—3 ENDOCRINOLOGY. A survey of endocrine organs in chordates, higher invertebrates and plants with major emphasis on roles of endocrine glands and their hormonal secretions in integration, control systems and metabolism. Prerequisite: 301a or consent of instructor.

447—4 TOPICS IN PLANT PHYSIOLOGY. Photosynthesis, mineral nutrition of plants, water regime, growth and movement of plants. Two hours lecture, and two laboratories per week. Prerequisites: 302c, Chemistry 125b.

455—4 PLANT ANATOMY. Cell types, tissues, and organog-

raphy of seed plants with emphasis on phylogeny and trends of specialization. Laboratory on microscopical observations of plant tissues. Two hours lecture, two laboratories per week. Prerequisite: 302c.

456—2 PLANT MICROTECHNIQUE. Principles and techniques of preparing plant tissues for microscopic study. Four hours of laboratory per week. Prerequisite: 302c, 455, or consent of instructor.

465a—4 BASIC CONCEPTS IN IMMUNOLOGY. An exposition of basic concepts in immunology and their clinical applications including: development of the immune systems; cellular mechanisms of immune response; humoral antibodies; mediators and effectors of immunity; pathogenetic mechanisms involving immunologic factors, and some clinical applications of immunology in prophylaxis and in therapy. Prerequisites: 301a, 303a, 304a (or equivalent) or a course in biochemistry.

470—4 FIELD BOTANY. Taxonomy, natural history, and distribution of local plants. Two hours lecture, and two laboratories per week. Field trips required. Prerequisite: 302c.

471—4 PHYCOLOGY. Morphology, reproduction, ecology, and physiology of algae. Laboratory includes field work, identification, culturing, and experimentation. Two hours lecture, two laboratories per week. Prerequisite: 302c or consent of instructor.

480—4 FIELD ZOOLOGY. Taxonomy, natural history, and distribution of local animals. Two hours lecture, and two laboratories per week. Field trips required. Prerequisite: 302a.

483—5 PRINCIPLES OF ENTOMOLOGY. A study of the principles of insect morphology, physiology, development, systematics, ecology, and pathology. Three hours lecture, two laboratories per week. Prerequisite: 302a.

485—4 ICHTHYOLOGY. Relationships, ecology, behavior, physiology, and anatomy of fishes. Field study of local fauna is stressed. Two hours lecture, and two laboratories per week. Field trips required. Prerequisite: 302a or consent of instructor.

486—4 HERPETOLOGY. A study of amphibians and reptiles, their evolution, relationships, morphology, and behavior. Two hours lecture, and two laboratories per week. Field trips required. Prerequisite: 302a,c or consent of instructor.

487—4 ORNITHOLOGY. Natural history, relationships, behavioral ecology, and evolution of birds. Field trips required. Prerequisite: 302a.

488—4 MAMMALOGY. Taxonomy, natural history, and evolution of mammals. Two hours lecture, and two laboratories per week. Prerequisite: 302a.

489—3 BIOLOGY OF THE PRIMATES. Evolution, taxonomy, morphology, zoogeography, and natural history of the living and fossil primates including man from a biological standpoint. Three hours lecture per week. Prerequisite: 302a.

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, (l) 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, (l) 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. Prerequisites: senior standing, consent of instructor.

CHEMISTRY

105—4 INTRODUCTION TO CHEMISTRY. Preparation for university chemistry. Mathematical techniques and problem solving; fundamental chemical terms, concepts, and 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: one year high school algebra or Mathematics 101.

110—12 (4,4,4) GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY. A study of fundamental chemical principles for other than chemistry majors. (a) General and Organic Chemistry. (b) Organic Chemistry. (c) Biological Chemistry. Three lecture hours, one three-hour laboratory per week. Must be taken in sequence.

125—11 (4,4,3) CHEMICAL STRUCTURE AND DYNAMICS. University-level treatment of modern chemistry-atomic structure, molecular bonding, and structure. Basic principles governing chemical change and equilibrium. (a,b) four lecture hours per week. (c) three lecture hours per week. Aspects of quantitative analysis are covered in lecture. Must be taken in sequence. Prerequisite for all sections: high school chemistry or 105; for (a) concurrent enrollment in 126a; for (b) concurrent enrollment in 126b; for (c) concurrent enrollment in 126c.

126—4 (1,1,2) CHEMICAL STRUCTURE AND DYNAMICS LABORATORY. Laboratory safety procedures and practices, laboratory techniques, qualitative and quantitative analysis, experiments involving chemical change and equilibria. (a) one two-hour laboratory per week; (b) one three-hour laboratory per week; (c) two three-hour laboratories per week. Prerequisite for all sections: high school chemistry or 105; for (a) concurrent enrollment in 125a; for (b) concurrent enrollment in 125b; for (c) concurrent enrollment in 125c.

241—12 (4,4,4) ORGANIC CHEMISTRY. A study of fundamental structure types of organic compounds correlated with their chemical and physical properties. Bonding, reaction, dynamics, reaction types, stereochemistry, functional groups and spectroscopic methods. Must be taken in sequence. Three lecture hours, one discussion hour per week. Prerequisite: 125.

245—4 (2,2) ORGANIC CHEMISTRY LABORATORY. Introduction to organic synthesis and the techniques for determining physical and chemical properties of organic systems. One four-hour laboratory per week. Prerequisite for a: 241a; for b: 245a.

261—3 CHEMICAL ENERGETICS AND KINETICS. Introduction to the principles of chemical thermodynamics, kinetics, and spectroscopy. Three lecture hours per week. Prerequisites: 125c, concurrent enrollment in Mathematics 150a.

311—3 INORGANIC CHEMISTRY. Introduction to theories of bonding and structure; descriptive chemistry of less familiar elements, coordination compounds, and organometallics. Three lecture hours per week. Prerequisite: 125.

335—5 QUANTITATIVE CHEMICAL ANALYSIS. Theory and methods for quantitative analysis, including laboratory experience in gravimetric, volumetric and fundamental instrumental techniques. Three one-hour lectures and two three-hour laboratories per week. Prerequisites: 125c, 126c.

345—3 IDENTIFICATION OF ORGANIC COMPOUNDS. Theory and practice of identifying organic compounds based on determination of physical, chemical and spectroscopic determinations. One lecture hour and two three-hour laboratories per week. Prerequisites: 241c, 245b.

361—12 (4,4,4) PHYSICAL CHEMISTRY. A study of mathematical models of the causes of chemical behavior, and their foundations in experiment. Thermodynamics, statistical mechanics, kinetics, and quantum mechanics with applications. Must be taken in sequence. Three lecture hours, one discussion hour per week. Prerequisites: (a) 125, 12 hours physics, one year calculus; (b) 361a; (c) 361b.

365—4 (2,2) PHYSICAL CHEMISTRY LABORATORY. One lecture hour and one four-hour laboratory per week. Prerequisites: (a) 245a, 361a; (b) 361b.

396—2 INTRODUCTION TO RESEARCH. Investigation of relatively simple research problems in chemistry under the direction of 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, and chemical bonds, and stereochemistry of complex ions and metal chelates. Four lecture hours per week. Prerequisite: concurrent enrollment in 361b or c.

419—2 to 6 SPECIAL TOPICS IN INORGANIC CHEMISTRY. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

432—8 (4,4) INSTRUMENTAL ANALYTICAL MEASUREMENTS. Theory and practice of instrumental analytical measurements, 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 6 SPECIAL TOPICS IN ANALYTICAL CHEMISTRY. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

441—3 PHYSICAL ORGANIC CHEMISTRY. Chemical equilibria, kinetics, and structure-reactivity relationships are studied in detail for their value as methods for determining the mechanisms of organic reactions. Three lecture hours per week. Prerequisites: 241 and either 361b or equivalent.

444—3 ORGANIC REACTIONS. An intermediate course with emphasis on mono-functional compounds. Additional topics, not included in elementary courses. Three lecture hours per week. Prerequisite: 241.

449—2 to 6 SPECIAL TOPICS IN ORGANIC CHEMISTRY. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

451—9 (3,3,3) BIOCHEMISTRY. (a) Life processes at the molecular level with emphasis on the relationships between the structure and function of biological molecules. (b) The generation and storage of metabolic energy and the biosynthesis of macromolecules. (c) The storage, transmission, and expression of information by molecular processes. Must be taken in sequence. Prerequisite: 241.

459—2 to 6 SPECIAL TOPICS IN BIOCHEMISTRY. The topic to be covered is announced by the faculty. Prerequisite: consent of instructor.

460—5 PHYSICAL CHEMISTRY, PREPROFESSIONAL. For secondary concentrations in chemistry and preprofessional students. Suggested for B.S. in Education degree. Traditional and biological aspects of physical chemistry without the requirement of calculus. Four lecture, three laboratory hours per week. Prerequisite: 241.

464—4 SPECTROSCOPY AND MOLECULAR STRUCTURE. Principles of spectroscopy and a systematic survey of the different types of spectroscopy, with emphasis on the molecular information to be obtained from each type. Prerequisite: Chemistry 361 or equivalent.

471—4 PRINCIPLES OF TOXICOLOGY. The injurious effects of chemicals that enter a biologic species and factors which influence the effects. Detection of hazardous conditions and treatment of effects. Prerequisite: consent of instructor.

490—2 CHEMICAL LITERATURE. A description of the various sources of chemical information and the techniques for carrying out literature searches. Two lecture hours per week. Prerequisite: 241.

496—2 to 6 CHEMICAL PROBLEMS. Investigations of chemical problems under the direction of a staff member. Prerequisites: senior standing, major in chemistry with 4.0 average, consent of department chairperson.

CONSTRUCTION

101—1 INTRODUCTION TO CONSTRUCTION. An introduction to the construction industry, its history and its role in today's society.

102—4 GRAPHICAL COMPUTER TECHNIQUES FOR CONSTRUCTION. An introduction to graphical and computer techniques specifically applied to the construction industry. Introduction to computer programming and use of the computer in

planning, scheduling and data processing. Graphical techniques used for resource scheduling, records and project productivity. Prerequisites: 101, Engineering 101.

201—4 CONSTRUCTION MATERIALS AND METHODS I. An introduction to the primary types of materials used in construction including asphalt, plastics, portland cement, steel, wood and glass. Examination of their molecular structure and factors affecting strength. Laboratory included. Prerequisite: Chemistry 110a.

202—4 CONSTRUCTION MATERIALS AND METHODS II. The 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. Both vertical and horizontal controls. Prerequisite: Engineering 263.

301—4 SOILS. Introduction to the geological distribution, physical properties and behavior of soils. Classification and testing of soils. Laboratory included. Prerequisite: Engineering 270 or concurrent enrollment.

302—4 WATER RESOURCES. Introduction to basic hydraulic and hydrology concepts. Determination of flow and drainage areas. Effects of water on construction procedures. Utilization of maps and air photos in hydrology studies. Laboratory included. Prerequisites: 102, 301.

321—3 ELECTRICAL SYSTEMS. Use of basic electrical theory for 60 cycle AC systems. Electrical systems and distribution for facilities. Electrical systems and distribution during construction including safety considerations, wiring and energy consumption. Prerequisite: Physics 211.

331—3 HVAC SYSTEMS. Introduction to heating, air-condition and ventilation systems. Requirements during construction as well as for the completed facility. Prerequisite: Physics 211.

332—3 MECHANICAL SYSTEMS. Introduction to mechanical systems and distribution. Requirements during construction as well as for the completed facility. Prerequisite: Physics 211.

341—4 PLANS AND SPECIFICATIONS. Reading and interpreting plans and specifications. Standard construction specifications such as ASTM, AISC, and ACI are used. Introduction to take-off methods for use in estimating. Laboratory included. Prerequisites: 202, 321 and 332 or concurrent enrollment.

351—4 INTRODUCTION TO CONCRETE AND TIMBER STRUCTURES. Elementary analysis of statically determinate structures. Design considerations for structural steel elements including familiarization with various design codes. Prerequisite: Engineering 270.

352—4 INTRODUCTION TO STEEL STRUCTURES. Elementary analysis of statically determinate structures. Design considerations for structural steel elements including familiarization with various design codes. Prerequisite: Engineering 270.

375—2 (1,1) JUNIOR SEMINAR I, II. Case studies of electrical and mechanical systems interfacing. Statistical considerations for records. Computer applications. Guest lecturers from the construction industry and allied fields. Prerequisite: junior standing.

403—4 CONSTRUCTION OPERATIONS. Planning and scheduling construction projects including resource and manpower allocation. Introduction and use of CPM and PERT methods. Progress reports and records. Prerequisites: 102, 341.

411—4 CONSTRUCTION CONTRACTS. Legal aspects of contracts and bidding. Types of construction contracts and documents including bonds. Safety during construction phase. Local, state, and federal regulations including OSHA rules and regulations. Prerequisites: Economics 310, Management 342 or concurrent enrollment.

441—4 SITE INVESTIGATION. Determination of access routes, haul roads and site topography. Sources of utility information, use of existing maps and air photos in site evaluation. Requirements for on-site support facilities including storage, electric, water and sanitary requirements. Prerequisites: 302, 341.

451—4 ESTIMATING AND BIDDING. Methods and procedures for estimating and bidding construction projects. Use of take-off quantities, productivity, and material costs in estimating and bidding. Prerequisites: 341, 403, Economics 310, Finance 320 or concurrent enrollment.

461—4 MATERIALS SAMPLING AND TESTING. Procedures and methods used to sample and test materials including standard methods such as ASTM and ACI standards. Statistical procedures. Laboratory included. Prerequisite: 202.

462—4 CONSTRUCTION EQUIPMENT. The types of construction equipment with methods for selection and evaluation of performance including basic principles used to determine size and energy requirements. Prerequisites: 403, Engineering 270.

464—4 CONSTRUCTION MONITORING AND CONTROL. Job inspection, quality control, time and motion studies, progress reports, records and employee relations. Prerequisites: 341, 403, Economics 310.

475a,b—2 (1,1) SENIOR SEMINAR I, II. Record keeping, labor contracts, zoning regulations, building permits, and contractor's office. Guest lecturers from construction industry and allied fields. Prerequisite: senior standing.

ENGINEERING AND TECHNOLOGY

101a,b—5 (2,3) ENGINEERING GRAPHICS. (a) Principles of Graphic Communications. Sketching for shape description, pictorial projection, multiviews, various types of sectional views, auxiliary views, geometric construction. The student must supply his or her own drafting instruments. (b) Shop processes, dimensioning, axonometric drawing, tolerances, fasteners, and the complete detail and assembly drawing of a jig or fixture for an assigned problem.

110—0 FRESHMAN SEMINAR. Introduction to engineering; description of major areas of engineering activity; discussion of available curricula at this University; procedures of the University and the Engineering Department. Team-taught by members of

Department of Engineering with invited lecturers from industry and other departments. Pass-No Credit grading only.

200—4 INTRODUCTION TO ELECTRICAL CIRCUITS. Steady state dc and ac circuit analysis. Ohm's Law, Kirchhoff's Laws Network Theorems (Thevenin, Norton, Superposition and Maximum Power Transfer). Loop and Nodal Analysis. Steady state analysis of circuits with sinusoidal excitation using phasor domain concepts. Power, power factor and rms value. Single phase and three phase circuits. Prerequisites: Physics 211, MSCS 172, MSCS 305 or concurrent enrollment.

230—3 ENGINEERING GEOLOGY. Geological principles governing the solution of civil engineering problems which are connected with the use and occurrence of rocks, minerals, soils, and water in the design and construction of engineering works. Prerequisite: pre-engineering.

260a,b—8 (4,4) ENGINEERING MECHANICS. (a) Static equilibrium conditions for external and internal force and moment systems. First and second moments of lines, areas, and volumes. (b) Kinematics and kinetics of particles and rigid bodies. Newton's laws, momentum, and energy methods. Vector algebra and calculus used throughout. Prerequisites for a: Physics 211a; for b: 260a.

263—3 SURVEYING I. Fundamentals of plane surveying, use of surveying instruments, basic field operations, and computations. Laboratory included. Prerequisite: pre-engineering.

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. Prerequisite: 260a.

300—3 THERMODYNAMICS. Elements of classical thermodynamics. Laws of thermodynamics and applications to open and closed systems. Introduction to statistical thermodynamics and its relationship to macroscopic properties of matter and transformation of energy. Prerequisites: Mathematics 260b, Physics 211b.

301—3 (1,1,1) JUNIOR ELECTRICAL ENGINEERING LABORATORY. Laboratory experiments which exemplify the material covered in junior electronics engineering courses. Characteristics of active devices and their uses, laboratory procedures, and measurement techniques. Prerequisites: for a: 326 or concurrent enrollment; for b: 301a, 327 or concurrent enrollment; for c: 301b.

303a,b,c—3 (1,1,1) INDUSTRIAL ENGINEERING LABORATORY. (a) Testing of mechanical properties of materials, harness testing, tensile and compression testing, notch toughness evaluation, torsion and bending. Introduction to metrology and analysis of measurement errors. Introduction to mechanic tools, lathe, milling and drilling machines, (b) Data Analysis, histograms, mean, mode, variance calculations, curve fitting, random sampling, central limit theorem, regression analysis, analysis of variance, quality control by attributes and by variables, MILSTD 105-D, use of SPSS and BMD programs. (c) Introduction to work analysis, operations and flow process charts, man-machine charts, flow diagram and plant layout, stopwatch study, performance rating, synthetic time data, work sampling, value analysis and cost estimation, human factors engineering. Prerequisites: (a) concurrent enrollment in 332; (b) concurrent enrollment in 410; (c) 471 or concurrent enrollment.

314—4 SOIL MECHANICS. Study of the theoretical and empirical principles of soil mechanics. Sampling, classification, shear strength, stresses and compressibility. Basic theories and assumptions for estimating settlement, bearing capacity, lateral earth pressures and slope stability. Laboratory included. Prerequisites: 230, 270, 316.

316—4 HYDRAULICS AND HYDROLOGY. Development of hydrological principles and their engineering applications, with an introduction to hydraulics of open channel and closed conduit flows. Statistical analysis of rainfall-runoff relationships, storm frequencies, and flood flows; surface water impoundments, drainage systems, pipeline networks, and groundwater systems. Prerequisite: pre-engineering.

319—4 INTRODUCTION TO SYSTEMS ENGINEERING. Introduction to network analysis, linear programming, critical path scheduling, decision analysis, and linear regression, with emphasis on application in the areas of construction, environmental, structural and transportation engineering. Prerequisite: pre-engineering.

320—3 ELECTRONIC CIRCUITS. Active networks including physics of tubes and transistors, biasing of active devices, simple amplifier circuits, R-C coupled amplifiers, basic oscillators, feedback circuits. Not for electronic engineering concentrations. Prerequisite: pre-engineering.

321—1 ELECTRONIC CIRCUITS LABORATORY. Laboratory study of active networks illustrating principles discussed in 320. Prerequisite: 320 or concurrent enrollment.

322—3 ELECTRICAL MACHINES, CONTROL AND POWER. Three-phase power distribution, transformers, induction, synchronous and d/c motors, their operation and characteristics and control. Prerequisite: pre-engineering.

323—1 ELECTRICAL MACHINES AND INSTRUMENTATION LABORATORY. Laboratory experiments dealing with electrical machines and control illustrating principles discussed in 322. Prerequisite: 322 or concurrent enrollment.

326—3 DIGITAL ELECTRONIC CIRCUITS. Digital circuits and systems, using BJTs and FETs. Brief introduction to semiconductor device (diode and transistor) characteristics; AND, OR, NOT, NAND, NOR gates; various types of logic; combinational digital systems (binary adders, ROM, etc.); sequential digital systems (S-R, J-K, R and D-type flip-flops). Prerequisites: pre-engineering; 301a or concurrent enrollment.

327—3 LINEAR ELECTRONIC CIRCUITS. Analog diode circuits (clipping, clamping, rectifying, voltage-regulating); low-frequency amplifiers in common-emitter, common-collector configurations of BJTs and common-source, common-drain configurations of FETs; small-signal models feedback amplifiers, frequency response of amplifiers; multiple-stage amplifiers (operational amplifiers, differential 80 amplifiers, etc.). Prerequisites: 326, 301b or concurrent enrollment.

330—8 (4,4) ENGINEERING ELECTROMAGNETICS. (a) Static electric and magnetic fields theory including field distribu-

tions and experimental field mapping methods. The formulation of Maxwell's equations in time-varying form and the retarded potentials. (b) Maxwell's equations for time-varying fields, derivation and solution of the wave equation field theory approach to transmission lines. Steady state solutions for the loss-less transmission line, the Smith Chart, lossy transmission lines. Pulse propagation on transmission lines. Must be taken in sequence. Prerequisite: pre-engineering.

332—4 MANUFACTURING PROCESSES AND MATERIALS. Introduction to manufacturing processes such as casting, powder metallurgy, metal forming, cold and hot working of metals, properties of engineering materials, selection of materials for manufacturing, introductory metallurgy including heat treatment of alloys, iron, and steels, welding, brazing, soldering and related welding processes. Prerequisite: pre-engineering.

340—8 (4,4) STRUCTURAL ANALYSIS I, II. (a) Analysis of statically determinate structures; influence lines and loading criteria for beams, trusses, and framed structures subjected to fixed and moving loads; computation of deformations by energy and geometric techniques; flexibility method of indeterminate structural analysis. (b) Classical stiffness methods of indeterminate structural analysis; slope-deflection and moment-distribution; influence lines for indeterminate structures: introduction to matrix stiffness methods. Must be taken in sequence. Prerequisite: pre-engineering.

341—4 PRINCIPLES OF ELECTRO-MECHANICAL ENERGY CONVERSION. An introduction to the basic principles of electro-mechanical energy conversion. Elementary lumped circuit modeling of electrical machines including DC motors and generators, AC motors and alternators. Prerequisite: 330a.

348—4 INTRODUCTION TO INDUSTRIAL ENGINEERING. Introduction to industrial engineering, role of IE in manufacturing as well as retail industries, scientific management, plant location, site selection, plant layout, time and motion study methods improvement, resource allocation, transportation and assignment models, break-even analysis, time-value of money, productivity, wage-incentive systems, forecasting, resource scheduling using network methods, job sequencing. Prerequisite: pre-engineering.

350—4 CIRCUIT ANALYSIS. Frequency response to sinusoidal and complex signal excitations. Transformer and mutual inductance concepts. One port, two port, and n-port parameters. Transfer function concepts. Transient analysis, zero-state and zero input concepts. Laplace Transforms and their application to solving linear network problems. Prerequisite: pre-engineering.

351—4 LINEAR SYSTEMS AND ANALYSIS I. A study of the methods available for analysis of the input-output properties of linear systems. The convolution integral. Frequency domain analysis of continuous time systems. Time and frequency domain analysis of discrete time systems. Prerequisites: 350, MSCS 260.

352—4 STOCHASTIC PROCESSES. Introduction to probability, random variables, and stochastic processes with emphasis on engineering applications. Power spectrum of stationary random signals and noise and the response of linear systems to random inputs. Prerequisite: 351.

353—3 LINEAR SYSTEMS ANALYSIS II. Introduction to the principles of simulation of linear systems on an Analog Computer. Introduction to general methods for study of input-output relations of systems. State space representation of continuous systems. State transition matrices and complete solution of linear continuous systems; controllability and observability; machine computation and simulation. Prerequisites: 351, Mathematics 305.

370—4 ENGINEERING MATERIALS. Quantitative and qualitative behavior of materials as related to the physical and chemical structure of solids. Laboratory determination of mechanical properties of materials. Prerequisite: pre-engineering.

376—4 TRANSPORTATION ENGINEERING. Selected topics in air, highway, rail, water, and pipeline transportation. Introduction to planning and design of transportation facilities (geometric and structural). Prerequisite: 263.

380—4 ENVIRONMENTAL ENGINEERING. Water Supply and Treatment. Planning and design of water supplies, distribution systems, and treatment systems. Prerequisite: 316.

395—2 to 8 READINGS IN ENGINEERING. Supervised reading in selected subjects. Prerequisites: junior or senior standing, concentration in engineering, consent of department chairperson.

401—2 (1,1) SENIOR ELECTRONIC ENGINEERING LABORATORY. Laboratory experiments which exemplify the material covered in junior and senior engineering courses. Introduction to advanced measurements techniques. NOT FOR GRADUATE CREDIT. Must be taken in sequence. Prerequisite: 301c.

402—4 ELECTRONIC PROPERTIES OF MATERIALS. Introduction to the physical interpretation of the dielectric, magnetic, conductive and superconductive properties of materials. These properties are studied in the context of engineering applications of these materials. Prerequisites: 330a, Physics 302a,b.

406—4 DIGITAL SIGNAL PROCESSING. Discrete-time signals and systems; z-transforms; discrete fourier transform; flow graphs and filter implementation; FIR IIR filter design; introduction to FFT. Prerequisite: 353 or equivalent.

410—4 DESIGN OF QUALITY CONTROL SYSTEMS. The application of statistical methods to quality control. Emphasis on the integration of control charts, sampling plans and other techniques into the design of quality control systems. Prerequisites: pre-engineering, MSCS 380.

415—4 FOUNDATION ENGINEERING. Application of the fundamental principles of soil mechanics in the design and analysis of foundations (shallow and deep), retaining walls, cofferdams, pavements and earth embankments. Estimates of hearing capacity, settlement and slope stability values. NOT FOR GRADUATE CREDIT. Prerequisite: 314.

419—3 TRANSPORT PHENOMENA I. Steady and unsteady state conduction heat transfer; Introduction to radiation and convection heat transfer; potential flow; boundary layer flow. Prerequisites: 270, 300.

420—4 TRANSPORT PHENOMENA II. Radiation and convection heat transfer; Principles of interphase mass transfer; Flow of compressible fluids; Turbulent flow. Prerequisite: 419.

421—1 FLUID DYNAMICS LABORATORY. Laboratory experiments to study the flow of fluids in conduits and in open channels. Prerequisite: 316.

425—4 ELECTRON DEVICES. Fabrication methods, characteristics, and analysis of selected solid state devices (BJTs, FETs Tunnel Diodes, Optoelectronic Devices, CCDs, etc.). Prerequisite: 402.

426—4 INTEGRATED CIRCUITS APPLICATIONS. The study of applications of analog and digital integrated circuits. Consideration of the building blocks of analog integrated circuits. The characteristics of digital logic families such as noise, speed, power requirements, logic levels and loading rules. Prerequisite: 327 or equivalent.

432—4 ADVANCED MANUFACTURING ENGINEERING. Metal cutting theory. Machining processes such as turning, milling, boring, drilling, broaching. Mass production techniques. Design of jigs and fixtures, computer aided design (CAD), computer aided manufacturing (CAM) N-C machines, use of group technology in a manufacturing facility. NOT FOR GRADUATE CREDIT. Prerequisite: 332.

435—4 POWER SYSTEM ANALYSIS. The study of the fundamental concepts of power systems. Operational consideration, basic component model representation, steady state performance and operating strategies of power systems. A systems approach is used with emphasis on overall operational characteristics. Prerequisites: 341, 353.

440—4 STEEL STRUCTURES. Fundamentals of structural steel design by "allowable stress" and "maximum strength" methods. Familiarization with various steel design codes. NOT FOR GRADUATE CREDIT. Prerequisite: 340a.

442—4 CONCRETE STRUCTURES. Investigation and design of reinforced concrete structural elements (beams, columns, slabs, footings). Emphasis on ultimate strength, time dependent behavior, and code requirements. NOT FOR GRADUATE CREDIT. Prerequisite: 340a.

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. Prerequisite: senior standing or consent of department chairperson.

444—3 ELECTRICAL ENGINEERING DESIGN. Elements of Design in Electrical Engineering. The student will be required to complete several "paper designs" selected from the various areas of Electrical Engineering. The final examination will consist of the design of a project selected by the student with approval of the Engineering Faculty. This design will be used as the basis of the project in Engr. 445, Electrical Engineering Design Laboratory. NOT FOR GRADUATE CREDIT. Prerequisites: pre-engineering and senior standing.

445—1 ELECTRICAL ENGINEERING DESIGN LABORATORY. The design generated for final examination in 444 is constructed and tested. Student works in consultation with one of the members of the faculty. For certain projects, computer simulation may be used to supplement or even replace construction and testing of the design. NOT FOR GRADUATE CREDIT. Prerequisite: 444.

450—3 to 6 TOPICS IN ENGINEERING. A selected topic of special interest. The title includes the name of the topic (e.g., "Topics in Engineering: Urban Systems"). Prerequisite: consent of instructor.

458—4 OPERATIONS RESEARCH—DETERMINISTIC MODELS. (Same as Mathematics 440.) Introduction to 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. Prerequisites: pre-engineering.

460—4 OPERATIONS RESEARCH—STOCHASTIC MODELS. (Same as Mathematics 441.) Probabalistic models, elementary queuing theory with single or multiple server systems, use of queues in the facility designs, elementary decisions theory, Markov processes and decision making. Prerequisites: pre-engineering, MSCS 380 or 480a.

463—4 TRANSPORTATION SITE SELECTION. Engineering techniques in transportation facilities site selection including highway route surveying. Introduction to Photogrammetry and use of air photos to identify and evaluate engineering controls and constraints in site selection. Geometric design criteria as applied to transportation facilities. Laboratory included. Prerequisites: 314, 376.

465—4 CONTROL SYSTEMS. Principles of linear feedback control systems, using Root-Locus, Bode, and Nyquist methods. Study of performance characteristics—steady state, transient and stability with major emphasis on Root-Locus as analysis and synthesis tool. Basic ideas on system identification. Prerequisite: 353.

471—4 METHODS DESIGN AND WORK MEASUREMENT. (Same as Production 461.) Design of work systems, methods, and techniques employed in the measurement of work. Emphasizes current philosophy underlying improvement of work methods and procedures used to measure work performed. Four major areas are covered: methods design, standardizing the operation, work measurement, and training the operator. A number of projects correlating with the course materials are assigned. Prerequisites: 348, MSCS 380.

472—4 PRODUCTION PLANNING AND CONTROL. (Same as Production 462.) Analyzes and describes the recurrent problems of managing the flows of materials, services, and information produced in response to changes in market demand. Emphasizes the top-level decisions necessary to plan and control operations so that customers are served on time and penalty costs are minimized, as well as the decisions made by middle and first line managers in regard to scheduling and controlling, purchasing, production, and distribution. Selected decision-making techniques are analyzed and evaluated from the production manager's point of view. Prerequisite: 471.

474—4 OPERATIONS RESEARCH—SIMULATION. (Same as Mathematics 442.) Inventory theory, simulation models,

generation of random variables, discrete event simulation using GPSS, continuous event simulation using CSMP. Prerequisites: pre-engineering, MSCS 380 or 480a.

475—4 URBAN TRANSPORTATION. Introduction to systems engineering, deterministic models (linear programming, transportation networks, and critical path scheduling). Trip generation, trip distribution, traffic assignment procedures, traffic analysis and traffic engineering procedures as utilized in urban transportation planning. Prerequisite: 376.

476—4 HUMAN FACTORS ENGINEERING. Study of human factors engineering and their impact on the design of product, work space arrangement. Analysis of man-machine system to increase the productivity and meet the physiological and psychological needs of those involved in the system. Prerequisite: 471.

477—3 CONSTRUCTION ENGINEERING. Application of engineering principles to modern methods of construction, construction planning, scheduling by critical path method, contract documents, economics, estimating and bidding, construction materials. NOT FOR GRADUATE CREDIT. Prerequisites: 314, Economics 341.

478—4 TRANSPORTATION ENGINEERING—FACILITIES DESIGN. Design criteria and methods for airfields, highways, railroads and waterways. Emphasis on the geometrical design of the facility and the structural design of the load carrying element. Human factors are discussed considering their effects on physical design criteria. Prerequisites: 376, 314 and 363 or equivalent.

479—4 FACILITY LAYOUT AND PLANNING. Emphasis on integrating available resources to achieve an efficient production facility. Problems of plant location and material handling are also stressed. Prerequisite: 471.

480—4 ENVIRONMENTAL ENGINEERING UNIT OPERATIONS. Selected topics from analytical and physical chemistry as applied to the examination and treatment of water and wastewater. Principles of unit operations. Basic principles and theory of chemical reactors. Supplemental laboratory exercises and demonstrations of laboratory techniques. Prerequisite: 380.

481—4 FUNCTIONAL ANALYSIS OF DIGITAL EQUIPMENT. Logic circuits including standard gates, function realization and minimization, and log diagrams. Sequential circuits including transition tables and timing diagrams. Internal organization and function of typical computers and controllers including common peripherals such as I-O devices, secondary storage, and D-A and A-D converters. Prerequisite: 200 or 320.

482—4 MICROPROCESSORS. Study of architecture and basic elements of single board microcomputer systems. Study of several types (6800, 8080, 6502) with demonstrations and projects. Software and hardware designs for microprocessor control of external circuits. Prerequisite: 320 or equivalent.

483—4 DIGITAL PROCESSOR PROGRAMMING. Software requirements for general purposes, stored program digital processors. Machine instructions and information format required to transfer data of specific I/O devices, execute memory and register transfers, perform logical and mathematical operations, employ memory protect and interrupts and sense and display errors. Machine and source languages, assemblers, translators and compilers, loaders and system operation of a typical processor. Projects with interpretive and interactive programming, debugging, diagnostics and I/O utility programs for actual processors. Prerequsite: 481.

485—4 COMMUNICATION SYSTEM. Elements of communications systems. Filtering and signal-to-noise ratios. Baseband communication systems. Analog modulation, including linear, exponential and pulse modulation. Quantizing and digital modulation. Frequency and time multiplexing. Prerequisites: 351, 352.

488—4 ADVANCED MECHANICS OF DEFORMABLE BODIES. Introduction to energy principles and their application. Problems in plane stress and strain. Beams on elastic foundations. Theories of failure. Introduction to plates and shells. Prerequisite: 340b or consent of instructor.

489—8 (4,4) ENVIRONMENTAL ENGINEERING DESIGN I, II. Water and wastewater treatment plant design. a) Design of sewers, sedimentation systems, filtration systems, and chlorination systems; b) Design of biological wastewater treatment systems: activated sludge, stabilization lagoons, anaerobic digestion, and trickling filters. Prerequisite: 480.

490—4 MICROWAVE PRINCIPLES. An introduction to microwave principles beginning with Maxwell's equations. Plane wave propagation and reflections of waves at boundaries. The mathematical theory of waveguides, both rectangular and circular. Resonant cavities, periodic structures, filters, and ferrite components. Prerequisite: 330b.

496—4 TRANSPORTATION ENGINEERING — GEOMETRIC DESIGN. Geometric design criteria for ground transportation systems. The influence of the operator (or passengers), vehicle, travelway, and their interactions on the geometric properties and the effects of the various geometric parameters on each of them. Prerequisite: 478 or equivalent.

ENVIRONMENTAL STUDIES

415—4 ENVIRONMENTAL PSYCHOLOGY. (Same as Psychology 415.)

442—4 HUMAN ECOLOGY. (Same as Anthropology 442.) Prerequisite: sophomore standing or consent of instructor.

480—4 PRINCIPLES OF INSTRUMENTAL ANALYSIS. A review of the basic principles of chemical analysis and introduction to the principles and applications of instrumental methods utilized in environmental science. Treatment of experimental data, principles of quantitative analysis, principles and application of spectrophotometry, electroanalytical methods and chromatography. Three lectures, three laboratory hours per week. Prerequisites: college algebra, general chemistry.

MATHEMATICS, STATISTICS, AND COMPUTER SCIENCE

101—4 BEGINNING ALGEBRA. A first course in algebra, including operations with real numbers; first degree equations and inequalities; absolute value; operations with polynomials;

factoring; operations with rational expressions. Five contact hours per week. May not carry credit toward some degrees. Graded on Pass/No Credit basis only.

105—4 INTERMEDIATE ALGEBRA. A second course in algebra, including operations with polynomials; factoring; operations with rational expressions, complex numbers; quadratic equations; exponential and logarithmic functions; applications. Five contact hours per week. Prerequisite: 101 or equivalent.

125—4 PRECALCULUS MATHEMATICS WITH TRIGONOMETRY. A study of elementary properties and applications of polynomial, exponential, trigonometric and certain other functions. Some topics from analytic geometry. Prerequisites: 6 semesters of high school mathematics and an ACT score of 23 or higher or GSM 144 with a grade of C or higher.

150—8 (4,4) ELEMENTARY CALCULUS AND ANALYTIC GEOMETRY. Elementary differential and integral calculus with analytic geometry and applications. Includes the definite integral and differentiation of transcendental functions. Must be taken in sequence. Prerequisites: 7 semesters of high school mathematics including a semester of trigonometry and an ACT score of 23 or higher; or MSCS 125 with a grade of C or higher.

172—2 INTRODUCTION TO FORTRAN IV. This course provides an introduction to digital computer programming with the FORTRAN IV programming language. The writing of efficient and well-organized computer programs is stressed, with emphasis on scientific computing applications. Specific features of FORTRAN IV covered include: arithmetic statements, arrays and subscripted variables, functions and subprograms. Both batch and interactive FORTRAN systems are utilized, and the use of available system subroutine packages is discussed. Prerequisite: 150b or concurrent enrollment.

260—12 (4,4,4) CALCULUS AND ANALYTIC GEOMETRY. Continuation of 150. Analytic geometry, indeterminate forms, improper integrals, linear algebra, vector functions, partial differentiation, multiple integrals, infinite series. Must be taken in sequence. Prerequisite: 150b.

272—4 INTRODUCTION TO PROGRAMMING. Introduction to digital computers. Methods of describing programming problems. Designing programs. Fortran programming. Prerequisite: six semesters of college preparatory mathematics or knowledge of college algebra.

273—4 INTRODUCTION TO COMPUTER ORGANIZATION. Components of a computer system; computer arithmetic, addressing techniques, computer hardware; computer software. Prerequisite: 272.

305—4 DIFFERENTIAL EQUATIONS FOR APPLICATIONS. Ordinary differential equations, numerical methods of solution, second order linear differential equations with singular points, special functions. (Some knowledge of computer programming is desirable.) Prerequisite: 260c.

321—4 ELEMENTARY LINEAR ALGEBRA. The arithmetic of matrices, determinants, and inverses; systems of linear equations; a first look at vector spaces, linear mappings, Euclidean spaces, and eigenvalue problems. Prerequisite: 150.

323—4 INTRODUCTION TO COMBINATORIAL MATHEMATICS. Permutations and combinations, the inclusion-exclusion principle, generating functions, introduction to graph theory. Prerequisites: 260a, 272, 321.

365—4 INTRODUCTION TO NUMERICAL ANALYSIS. Sources of error; round-off and truncation, roots of equations, numerical integration; ordinary differential equations, interpolation. Prerequisites: 260c, 272.

371—4 ADVANCED PROGRAMMING LANGUAGES. Basic features of PL/I, string-manipulation and list-processing languages, comparisons with Algol and Fortran, dynamic allocation and programmer-defined interrupts. Computer applications emphasized. Prerequisite: 272.

372—4 COMPUTER PROGRAMMING II. Continuation of 272. An introduction to simple data structures, recursion, storage management, internal sorting and searching methods, and applications such as string processing and lexical analysis. Prerequisite: 272.

373—4 ASSEMBLY LANGUAGE PROGRAMMING. Job control language, machine language, assembly language, assemblers. Prerequisite: 273.

374—4 INTRODUCTION TO LOGIC AND ALGORITHMS. Lattices; Boolean algebra; the propositional calculus; the first order predicate calculus; algorithms and computing machines. Prerequisite: 272.

380—4 STATISTICS FOR APPLICATIONS. A brief introduction to probability rules and probability distributions, treatment of data, inferences concerning means and proportions, regression, and analysis of variance. Prerequisite: 260a or consent of instructor.

400—3 HISTORY OF MATHEMATICS. A historical introduction to the development of selected mathematical concepts. Prerequisite: 260c 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: GSM 144.

418—4 DETERMINISTIC MODELING FOR THE ENVIRONMENTAL SCIENCES. The study of mathematical modeling with applications in environmental sciences. Model construction; linear optimization; network analysis; PERT and CPM techniques; deterministic simulation of continuous systems; elements of CSMP. May not be taken for credit towards major or graduate concentration in mathematical studies. Prerequisite: 40 hours natural science, mathematics, or engineering, including MSCS 150b.

419—4 STOCHASTIC MODELING FOR THE ENVIRONMENTAL SCIENCES. Selected topics in probability and statistics; elements of queuing theory; stochastic simulation models; growth and population models; discrete simulation using GPSS. May not be taken for credit towards major or graduate concentration in mathematical studies. Prerequisite: 40 hours natural science, mathematics, or engineering, including MSCS 150b.

420—6 (3,3) FUNDAMENTAL CONCEPTS OF ALGEBRA. An introduction to abstract algebraic structures; groups, rings, fields, and vector spaces. Must be taken in sequence. Prerequisite: 321 or consent of instructor.

421—9 (3,3,3) LINEAR ALGEBRA. A study of finite dimensional and multilinear vector spaces and linear mappings. Must be taken in sequence. Prerequisite: 321 or consent of instructor.

425—3 ELEMENTARY NUMBER THEORY. The divisibility of integers, linear and quadratic congruences, primitive roots, number theoretic functions, and the distribution of primes. Prerequisite: 321.

430—6 (3,3) AN INTRODUCTION TO TOPOLOGY. The elements of set theory, metric and topological spaces, separation axioms, connectedness, compactness, product and quotient topologies, locally compact spaces, complete metric spaces, and applications. Prerequisite: 260c or consent of instructor.

435—9 (3,3,3) FUNDAMENTAL CONCEPTS OF GEOMETRY. An axiomatic study of plane Euclidean geometry by means of groups of transformations. Axioms, motions, groups, crystallographic groups, circles, metric geometry, similitude, hyperbolic geometry and elliptic geometry. Must be taken in sequence. Prerequisite: 321 or consent of instructor.

440—4 OPERATIONS RESEARCH—DETERMINISTIC MODELS. (Same as Engineering and Technology 458.)

441—4 OPERATIONS RESEARCH—STOCHASTIC MODELS. (Same as Engineering and Technology 460.)

442—4 OPERATIONS RESEARCH—SIMULATION. (Same as Engineering and Technology 474.)

450—8 (4,4) INTRODUCTION TO REAL ANALYSIS. (a) Real numbers, topology of Rn, continuity and differentiability of functions from Rm into Rn, (b) implicit function theorem, characterization of Riemann integrable function, uniform convergence. Must be taken in sequence. Prerequisites: 260c, 321.

463—12 (4,4,4) 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. (c) Complex analytic functions, complex integrals. Taylor and Laurent series, integration by residues. May be taken in any sequence. Prerequisites: (a) 260, 305; (b) 463a; (c) 463b or consent of instructor.

465—8 (4,4) NUMERICAL ANALYSIS. An introduction to numerical methods with error analysis, solution of nonlinear equations, numerical differentiation and quadrature, numerical integration of ordinary and partial differential equations, solution of systems of linear algebraic equations, approximation theory, finite differences and interpolation, least squares curve fitting, eigenvalue problems. Must be taken in sequence. Prerequisites: (a) 260c, 272; (b) 305, either 365 or 465a, 321 or consent of instructor.

470—4 DATA STRUCTURES. Static, semi-static, and dynamic structures. General vectors, arrays, and records. Self-describing records and array variability; stacks, queues, and deques. Linear linked lists; shared-element lists; trees and graphs. Logical and physical organization; accessing algorithms. Operations on lists; implementation algorithms. Searching and sorting. Storage management. Language supporting list-processing facilities. Concepts applied in programming assignments. Prerequisites: 273, 371, 374.

472—7 (4,3) PROGRAMMING AND DESIGN TECHNIQUES. (a) History of programming, structures programming, team programming, programming testing and varification, decision tables, coroutines, recursive programming. (b) Systems development process, tools and guidelines for structured design, using structured design, related subjects. Prerequisites: 272, 371; or consent of instructor.

473—4 STRUCTURED COMPUTER ORGANIZATION. Introduction to virtual machines, machine language of CDC 6600 and PDP-11, microprogramming operating system, virtual machines, multi-level machines, multiprogramming and SPOOLing. Prerequisites: 373, 472a or concurrent enrollment.

475—9 (3,3,3) APPLICATIONS OF SYSTEMS DESIGN. (a) Background: advanced features of COBOL, guidelines to programming style in COBOL, data organization and access (sequential files, direct files, data base files), introduction to JCL. (b) Case study: examination of systems programs with attention to I/O specifications, hardware configurations, systems flowcharts, documentation, utility programs, modularization, impact of systems alternatives. (c) Class project: given an information base and a project's goals, the class designs an implementing software system. Prerequisite: (a) COBOL; (b) 472a; (c) 472b.

476—6 (3,3) LANGUAGE TRANSLATION. Single- and multipass assemblers, interpreters, and compilers. Lexical and syntactic analysis. Table look-up and precedence schemes. Intermediate code. Object code generation. Run-time environment for nested and independent block structure; compile- and run-time structures; storage allocation. Concepts applied in programming projects. Must be taken in sequence and should be taken in consecutive quarters. Prerequisite: 470.

477—6 (3,3) OPERATING SYSTEMS. Introduction to operating systems, I/O and interrupt programming, memory protection, memory management, processor management, device management, information management, case studies. Prerequisite: 473.

478—6 (3,3) HEURISTIC PROGRAMMING AND ARTIFICIAL INTELLIGENCE. (a) Heuristic problem-solving methods with applications in decision making, theorem proving and game playing. (b) Survey of topics in artificial intelligence, complemented by a class project. Prerequisite: 470 or consent of instructor.

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: 260c.

481—4 APPLICATIONS OF STATISTICAL METHODS. 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 the 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 the 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. Statistical inference using distribution-free tests and estimation procedures. Randomization, the sign test, signed-rank test, power robustness, relative efficiency, inferences concerning location based on two or more independent samples, inferences concerning scale parameters, association analysis, general distribution tests and goodness-of-fit, tests of randomness. Prerequisite: 480 or consent of instructor.

495a-i—1 to 6 INDEPENDENT STUDY. Research and reading in a specific area of interest. (a) Algebra. (b) Geometry. (c) Analysis. (d) Probability and Statistics. (e) Mathematics Education. (f) Logic Foundations. (g) Topology. (h) Computer Science. (i) Operations Research. A total of 24 hours may be accumulated, not more than 6 in a single segment, not more than 12 in one quarter. Prerequisite: consent of adviser.

PHYSICS

100—1 INTRODUCTORY PHYSICS SEMINAR. Requirements and options within the physics curriculum, educational and employment opportunities for physics majors, and introduction to major areas of research in physics. Visitations of both basic and industrial research laboratories, and attendance at physics seminars. Team-taught by faculty of Department of Physics with invited outside lecturers. Graded on pass/no credit basis only. May be repeated for a total of 3 hours. Prerequisite: physics major or consent of undergraduate physics adviser.

206—15 (5,5,5) COLLEGE PHYSICS. Designed to meet premedical requirements and the needs of students majoring in the biological sciences. Laboratory. Must be taken in sequence. Prerequisite: GSM 144.

211—12 (4,4,4) UNIVERSITY PHYSICS. (a) Kinematics, dynamics, conservation of energy, linear momentum, angular momentum. (b) Oscillations, gravitation, fluids, wave theory, sound, electrostatics, potentials. (c) Circuits, magnetic fields, electromagnetic waves, geometrical and physical optics. Must be taken in sequence. Prerequisite: (a) MSCS 150b or concurrent enrollment; (b) 211a; (c) 211a, b.

212—2 (1,1) INTRODUCTORY PHYSICS LABORATORY. (a) Experiments in classical mechanics emphasizing physical measurements, data analysis and presentation, as well as simple error analysis. Measurements of velocities, acceleration, acceleration due to gravity, moments, gravitational, kinetic and heat energy, and simple harmonic motion. (b) A continuation of experiments in classical mechanics and classical electromagnetism. The latter includes electrical measurements and some simple circuit properties. One or two experiments in geometrical and/or physical optics. Prerequisites: (a) 211a, concurrent enrollment in 211b; (b) 211b, 212a, concurrent enrollment in 211c.

302—8 (4,4) MODERN PHYSICS. (a) Thermodynamics, special relativity, photoelectric effect, Planck's radiation theory, Compton effect. (b) Matter waves, the uncertainty principle, the Schrodinger solution for a confined particle, the hydrogen atom, atomic theory, nuclear and solid state physics. Must be taken in sequence. Prerequisites: (a) 211, MSCS 260a; (b) 302a.

304—4 THERMODYNAMICS AND KINETIC THEORY. A macroscopic study of the laws of thermodynamics. Thermodynamic potentials, Maxwell's relations and applications of thermodynamics to the study of the properties of matter including phase equilibria. Introduction to irreversible processes and kinetic theory. Prerequisite: 302a.

308—8 (4,4) INTRODUCTION TO CLASSICAL MECHANICS. Statics of a particle, of a rigid body, and of a flexible string; the principles of virtual work, motion of a particle in a uniform and in a central force field, simple harmonic motion, motion of a system of particles, rigid body motion in a plane; noninertial reference frames; generalized coordinates, Lagrange's and Hamilton's equations of motion; vibrating systems, normal coordinates, and wave motion. Prerequisites: (a) 211a,b, MSCS 260a; (b) 308a.

310—4 PHYSICAL OPTICS. Theory of interference and interferometers. Fresnel and Fraunhofer diffraction, Fourier transform theory of diffraction; velocity of light, polarization, electromagnetic theory of light applied to reflection and refraction in isotropic media and anistropic media; birefringence, optic axis, crystal optics, optical activity; theory of normal and anomalous dispersion, scattering of light by particles; quantum optics, lasers. Prerequisites: 211, MSCS 260a.

311—1 OPTICS LABORATORY. Advanced experiments in geometrical and physical optics. Two laboratory hours per week. Prerequisite: 310 or concurrent enrollment.

312—2 (1,1) INTERMEDIATE PHYSICS LABORATORY. (a) A continuation of experiments in classical physics including physical and geometrical optics, thermodynamics and an introduction to experiments in modern physics. (b) A continuation of experiments in modern physics including the photoelectric effect, measurement of e/m, Millikan oil drop experiment, half-life measurements of radioactive isotopes and the Frank-Hertz experiment. Prerequisites: (a) 211c, 212b, concurrent enrollment in 302a; (b) 302a, 312a, concurrent enrollment in 302b.

320—4 SPECIAL RELATIVITY. An introduction to Einstein's Theory of Special Relativity. Develops the notion of space and time and treats relativistic kinematics, dynamics, and electromagnetism. Prerequisites: 211, MSCS 260a.

375—1 SEMINAR. Topics selected from a wide range of physical theories and applications. One hour per quarter with a maximum of 3 total hours; graded on a Pass/No Credit basis only. Prerequisite: consent of instructor.

390—1 to 15 PHYSICS HONOR PROJECT. Honors work in physics mostly in the junior and/or senior years. Entrance by invitation of any member of the Physics Department. Prerequisite: 405a.

404—4 INTRODUCTION TO STATISTICAL MECHANICS. Introduction to phase space and ensemble theory. Statistical interpretation of thermodynamic processes. Maxwell-Boltzmann, Bose-Einstein, Fermi-Dirac statistics, and applications. Systems of interacting particles. Prerequisites: 302, 304 and 308.

405—8 (4,4) INTRODUCTION TO ELECTROMAGNETIC FIELD THEORY. Vector treatment of the theory; electrostatics in vacuum and in matter, steady currents, magnetism, magnetic materials, and electromagnetic radiation. Must be taken in sequence. Prerequisites: (a) 211c, MSCS 260a; (b) 405a.

415a—4 WAVE MECHANICS. Cites the evidence for a need of new "quantum theory." Considers the Schroedinger equation, and the Born interpretation of the wave function. Develops the theory of quantum harmonic oscillators, the rigid rotator and hydrogen-like atoms. Develops perturbation theory and a description of radiation from atomic systems. Prerequisites: 302b, MSCS 305.

415b—4 ATOMIC PHYSICS. Exploits the theoretical considerations developed in 415a by considering their application to the study of atomic and molecular systems. Prerequisite: 415a.

415c—4 NUCLEAR PHYSICS. A systematic discussion of the properties of the atomic nucleus. Examples of the application of wave mechanics to the study of the nucleus. A consideration of nuclear forces, subnuclear particles, and nuclear models. Prerequisite: 415a.

418—2 ADVANCED PHYSICS LABORATORY. An advanced laboratory course to include experiments chosen from nuclear spectroscopy, semiconductor physics, x-ray diffraction, optical spectroscopy, materials preparation techniques, nuclear magnetic resonance, and work with lasers and optical detectors. May be repeated to total of 4 hours credit. Prerequisites: 302b, 312b.

419—4 INTRODUCTION TO THEORETICAL PHYSICS. Discussion and application of a variety of mathematical techniques to problems selected from the area of theoretical physics. (a) Treatment of solutions of the homogeneous partial differential equations of theoretical physics in the presence of boundaries. Prerequisites: 302, MSCS 305.

420—2 to 4 SPECIAL EXPERIMENTAL PROJECTS. Each student is assigned to a definite investigative topic. Adapted to advanced undergraduate students. May be repeated to total of 6 hours. Prerequisites: 308, 405.

421—2 to 4 SPECIAL THEORETICAL PROJECTS. Assignment to specific theoretical topics. Adapted to advanced undergraduate students. May be repeated to total of 6 hours. Prerequisites: 308, 405.

450—4 INTRODUCTION TO SOLID-STATE PHYSICS. Crystal structure. Crystal binding. Lattice vibrations and thermal properties of crystals. Electronic states and energy band theory. Other selected topics. Prerequisite: 415.

480—2 to 4 SELECTED TOPICS IN PHYSICS. Topics of special interest. May be repeated to a total of 6 hours. Lecture format. Prerequisite: consent of instructor.

SCIENCE AND TECHNOLOGY

401—3 to 6 CLASSICAL MECHANICS. A systematic treatment of mechanics which assumes only a modest background in algebra. Emphasis on those concepts which historically were defined for mechanical systems but which have proven important in all areas of physics. Primarily for teachers of the physical sciences. Subject matter is related to texts and material available in most secondary schools. May be repeated to maximum of 10 hours.

403—3 to 6 EXPERIMENTS AND TECHNIQUES OF PHYSICS. Conducting of experiments and consideration of equipment for teaching physics. Lectures on experimental techniques. May be repeated to a maximum of 10 hours.

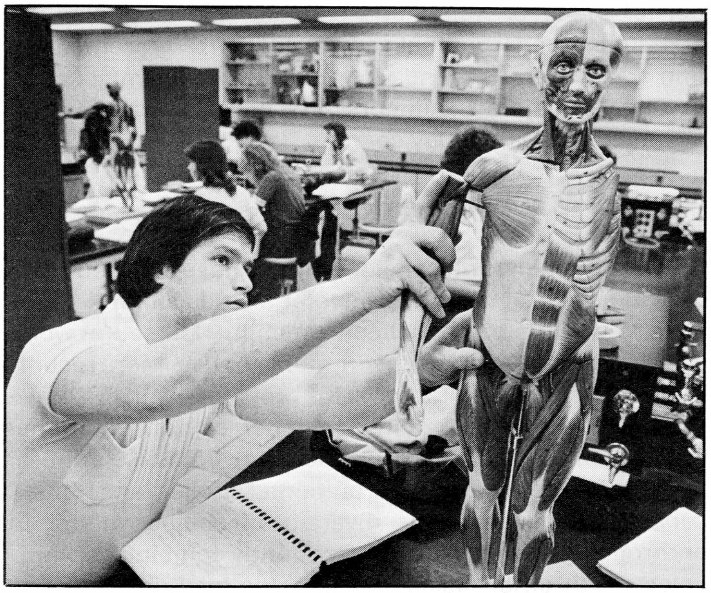
416—2 to 5 INDEPENDENT STUDY IN SCIENCE EDUCATION. Each student is assigned material and studies under supervision in an area of science education. Selection of topics is based on needs of student. May be repeated to a maximum of 10 hours. Prerequisite: consent of adviser.

421—4 BASIC CONCEPTS OF CHEMISTRY. A general background in chemistry. A body of chemical principles with emphasis on the existence, size, structure, and bonding of atoms. Four lecture hours per week.

429—6 (1,1,1,1,1,1) TOPICS IN CHEMISTRY. Short courses focusing on a particular topic: (a) Origins of Elements, Molecules, and the Earth's Atmosphere; (b) Hazardous Substances; (c) Acid-Base Theories; (d) Chemistry of Air Pollution; (e) Problem-Solving in the Physical Sciences; (f) Seminar for Chemistry Teachers. No more than 1 hour of credit may be received in each of the courses. Prerequisite: consent of chairperson of Department of Chemistry.

441—3 MODERN ORGANIC CHEMISTRY. Stereochemistry, spectroscopy, mechanisms, and review of fundamental concepts (hybridization, functional groups, nomenclature). Laboratory; use of spectroscopy and chromatography to characterize compounds prepared by students. Intended primarily for continuing education courses. Prerequisite: consent of chairperson of Department of Chemistry.

480—3 to 6 SPECIAL TOPICS IN PHYSICAL SCIENCE TEACHING. Topics of special interest in teaching of science not included in other courses. Combined lecture and/or laboratory format. May be repeated to a maximum of 10 hours. Prerequisite: consent of department chairperson.



SCHOOL OF SOCIAL SCIENCES

The School of Social Sciences offers bachelor's degree programs in anthropology, earth science, economics, geography, government, history, sociology, and social work. It also has master's degree programs in behavioral science, city and regional planning, geography, government, history, 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 training 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 in such areas as improving the quality of the environment, conservation of natural resources, stimulating interest in local history, and improving the quality of local government services.

ANTHROPOLOGY

Professors:

Frisbie, C. J.
Schusky, E. L.

Associate Professors:

Aschenbrenner, J. C.
Denny, S. G. (Chairperson)
Frisbie, T. R.
Maloney, T. J.

Anthropology is a subject generally unfamiliar to high school graduates. It is concerned with studying humans and their physical and cultural developments through time and space. Among the major goals of anthropology are the development of an understanding of the potentials and limits of being human, and respect for the various ways of life followed by others and the reasons for these practices. The student in anthropology acquires 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. The particular strengths of the Department of Anthropology at SIUE lie in the faculty expertise in the areas of 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, Behavioral Science, 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 Honor Society in 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 3.0 grade-point average in anthropology courses.

Career Opportunities

Traditionally, anthropology majors have pursued graduate degrees at both the master's and doctoral level, leading 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 prepare students for relating to diverse community problems and many issues of contemporary life and thus greatly expand the opportunities for interesting and rewarding careers.

Degree Requirements

Bachelor of Arts Degree, Anthropology

The Bachelor of Arts degree is designed primarily to prepare students for advanced study in anthropology and includes a foreign language requirement.

General Studies Requirements (Waive GSS-8.)	60
*Foreign Language Requirement	12
Requirements for Major in Anthropology	48
GSM 365	4
Anthropology 400, 408, 411, 442	16
One ethnography course to be taken from 305a, b, 307, 311, 482	4
Anthropology 301 or 401 (English 400)	4
Anthropology electives chosen in consultation with undergraduate adviser	20
Minor	27
Electives	45
	192

Bachelor of Science Degree, Anthropology

The Bachelor of Science degree is designed for students desiring to pursue anthropology as an avocation or in the areas of government service, industry, salvage archaeology, museology, or Foreign Service where advanced graduate degrees are not required.

The requirements for a Bachelor of Science degree differ from requirements for the Bachelor of Arts degree by requiring 12 hours in field methods courses—375a, b (4 to 8, 4 to 8) and 475a, b (4 to 8, 4 to 8), 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 27 hours and includes GSS 210, one physical anthropology course, and one cultural anthropology course. The remaining hours consist of anthropology electives selected in consultation with the undergraduate anthropology adviser.

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:

Elliott, D. S.
Hashimi, R. M.
Levin, S. L.
Meisel, J. B.

Assistant Professor:

Edmonds, R. G.

Instructor:

Jaillett, M.

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 their 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 housewife'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. The student's program is planned 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 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; and in labor unions — as well as in junior and senior 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 the SIUE program 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 Ph.D. programs at prestigious universities.

Degree Requirements

Bachelor of Science, Bachelor of Arts Degrees, Economics

General Studies Requirements	60
Requirements for Major in Economics[1]	48
GSM 144, 244	(9)
Economics 201, 202, 321, 401, 402	20
Economics Electives	28

[1]GSS 150 does not count toward completion of the requirements for a major in economics.

Minor	28
(The minor must be approved by the student's adviser.)	
Electives	56
	192

The Bachelor of Arts degree program is identical to the Bachelor of Science degree program except that the student is required to study a foreign language. Thus the language requirement of 12 hours reduces the elective hours by 12. Students in all programs are required to maintain a 3.0 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 201, 202, 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.
Kircher, H. B. (Chairperson)
Koepke, R. L.
Lossau, C. S.
Miller, H. W.

Associate Professors:
Clements, D. W.
Lampe, F. A.
Marlow, L. D.
Mendelson, R. E.
Strohmeyer, D. K.
Thompson, N. R.
Thornton, C. A.
Yarbrough, R. E.

Assistant Professors:
Bagchi, D. M.
Johnsen, N. C.

Visiting Lecturer:
Wallace, D. L.

The Department of Earth Science, Geography and Planning offers the Bachelor of Science and the Bachelor of Arts in Geography and the Bachelor of Science in Earth Science. Majors in the teaching fields of geography and earth science lead to the Bachelor of Science degree offered in the School of Education.

Geography. Geography is concerned with the earth as the home of humankind with a particular emphasis on understanding why human activities are located where they are and how these human activities are interrelated with the natural environment. Geography is an ancient discipline reflecting humankind's curiosity about people and places but is also a new, very practical applied discipline which can offer expert advice on such questions as where new housing developments, airports, power plants, schools, highways, or fast food restaurants should be located.

Geography is a broad field which 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.

A broad background in other fields is of great importance to a geographer. Thus, it is recommended that geography students use their elective hours to take work in other areas. 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 that are related to such areas of interest.

Geography students are strongly urged to take work in quantitative methods. A minimum of high school algebra is also recommended. GSM 110, 111, 210, 212, 213 and GSS 240 and 245 are recommended General Studies 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 be applied to such matters as the best location for wells and mines, the age and significance of fossils, mine subsidence, and prediction of earthquakes.

Personal qualifications for earth scientists include a liking for the outdoors, interest in travel, an ability to adapt to many and changing conditions (some not so physically comfortable), an ability to notice details and recognize their significance, a liking 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 consider taking elective courses in geology, botany, zoology, chemistry, 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. The specific type

of job will depend, of course, upon the particular area in the field the student has chosen to emphasize as well as the supporting area or minor. Geography majors have found employment in such diverse 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. At the present time the greatest employment opportunity is in cartography with jobs available in various private and government mapping agencies. Students interested in urban and regional planning will find that the geography program provides a solid base for pursuing advanced planning degrees.

The programs leading to a Bachelor of Science degree in the School of Education provide preparation to teach geography or earth science in the junior high or secondary schools. With additional graduate work one could also teach in a junior or 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 in 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.

Degree Requirements

Bachelor of Arts, Bachelor of Science Degrees, Geography

General Studies Requirements	60
Foreign Language Requirement	12
Requirements for Major in Geography[1]	48
Core Requirements: 302, 303 or 307, 304, 306, 308, 310a, 410a and one regional course (substitutions require consent of geography adviser)	32
Geography electives	16
Electives	72
	192

The requirements for the Bachelor of Science degree are the same as for the Bachelor of Arts degree except that no foreign language is required and the elective hours are inceased by 12.

Bachelor of Science Degree, Earth Science

General Studies Requirements	60
Requirements for Major in Earth Science[1]	52
Core requirements: 215a, 215b, 303, 325, 400, 401, 403a, b, or c, 410a, and 441 or 442	36
Earth Science electives	16
Electives	80
	192

[1]An overall 3.0 average must be achieved in major courses.

Bachelor of Science Degree in Geography or Earth 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 geography or earth science. This major constitutes the teaching field specialization for the education degree. For those degrees a minor is required. A 36-hour major is acceptable with two teaching minors.

For the earth science major, the student must take Earth Science 444, Teaching of Earth Science, and is urged to take a minor in such fields as biology, chemistry, computer science, physics, mathematics, or environmental studies. For the geography major, 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 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.

Minor in Environmental Science Requirements

The minor in environmental science consists of 30 hours from the following: 12 hours of Core Curriculum courses GSM 221, 250, Geography 424; and 18 hours of electives of which at least two courses must be taken from each group of electives.

Group I: Urban Environment and Conservation

GSM 212
GSS 245
Geography 402a, b, or c
Geography 404a, 412-2, 471a, 475-5.

Group II: Science and Engineering

GSM 131-2, 234, 300
Biology 303a
Chemistry 110
Physics 206, 211, 212
Science and Engineering 101c, 330.

GOVERNMENT

Professors:

Glaser, K.
Hsiao, G. T.
Kerr, J. R.
Lovell, S. D.
Stahnke, A. A.
Teters, B. J. (Vice President and Provost)

Associate Professors:

Feeney, W. R.
Jacobitti, S. D. (Dean, School of Social Sciences)
McCabe, D. F. (Chairperson)
Quinn, M. A.

Schwartz, D. F.
Westefield, L. P.

Assistant Professors:
Donnelly, B. E.
Farrell, J. V.
Paulsmeyer, D. L.

The Department of Government and Public Affairs offers courses in the discipline of political science, which is broadly concerned with the study of government and politics. These courses are organized into six specialized fields. In American politics students examine various aspects of the American political system. Included are such subjects as legislatures, executives, parties, campaigns and elections, and issues of public policy. In comparative politics attention is given to the political, legal, and administrative processes of other countries. International relations is concerned with the relations among nations and with such international bodies as the United Nations. Political theory is concerned with the attempts of important thinkers to define the functions of the state and the rights and obligations of citizens as well as analysis and with efforts to develop comprehensive theories of politics through the evaluation of political behavior. Public administration deals with the ways in which the bureaucracy conducts the public's business. Courses in public law examine the nature of the judicial process and the role of the courts in interpreting and applying the Constitution of the United States.

There are a number of reasons for studying government. The offerings of the Department can be useful 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 Government. Students should, however, consult the Department's undergraduate adviser as soon as possible after declaring a major. The adviser will provide them with initial orientation to the Department's programs and for detailed advisement will guide them to a faculty member who shares their interests. There are two pre-law advisers for those students contemplating law school upon graduation. These advisers will aid students in preparing a course of study and can provide useful information about law school admission. Faculty members who are part of the Department's Master of Public Administration program can provide course work, information, and guidance for undergraduates planning a career in the 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. Also available here are the Department's microcomputer and computer terminals which give students access to the large computer system of the Educational Computing Network.

Career Opportunities

Students who major in government have typically gone into careers in business, in 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 the demand for government employees, for lawyers, and for college graduates interested in careers in business will continue at something close to the present levels. For students seeking careers in government, a major in political science provides knowledge of political and bureaucratic processes, analytical skills, and 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 the practice of law. In all of these areas the experience gained in an internship can be a significant advantage. Opportunities for employment in teaching and journalism are likely to 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 government 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. And they will have numerous chances to hone a crucial skill — the ability to write clearly and forcefully. These are all abilities which make students more attractive as potential employees.

Degree Requirements

Bachelor of Arts, Bachelor of Science Degrees, Government

Requirements for Major in Government 48

A minimum of 48 hours including 200 and 203, 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.

General Studies Requirements 60
Foreign Language Requirement 12

Minor	28
Electives	44
	192

Requirements for the Bachelor of Science degree are the same as for the Bachelor of Arts degree except that a foreign language is not required, and the elective hours are thus increased by 12. For both degrees a minimum grade-point average of 3.0 is required in major courses.

Bachelor of Science Degree, Government, 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 government. This major constitutes the teaching field specialization for the education degree. The requirements for this major total 48 or 36 hours in government depending on whether the student has one minor or two. They must include 200 and 203, and at least 4 hours (but no more than 20 hours) must be taken in four of the six areas of specialization listed above. See Secondary Education requirements.

Minor Requirements

A minor is 28 hours and must include 200 and 203 and at least one course in three of the six areas of specialization. A minimum grade-point average of 3.0 is required in minor courses.

HISTORY

Professors:

Astour, M. C.
Beard, E. S.
Erickson, R. F.
Gallaher, J. G.
Haas, J. M.
Kimball, S. B.
McCurry, A. J.
Millett, R. L.
Nordhauser, N. E.
Pearson, S. C. (Chairperson)
Riddleberger, P. W.
Weingartner, J. J.
Weiss, S. L.

Associate Professors:

Chen, C-C.
Grant, S. B.
Jacobitti, E. E.
Santoni, W. D.
Steckling, R. A.
Taylor, J. A.

Assistant Professors:

Branz, N. R.
Nore, E. N.

Instructor:

Carlson, S. J.

Adjunct Assistant Professor:

Wilton, D. W.

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; and 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 closely akin to the methods of literary criticism.

By studying the past, historians come to better understand 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 can and does prepare persons for meaningful participation in the families, communities, nations, and world of today.

Students who intend to study for the Bachelor of Arts or Bachelor of Science degree with a teaching major in history should arrange for an interview with the undergraduate adviser in history at the time of declaration of major. The Bachelor of Arts degree is recommended for students who plan to pursue careers in history or related academic fields. The Bachelor of Science degree is recommended for students planning careers in other areas, and the Bachelor of Science degree with a teaching major in history is designed particularly for students planning to teach at the secondary level. The honors program for the Bachelor of Arts degree is particularly recommended for students who plan graduate study in history. Application for admission to the honors program should be made to the history adviser.

Career Opportunities

Traditionally, many students of history have become teachers; and some graduates are still finding positions as classroom instructors though there is now only limited demand in this area. Other history majors have found positions as archivists or in government service. Some have coupled their history program with library science courses and found positions in university and public libraries. Many law students hold undergraduate history degrees, and history together with foreign language can be a very useful study in preparation for employment in international corporations. A few able historians have tradi-

tionally found employment in journalism, editing, and research.

Degree Requirements

Bachelor of Arts, Bachelor of Science Degrees, History

General Studies Requirements	60
Requirements for Major in History	52
Four courses (at least one in U.S. History) from GSS 101, 102, 103, 105, 200, 201, 202, History 100	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
Foreign Language Requirement	12
Minor	27
Electives	41
	192

The Bachelor of Arts degree (Honors Program) is identical to the above program except that the student 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 the student is not required to study a foreign language. Thus the language requirement is eliminated, and the elective hours are increased by 12. Students in all programs are required to maintain a 3.0 grade-point average in history.

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 GSS 101, 102, 103, 105, 200, 201, 202, History 100. In addition, five history courses numbered between 301-499 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 those students who are interested in a multidisciplinary understanding of the lands and peoples of Latin America. It consists of 24-26 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; two courses chosen from among these: Economics 422, Geography 467a, Geography 467b, Anthropology 307.

SOCIOLOGY

Professors:

Blain, R. R.
Campbell, R. B.
Crowther, B. I.
Henslin, J. M.
Lauer, R. H.
Shaw, K. A. (Chancellor)

Associate Professors:

Altes, J. A.
Barlow, H. D.
Handel, W. H.
Riley, L. E. (Chairperson)

Assistant Professor:

Farley, J. E.

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, in turn, 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 special, 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 in the general characteristics of all social behavior, however, can involve the study of particular institutions such as the family, education, religion, the economy, health care and legal institutions, to mention just a few. For this reason, students majoring in other fields often find specific sociology courses to be useful and specifically relevant for their studies.

Career Opportunities

Persons with an undergraduate degree in sociology find employment in a variety of jobs. Government agencies and business firms often are interested in obtaining the services of well-educated people without regard to their areas of specialized study. Such employers believe that a good general education makes an excellent foundation for the 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 level sometimes

employ persons with undergraduate degrees in sociology. 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, Bachelor of Arts Degrees, Sociology

General Studies Requirements	60
Requirements for Major in Sociology	48
GSS 130	4
Sociology 310, 312, 321, 430, 456	20
Sociology electives	24
Minor	28
Electives	56
	192

The Bachelor of Arts degree requires 12 hours in foreign language in addition to the other requirements.

The Bachelor of Science and Bachelor of Arts degrees in sociology require 48 hours of course work including GSS 130, Sociology 310, 312, 321, 430, and 456. The Bachelor of Arts degree in sociology requires 12 hours of a foreign language in addition to the above courses. Social work courses do not count toward a sociology major or minor. Sociology majors must have a grade-point average of 3.0 in sociology courses and their minor courses.

SOCIAL WORK

Associate Professors:
Cingolani, J.
Swaine, R. L.

Assistant Professors:
Spencer, D. M.
Smith, M. C.

The undergraduate social work program, which is 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 the student for beginning practice or entry into graduate social work education. Although the program emphasis is generalist, the opportunity to explore specific interests is available in the selection of electives and the field placement setting.

Social work is a profession which is 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, as well as promoting positive change in social conditions, and serving as an advocate for individuals and groups which are disadvantaged or discriminated against.

Professional social work practice consists of the application of knowledge from the social and behavioral sciences, professional values and ethics, and mastery of the skills of working with people to facilitate change.

In addition to classroom courses, the student spends a minimum of three hundred hours in a social work practice setting. This course is 482 and gives 12 credit hours. It may be taken in one quarter or over a two-quarter period. The practicum is an individualized and closely supervised learning experience that 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 the student's needs and interests within the context of the educational objectives of the program.

ADMISSIONS

It is the intent of the recruitment and admissions procedures 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 a professional value set and the ability to relate well to people in a variety of situations. Much of this can be taught in a formal setting, but the personal characteristics of the student 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 program faculty assumes responsibility to the profession, students, and the consumers of social services to promote entrance to the program of those with potential for effective professional practice. Early screening enables the faculty to identify students for whom this career choice is extremely unwise before excessive time is invested 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 while in the program.

ADMISSIONS REQUIREMENTS AND CRITERIA

1. Completion of at least 30 quarter hours of college work with an overall GPA of at least 3.0.

2. Completion of 200 and 282 with grades of C or better. (282 can be waived by the adviser for those with

equivalent prior work or volunteer experience in social services.)

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 the student's performance in social work courses; interviews with the adviser, the Admissions Committee or other faculty; and information from the field experience in 282 (or its equivalent, if waived). Other information may also be considered with the informed consent of the student.

Students who plan to enter the program should arrange to meet with the social work adviser as early in their academic career as possible. It is important that students become familiar with the sequencing 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 V.A.

Degree Requirements

Bachelor of Science Degree, Social Work

General Studies Requirements (GSS 150 required)	60
Professional Requirements	62
Social Work 200, 282, 375, 381, 383, 385a, 385b, 475, 480, 481, 482, 490	54
Sociology 310, 312	8
Supporting Requirements	32
Anthropology 411	
Economics 327 (GSS 150 required prerequisite)	
Government 203, 342	
Psychology 305 and one of the following: 301, 303, 304 Sociology 300, 304	
Electives	38
	192

COURSES

ANTHROPOLOGY

301—4 LANGUAGE AND CULTURE. An introduction to relationships between language and culture. An examination of the development of language and culture as human characteristics, a consideration of diversity and universals in language and culture, and an introduction to sociolinguistics and the ethnography of communication. Prerequisite: introductory anthropology course or consent of instructor.

305—8 (4,4) PEOPLES AND CULTURES OF THE WORLD I. (a) North America. The historical background for indigenous people in the New World, the development and ethnography of North American cultural areas and the cultural area as a tool of modern anthropology, and examination of current political and social problems among American Indians. (b) Asia. Geography, history, cultural and social organization of peoples of Asia, with special emphasis on South Asia.

307—4 PEOPLES AND CULTURES OF LATIN AMERICA AND THE CARIBBEAN. Social and cultural aspects of contemporary Mexico, Central America, South America, and the Caribbean viewed in their historical and environmental contexts.

311—4 CULTURE OF BLACK AMERICANS. An anthropological study of the shaping influences and present content and orientation of the unique cultural contributions of black Americans; black institutions, in particular, the family and religion, and political movements in the context of American culture. Prerequisite: consent of instructor.

325—4 ARCHAEOLOGICAL METHOD AND THEORY. A general overview of current method and theory in American archaeology. A review of major historical development in both Old and New World archaeology and an introduction to basic archaeological methods in dating, soil analysis, archaeological survey and excavation, archaeo-mineralogy, archaeo-zoology, and archaeo-botany. The theoretical portion deals with various approaches to the analysis of archaeological materials, the nature of archaeological data, sampling, settlement pattern studies, typology, systems theory, ethnoarchaeology and sociocultural evolution. A final portion is concerned with recent developments in the area of cultural resource management.

330—4 ARCHAEOLOGY OF NORTH AMERICA. An introduction to the methods of archaeology and a survey of prehistoric Indian culture north of Mexico, with particular emphasis on the cultures of the Mississippi Valley.

367—4 GROWTH OF NEW WORLD CIVILIZATION. Beginnings and rise of culture-centers in the New World, with attention to Mexico, Yucatan, and Andean developments; ecological and cultural factors conditioning the rise of regional and interregional cultural manifestations.

375—16 (4-8,4-8) INTRODUCTION TO FIELD METHODS. An introduction to field methods in anthropology. (a) Archaeological Field Methods including site survey and evaluation techniques, excavation and data recording, lab methods and interpretation. (b) Ethnological Field Methods in cross-cultural settings, controlled field sites, rural and urban areas; independent and/or group research—personalized staff supervision. Each segment carries 4-8 quarter hours credit. Prerequisite: GSS 210 or consent of instructor.

400—4 CULTURAL ANTHROPOLOGY. Nature of culture and theoretical approaches to studying it. Introduction to fieldwork

and discussion of some of the basic institutions of culture, including language, economics, kinship, and religion.

401—4 ANTHROPOLOGICAL LINGUISTICS. (See English 400.) A survey of linguistic concepts and theories. Recommended for anthropology students, linguistic students, and those preparing to teach English.

404—4 ANTHROPOLOGY AND THE ARTS. Anthropological approach to the arts. Consideration of the origins of art and evidence for art in early human history. Introduction to the graphic and plastic arts, and ethnomusicology, choreology, and folklore among selected non-Western cultures.

405—4 KINSHIP AND KIN GROUPS. A comparative approach to the basic organization of small societies. Functional aspects and distributions of kinship and kin groups.

407—4 PRIMATOLOGY. Introduction to various aspects of primate evolution, behavior (ethology), physiology and ecology. Special consideration to development of locomotion and other motor skills, evolution of the brain, and recent developments in understanding of primate communication and associated cognitive processes. Prerequisite: GSS 210.

408—4 HISTORY OF ANTHROPOLOGICAL THOUGHT. The beginnings of anthropology in the eighteenth century and its development as a discipline; important shifts in theory, method, and problem definition; evolution, structure, and configuration in anthropological thought. Prerequisite: junior standing or consent of instructor.

409—4 APPLIED ANTHROPOLOGY. The applications of anthropological principles to the solution of problems of the modern world. Contributions of anthropology to the work of the educator, social worker, administrator, business person, government official, and other specialists dealing with people in Western and non-Western cultures.

410—4 ANTHROPOLOGICAL PERSPECTIVES ON RELIGION. An anthropological approach to the study of primitive religion, with emphasis on religion as one aspect of culture. Historical and contemporary perspectives, and various religious expressions from selected ethnographic areas. Prerequisite: GSS 210 or consent of instructor.

411—4 URBAN ANTHROPOLOGY. An anthropological approach to urban society, with an emphasis on study of ethnic communities and the effects of industrialization and social complexity on modern humans and their cultures. Prerequisite: GSS 210 or consent of instructor.

415—8 (4,4) DANCE ANTHROPOLOGY. (Same as Theater 415.) (a) Methods of research used in documenting and analyzing the total complex of dances in Haiti. A study of the various dances in Haiti relative to their form, function, and basic cultural interpretations. Community research and the methodology of extracting information concerning dance, music, and cult religions. (b) Research methodology as it pertains to West Africa and the psycho-pathological implications of ceremonial healing. A study of choreography. Prerequisite: consent of instructor.

416—4 CULTURE CHANGE. Examination of long and short range culture change, acculturation process and innovation, theory and method in study of culture change.

420—4 MUSEUM TECHNOLOGY (MUSEOLOGY). An understanding of museums as a particular kind of institution that has evolved within the framework of Western European cultural and political history. Concentration on dynamics of museum history and shifting roles, functions, philosophies and continuing education of museums. Practical experience in developing and constructing exhibits. Prerequisite: consent of instructor.

424—4 CULTURE AND PERSONALITY. A cross-cultural comparison and survey of personality in relation to cultural differences found in the "folk societies" with emphasis on the socialization and enculturation of the child; group variants in personality and measurement of their cultural correlates. Prerequisite: junior standing or consent of instructor.

426—4 THE FAMILY IN CROSS-CULTURAL PERSPECTIVES. Family systems of the world, with a concentration on Asian, American Indian, and black family types. Alternative ways of organizing family relationships and how they articulate with economic and political systems within a society. The family as enculturating agent and as a unit in which age, sex, and kinship roles are structured and integrated within the total society. Prerequisite: GSS 210 or consent of instructor.

432a—4 ARCHAEOLOGY OF THE MIDWEST. A survey of prehistoric cultural developments in the Mississippi River drainage, with emphasis on events leading to the climax of the Mississippian culture at Cahokia; contributions to archaeological theory; field trips to local archaeological sites. Prerequisite: 300 or consent of instructor.

432b—4 SOUTHWESTERN ARCHAEOLOGY. A survey of prehistoric-historic cultural developments in the southwestern United States with emphasis on Pueblo culture. Consideration to Mogollon and Hohokam cultures, the Mesoamerican base, theory, and the use of analogy in archaeological reasoning. Prerequisite: 330 or consent of instructor.

442—4 HUMAN ECOLOGY. (Same as Environmental Studies 442.) Systematic consideration of human-habitat relationships, especially concerned with cultural adaptations. Problems related to environmental change, migration, and population growth, technological and institutional changes; attitudes toward change and perception by people of problems involved in modifying their traditional habits and values. Prerequisite: sophomore standing or consent of instructor.

452—4 POLITICAL ANTHROPOLOGY. Cross-cultural comparison of political systems with emphasis on non-European peoples: functional relations between politics and society; the growth of political complexity; and systems of authority and leadership. Prerequisites: junior standing, consent of instructor.

470—4 to 12 SPECIAL TOPICS IN ANTHROPOLOGY. Focus on a limited subject area on the frontiers of anthropology. Investigation of significant problems and issues which are not treated in other course offerings. Content varies with each offering and is announced in advance. Prerequisite: GSS 210 or consent of instructor.

475—8 (4,4) ADVANCED FIELD METHODS. Advanced field methods in anthropology: (a) advanced archaeological field

methods with emphasis on new techniques for recovery of information; (b) advanced ethnological field methods; field sites vary according to instructor—American Indian reservations, rural communities, and urban settings. Undergraduates limited to no more than 16 hours of field experience (375 and/or 475). Prerequisite: 375a or 375b, respectively; or consent of instructor.

482—4 INDIANS OF THE PLAINS: PREHISTORY, ETHNOHISTORY, AND CULTURE. An advanced introduction to dynamic changes which produced the Plains Indian Culture-Area, including the acculturative history of Plains Indians after contact with Europeans. Prehistoric antecedents of the historic tribes; basic features of Plains Indian culture, with subareal variations; and ethnohistory and acculturation in the wake of the advancing frontier. Prerequisite: junior standing or consent of instructor.

483—1 to 8 INDIVIDUAL STUDY IN ANTHROPOLOGY. Guided research on anthropological problems. Consult department chairperson before enrolling.

EARTH SCIENCE

215a—4 MINERALOGY AND CRYSTALLOGRAPHY. An introduction to the occurrence of important and common minerals, their descriptions, properties and identification. The crystalline state of minerals including morphology, habit, and crystal chemistry. Prerequisite: GSM 111 or Chemistry 105.

215b—4 PETROLOGY. The natural history of rocks. Geological, physical, and chemical factors governing their origin and occurrence. Description and identification of common types. One weekend and one Saturday field trip required. Prerequisite: 215a.

302—4 INTRODUCTION TO PHYSICAL GEOGRAPHY. A study of the earth's physical surface, world distribution patterns of the physical elements, their relationships to each other, and their importance to man. Field trip and laboratory work. Prerequisite: GSM 111.

303—4 METEOROLOGY. An introduction to weather elements, condensation process, air masses, cyclonic activity, and weather movements. Prerequisite: GSM 110.

307—4 CLIMATE. A study of the major climates of the world with special emphasis on the climates of the United States. Prerequisite: GSM 110.

308—4 INTRODUCTION TO GEOGRAPHIC METHODS. Designed to introduce the geographic methods of integrating physical, economic, and cultural elements in the study of areas. Cartographic and quantitative techniques utilized.

310—8 (4,4) INTRODUCTION TO CARTOGRAPHIC METHODS. Properties of maps and air photos, their uses and sources; map symbols, map projections, and map construction. Introduction to the use of quantitative techniques as applied in geographic study. Laboratory. Must be taken in sequence.

325—4 STRUCTURAL GEOLOGY. Architecture of the earth, especially its crust and the rock bodies within it. Global plate tectonics. Mechanics of rock deformation. Mapping and measurement of rock structures. One weekend field trip or field project required. Prerequisite: 215a.

400—4 THE EARTH IN SPACE. Planetary and stellar composition and structure; energy sources and arrangements of the universe as to position, size, dimensions, age, origin, and evolution. Prerequisite: GSM 110.

401—4 THE HISTORY OF THE EARTH. Methods and problems of interpreting geologic history. Physical history of continents (emphasis on North America); in terms of rocks, orogenies, and history of development and evolution of organisms and their adaptation to various environments.

402a—4 SOILS. Designed to introduce surficial material from the viewpoint of the soil scientist and geologist. Examination of soil properties in the field. Study of the soil taxonomic classification system. Prerequisite: GSM 111 or consent of instructor.

402b—4 AIR MASS CLIMATE. A special topics course which emphasizes site (micro) climatology and meterology. Application of air pollution problem areas and solar heating are stressed. Prerequisite: 303.

402c—4 WATER. The hydrologic cycle, major stream systems, hydrologic aspects, and the uses of water resources and their relationship to quality and future supplies. Prerequisite: junior status.

403a—4 PRINCIPLES OF GEOMORPHOLOGY. Processes and structures influencing the shape of the land surface. Prerequisite: GSM 111.

403b—4 REGIONAL GEOMORPHOLOGY OF THE EASTERN UNITED STATES. Description, origin, and geomorphic history of the natural landform regions of the United States from interior lowlands east. Prerequisite: 403a or 325 or consent of instructor.

403c—4 REGIONAL GEOMORPHOLOGY OF THE WESTERN UNITED STATES. Description, origin, and geomorphic history of the natural landform regions of the United States from the Great Plains west. Prerequisite: 403a or 325 or consent of instructor.

410a—4 QUANTITATIVE METHODS. (Same as Geography 410a and Planning 410a.) Statistical techniques and introduction to computer programming with stress on the spatial element of measurement. Topics are selected from descriptive, correlation and inferential analyses and parametric and non-parametric tests of reliability. Computer skills include introduction to Fortran computer language, SPSS package programs, and interactive terminals.

410b—4 REMOTE SENSING OF THE ENVIRONMENT. (Same as Geography 410b and Planning 410b.) Introduces the physical phenomena involved in identifying objects at a distance. Numerous applications of remote sensing are discussed including those relevant to: agriculture, geology, forestry, urban planning and meteorology. Sensing types of particular interests are: landstat imagery high altitude infrared photographs and radar imagery. Lecture and lab format is employed.

412—2 (1,1) CONSERVATION OF ILLINOIS. Such problems as water, land use, air, mineral use, recreation and waste disposal.

416a—4 STATISTICAL MAPPING. (Same as Geography 416a.) This course focuses on cartographic analysis of problems related to data conversion into quantitative symbology, effective map design, and map drafting. Prerequisite: 310a.

416b—4 COMPUTER MAPPING. (Same as Geography 416b.) This course utilizes the computer's capability to produce maps. Emphasis is placed on interactive computer systems to produce the design and patterns necessary to complement, or in some cases, replace traditional cartography in representing geographical features. Prerequisite: 310a.

417—4 AIR PHOTO INTERPRETATION. Techniques in the use of air photos as source material for research in the physical and social sciences. Laboratory. Prerequisite: 310a.

424—4 REGIONAL PROBLEMS IN CONSERVATION. The distribution, use, and interrelationship of the resources of the U.S. and the conservation techniques applied to them. Field study of selected cases.

441—4 PALEONTOLOGY. The study of fossil invertebrates from the standpoint of evolution and taxonomy. Study and identification of specimens is stressed. Prerequisite: GSM 210.

442—4 PRINCIPLES OF STRATIGRAPHY. The study of sedimentary rocks, their classification, environments of deposition, and the rules and practice of stratigraphy. Prerequisite: GSM 111.

444—4 TEACHING OF EARTH SCIENCES. (Same as Secondary Education 444.) The objectives of earth science education with emphasis on methods, skills, and techniques of instruction in lectures and laboratories. Prerequisite: junior standing.

450—3 to 15 TRAVEL STUDY COURSE. Enrichment through travel, supervised study, and reading on areas visited. May be repeated for a total of 15 hours.

471—8 (4,4) REGIONAL ENVIRONMENTAL PLANNING. (a) Regional planning, (b) Location of urban and regional economic activity.

475—4 to 8 FIELD STUDY OF ENVIRONMENTAL PROBLEMS. Field investigation of the environment and problems relating to man's use of the natural resources and environment. Prerequisite: advanced standing. May be repeated for a total of 8 hours.

490—1 to 4 (8 total) TUTORIAL IN EARTH SCIENCE. Individual and small group conferences with staff members to examine earth science concepts.

GEOGRAPHY

215a—4 MINERALOGY AND CRYSTALLOGRAPHY. (Same as Earth Science 215a.)

215b—4 PETROLOGY. (Same as Earth Science 215b.)

302—4 INTRODUCTION TO PHYSICAL GEOGRAPHY. (Same as Earth Science 302.)

303—4 METEOROLOGY. (Same as Earth Science 303.)

304—4 INTRODUCTION TO ECONOMIC GEOGRAPHY. Study of the spatial distribution and interaction of economic activities. Introduction to locational theory.

306—4 INTRODUCTION TO CULTURAL GEOGRAPHY. An overview of the geographic viewpoint in the study of the human occupance of the earth. Aspects of population, settlement, and political geography, and a generalized survey of major world culture areas.

307—4 CLIMATE. (Same as Earth Science 307.)

308—4 INTRODUCTION TO GEOGRAPHIC METHODS. (Same as Earth Science 308.)

310—8 (4,4) INTRODUCTION TO CARTOGRAPHIC METHODS. (Same as Earth Science 310.)

325—4 STRUCTURAL GEOLOGY. (Same as Earth Science 325.)

400—4 THE EARTH IN SPACE. (Same as Earth Science 400.)

401—4 THE HISTORY OF THE EARTH. (Same as Earth Science 401.)

402—12 (4,4,4) PHYSICAL GEOGRAPHY. (Same as Earth Science 402a, b, c.)

403a—4 PRINCIPLES OF GEOMORPHOLOGY. (Same as Earth Science 403a.)

403b—4 REGIONAL GEOMORPHOLOGY OF THE EASTERN UNITED STATES. (Same as Earth Science 403b.)

403c—4 REGIONAL GEOMORPHOLOGY OF THE WESTERN UNITED STATES. (Same as Earth Science 403c.)

404—12 (4,4,4) URBAN GEOGRAPHY AND ECOLOGY. (a) Urban geography and ecology. (b) Industrial location. (c) Resource base.

405—8 (4,4) LOCATION OF ECONOMIC ACTIVITIES II. (a) Area development. (b) Transportation.

406—8 (4,4) POPULATION GEOGRAPHY. (a) World population patterns. (b) Problems in population geography. Prerequisite: 306.

407—8 (4,4) CULTURAL GEOGRAPHY. (a) Historical geography. (b) Settlement geography. Prerequisite: 306.

410a—4 QUANTITATIVE METHODS. (Same as Earth Science 410a and Planning 410a.)

410b—4 REMOTE SENSING OF THE ENVIRONMENT. (Same as Earth Science 410b and Planning 410b.)

412—2 (1,1) ILLINOIS CONSERVATION PROBLEMS. (Same as Earth Science 412.)

416a—4 STATISTICAL MAPPING. (Same as Earth Science 416a.)

416b—4 COMPUTER MAPPING. (Same as Earth Science 416b.)

417—4 AIR PHOTO INTERPRETATION. (Same as Earth Science 417.)

424—4 REGIONAL PROBLEMS IN CONSERVATION. (Same as Earth Science 424.)

441—4 PALEONTOLOGY. (Same as Earth Science 441.)

442—4 PRINCIPLES OF STRATIGRAPHY. (Same as Earth Science 442.)

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.

444—4 TEACHING OF EARTH SCIENCES. (Same as Earth Science 444. See also Secondary Education 444.)

450—3 to 15 TRAVEL STUDY COURSE. (Same as Earth Science 450.)

461—8 (4,4) GEOGRAPHY OF ANGLO-AMERICA. (a) Anglo America—Tropical. Physical, cultural, and economic coverage. (b) Anglo America-Regional. Treatment of specific areas.

462—8 (4,4) GEOGRAPHY OF EUROPE. (a) Topical. Physical, cultural, and economic coverage. (b) Europe-Regional. Treatment of specific areas.

463—7 (4,3) REGIONAL GEOGRAPHY OF MEDITERRANEAN LANDS AND SOUTHWESTERN ASIA. (See Geography 462.)

464—7 (4,3) REGIONAL GEOGRAPHY OF SOVIET WORLD. (See Geography 462.)

465—7 (4,3) REGIONAL GEOGRAPHY OF AFRICA. (See Geography 462.)

466—4 (4,3) REGIONAL GEOGRAPHY OF ASIA. (See Geography 462.)

467—8 (4,4) GEOGRAPHY OF LATIN AMERICA. (a) South America. Physical, cultural, and economic coverage. (b) Middle America and Caribbean. Physical, cultural, and economic treatment.

470—20 (4,4,4,4,4) URBAN PLANNING. (a) History of planning, (b) planning and politics, (c) planning and housing, (d) planning problems, (e) planning seminar.

471—8 (4,4) REGIONAL ENVIRONMENTAL PLANNING. (Same as Earth Science 471.)

472—2 to 12 PLANNING INTERNSHIP. Work experiences 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.

475—4 to 8 FIELD STUDY OF ENVIRONMENTAL PROBLEMS. (Same as Earth Science 475.)

480—4 WORKSHOP IN THE TEACHING OF GEOGRAPHY. The 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.

490—1 to 4 (8 total) TUTORIAL IN GEOGRAPHY. Individual and small group conferences with staff members to examine geographic concepts.

GOVERNMENT

200—4 INTRODUCTION TO POLITICAL SCIENCE. A general introduction to the study of politics with emphasis on contemporary theories for ordering political systems, the institutions of government and their processes, and the social roots of political behavior.

203—4 AMERICAN NATIONAL GOVERNMENT AND POLITICS. A study of the theory, organization, and operation of American national government and its social context. Meets State Constitution requirements.

310—4 INTRODUCTORY SOCIAL STATISTICS. An introduction to descriptive and inferential statistics. Among the topics covered are: frequency distributions and their graphic representations, the normal curve, measure of central tendency and dispersion, measures of association, the tabular presentation of multivariate data, probability, estimation and hypothesis testing.

320—4 INTRODUCTION TO PUBLIC ADMINISTRATION. A study of principles and problems of administrative organization and co-ordination, personnel and fiscal management, regulatory administration, and public responsibilities of administrative agencies. Prerequisite: 203.

321—1 to 6 READINGS IN GOVERNMENT. Prerequisite: consent of instructor.

330—4 ILLINOIS GOVERNMENT. The development and functioning of government in Illinois.

340—12 (4,4,4) AMERICAN POLITICAL INSTITUTIONS. (a) The American Chief Executive. A review of the legal, political, and administrative responsibilities of the chief executive in national, state, and local political units in the United States, with emphasis on the national level. (b) The American Legislative Process. An investigation of the legislative organization and processes in Congress and state legislatures. (c) The American Judicial System. A survey of the nature, purposes, and limitations of law as administered and interpreted by courts. The development, organization, and operation of the American judicial system with emphasis on the federal level. Prerequisite: 203.

342—4 ISSUES IN AMERICAN PUBLIC POLICY. A study of domestic public policy in the United States. Major emphasis on the substantive results produced. Such policy areas as poverty, civil rights, education, the regulation of business, labor and agriculture.

343—4 AMERICAN STATE GOVERNMENTS. An examina-

tion of the role of the states in the federal system and a survey of the governmental processes within the fifty states. Prerequisite: 203.

344—4 LOCAL GOVERNMENT IN THE UNITED STATES. A survey of the structure, functions, and problems of the counties, municipalities, towns, townships, and special districts in the United States. Prerequisite: 203.

345—8 (4,4) AMERICAN POLITICAL PARTIES AND INTEREST GROUPS. (a) A study of the historical development of American political parties. (b) An analysis of contemporary American political parties and interest groups. Prerequisite: 203.

350—8 (4,4) THE POLITICAL SYSTEMS OF MAJOR EUROPEAN STATES. (a) A comparative study of British and German political systems. (c) An examination of the organization and operation of the Soviet political system. Prerequisite: 200.

355—8 (4,4) POLITICAL SYSTEMS OF MAJOR NON-EUROPEAN STATES. (a) Latin America. An examination of the political systems of the five representative states: Mexico, Brazil, Ecuador, Cuba, and Uruguay. (b) Asia. An analysis of four major political systems: China, Japan, India, and Indonesia. Prerequisite: 200.

370—4 INTRODUCTION TO INTERNATIONAL RELATIONS. The nation-state system, diplomatic practice, problems of national interest, power, ideology, and conflict; strategy and instruments of foreign policy. Prerequisite: 203.

385—4 INTRODUCTION TO POLITICAL THEORY. An introduction to the basic concepts and topics of political theory. Prerequisite: 200.

386—4 AMERICAN POLITICAL IDEAS AND THEIR ORIGINS. Examination of eighteenth and nineteenth century sources of the contemporary American political ideas. The American Revolution, the Constitution, age of Jackson, the Civil War, and the industrial and westward expansion; readings include works by Jefferson, Madison, Calhoun, Lincoln, DeTocqueville, as well as Supreme Court decisions and political speeches.

410—4 INTERMEDIATE SOCIAL STATISTICS. (Same as Sociology 410.) Descriptive and inferential statistical techniques with computer applications. Basic algebra recommended. Proficiency examination available. Prerequisite: 310, its equivalent, or consent of instructor.

411—4 ADVANCED SOCIAL STATISTICS. (Same as Sociology 411.) Intermediate and advanced statistics, focusing on multivariate techniques such as factor analysis, analysis of covariance, multiple regression, path analysis, and models. Prerequisite: 410 or consent of instructor.

421—4 PUBLIC PERSONNEL ADMINISTRATION. An analysis of problems of recruiting, retaining, and developing public service employees and related topics such as political neutrality, motivation, security, and manpower planning. Prerequisite: 320.

422—4 PUBLIC FINANCIAL ADMINISTRATION. A survey of the problems encountered in the administration of public financial resources, including budgeting, accounting, auditing, and fiscal and monetary policy. Prequisite: 320.

424—4 ADMINISTRATIVE LAW. A study of the principles of administrative law in the United States with special emphasis on the law of public officers and on legal procedure for the enforcement of bureaucratic responsibility. Prerequisite: 320.

425—4 CONSTITUTIONAL LAW AND THE MASS MEDIA. Meaning of the First Amendment of U.S. Constitution, as interpreted by the U.S. Supreme Court and the Illinois Supreme Court in relation to speech, assembly, and mass media (press). Development and current status of American jurisprudence as to libel, invasion of privacy, regulation of "obscenity," prior restraint, and developing "right of access" to mass media by minority opinion groups. Surveys trends in FCC administration of broadcast standards and contrasts such administration against parallel judicial standards.

426—4 PUBLIC ADMINISTRATION AND PUBLIC POLICY FORMATION. An analysis of the role of formal organizations in contemporary society with an emphasis on decision-making in government administrative organizations. A treatment of internal and external forces affecting the policies and structure of operations in these organizations. Prerequisite: 320.

429—4 TOPICS IN PUBLIC ADMINISTRATION. An intensive study of an administrative problem or process. Primarily for government students with advanced standing. May be repeated for total of 8 hours credit when content differs and consent of department chairperson is received. Prerequisite: 320.

442—4 POLITICS IN METROPOLITAN AREAS. An investigation of significant problems that face metropolitan areas. Emphasis on the political implications of these problems and the difficulties involved in attempting to solve them. Prerequisite: 203.

444—4 ETHNIC POLITICS IN THE UNITED STATES. An analysis of the impact of the ethnic factors, race, religion, national origin and ancestry, on the politics in the United States. A discussion of the difficulties in participation and contribution of the various minority groups to the structure and process of American politics. Prerequisite: 203.

445—12 (4,4,4) AMERICAN POLITICAL BEHAVIOR. (a) American Voting Behavior. Survey of studies of American elections emphasizing the psychology, sociological, and political-legal bases of voting behavior. (b) Personality and Politics in the United States. A survey of research findings concerning the relationship of psychological and sociological characteristics to the political process. (c) Public Opinion, Propaganda, and the Mass Media in the United States. A survey of research findings concerning the relationship of communications content and communications media to the political process. Prerequisite: 203.

446—4 PUBLIC POLICY ANALYSIS. An intensive analysis of a selected area of public policy. Content varies from quarter to quarter. Examples of areas are education, science and technology, the environment, or welfare. May be repeated for total of 8 hours credit. Prerequisite: 203.

448—4 INTERGOVERNMENTAL RELATIONS IN THE UNITED STATES. An introduction to the relationships—political, legal, fiscal, administrative, etc.—between and/or among the national, state, and local governments. Prerequisites: 203, 343, and 344 or consent of instructor.

449—4 TOPICS IN AMERICAN POLITICS. An intensive examination of one significant facet of the American political system. Primarily for government students already having had considerable course work in this area. May be repeated for total of 8 hours credit when content differs and consent of department chairperson is received. Prerequisite: 203.

456—4 TOPICS IN COMPARATIVE POLITICS. A selective and detailed study of a major question of relevance to students of comparative politics. May be repeated for total of 8 hours credit when content differs and consent of department chairperson is received. Prerequisite: 350 or 355.

472—4 INTERNATIONAL ORGANIZATIONS. (a) Description and analysis of both past and contemporary general international organizations, with special emphasis on the principles, structure, decision-making processes, operations, and problems of the United Nations and its related agencies. Prerequisite: 200.

473—12 (4,4,4) FOREIGN POLITICS OF MAJOR POWERS. (a) American Foreign Policy. Institutional framework and decision-making processes of American foreign policy; idealist and realist schools of thought; the national interest in historic and geographic perspective. (b) Soviet Foreign Policy. Analysis of objective strategy, and tactics of Soviet foreign policy, with emphasis on the combination of conventional and unconventional instruments including role of Communist parties. (c) Foreign Policies of Western European States. Analysis of foreign policies of the major European powers, with emphasis on structural changes incident to the two world wars and the dissolution of colonial empires. Prerequisite: 370.

474—8 (4,4) PUBLIC INTERNATIONAL LAW. (a) Nature, Sources and Development of International Law. (b) Jurisdiction, Boundaries and War in International Law. An introduction to the role of international law in contemporary world affairs. Origins of international law, legal aspects of interstate behavior, settlement of disputes, and use of force. Prerequisite: (b) 474a.

479—4 TOPICS IN INTERNATIONAL RELATIONS. A detailed study of a selected topic. Primarily for government students with advanced standing. May be repeated for total of 8 hours credit when content differs and consent of department chairperson is received. Prerequisite: 370.

481—8 (4,4) DESCRIPTIVE POLITICAL THEORY. (a) Contemporary Systematic Political Theory. Intensive study of major contemporary attempts to devise a general systems theory of politics. (b) Contemporary Political Analysis. The character of scientific inquiry as it relates to the discipline of political science. Prerequisite: 200.

484—12 (4,4,4) HISTORY OF WESTERN POLITICAL THEORY. (Same as Philosophy 484.) (a) Ancient and Medieval. (b) Renaissance and Early Modern. (c) Recent. May be taken separately.

489—4 TOPICS IN POLITICAL THEORY. A comprehensive examination of the works of one major political thinker and the treatment of one major topic or idea by selected political thinkers. Primarily for government students with advanced standing. May be repeated for total of 8 hours credit when content differs and consent of department chairperson is received.

495—12 (4,4,4) CONSTITUTIONAL LAW. (a) A study of the development of American constitutional law chiefly through judicial opinion. Emphasis is placed on the analysis of federalism and the distribution of powers. (b) A study of government power and the rights of property. Special attention is directed to tension between the public welfare and private rights, the extent of government power to regulate property rights, and state versus federal power over commerce and taxation. (c) A study of the nature and extent of civil rights and liberties in the United States. Special attention to freedom of speech, press, and association, separation of church and state, equal protection of the laws, rights of persons accused of crime. Prerequisite: 203.

495d—4 THE SUPREME COURT AND CRIMINAL PROCEDURE. A study of the Fourth, Fifth, Sixth, and Eighth Amendment protections of criminal defendants. Emphasis is on the nationalization of the Bill of Rights, arrest, search, and seizure, assistance of counsel, due process of law, and the permissible scope of punishment. Prerequisite: 203.

498—2 to 8 LEGAL AID INTERNSHIP. Assisting legal-aid attorneys and public defenders with legal research, preliminary interviews of clients, investigating of complaints, and organizing welfare-rights groups. This course may be taken for one or two quarters but no more than 8 hours credit may be earned. Students work as paraprofessionals ten hours per week for 4 hours credit and twenty hours for 8 hours of credit. NOT FOR GRADUATE CREDIT. Prerequisite: 340c or 495 recommended.

499—4 to 8 INTERNSHIP IN GOVERNMENT. Internships consist of full-time day-to-day assignments in Congressional or administrative offices under the supervision of regular professional employees of that office. Arrangements are made in advance to ensure that the student's internship experience is varied and relevant to his/her professional development, while also making a positive contribution to the office to which he/she is assigned. Internships may be one or two quarters duration, depending on arrangements and student interest. NOT FOR GRADUATE CREDIT. Prerequisite: 16 hours of graduate work or senior standing with a government concentration.

HISTORY

100—4 SURVEY OF ANCIENT CIVILIZATION. Ancient Period to 1000 A.D.

300—2 SPECIAL TOPICS. An intensive examination of a single historical topic from the areas of political, economic, social and cultural history. May be repeated for total of 8 hours.

304—4 GREAT TRIALS, ASSASSINATIONS AND EXECUTIONS. Eight to ten of the most famous trials, executions, and assassinations in European history (e.g., Socrates, Christ, Caesar, Joan of Arc, Charles I, Marie Antoinette, Archduke Francis Ferdinand, Adolf Eichmann, etc.) will be dealt with. Each figure will be treated both as an individual and as a symbol of some important theme in European history. The persons treated will vary from quarter to quarter.

306—12 (4,4,4) HISTORY OF ROME. (a) The Republic. (b) The Western Empire. (c) The Eastern Empire.

308—4 HISTORY OF ILLINOIS. A history of the State of Illinois from French settlement to the present. A survey of the political, social, economic, and cultural history of Illinois.

309—4 THE NEGRO IN AMERICA. The role of the Negro in America from the 17th century to the present with emphasis on the period since 1865.

313—4 WITCHCRAFT, MAGIC AND THE OCCULT. The general theory of magic and of the history of magic and witchcraft in the western world.

315—4 AMERICAN POLITICAL EXTREMISM. A study of leftwing and rightwing political movements in United States history.

316—12 (4,4,4) HISTORY OF AFRICA. (a) Africa south of the Sahara from prehistoric to colonial times. (b) Africa south of the Sahara from Colonial times to the present. (c) Africa north of the Sahara. Emphasis on the lands, people, and state from Islamic times to the present.

317—8 (4,4) THE WESTWARD MOVEMENT IN AMERICAN HISTORY. (a) To 1845. (b) 1845 to the present. The land policies, immigrations, settlements, and exploitation of the American lands since the first European settlements.

321—4 MUSSOLINI AND EUROPEAN FASCISM. A study of the circumstances, ideas, and anxieties which produced fascism in Italy. A brief survey of the fascist experience in other European states is also given so that the student is able to assess both the universal aspects of totalitarianism as well as the aspects peculiar to each state.

322—12 (4,4,4) HISTORY OF THE ARAB WORLD. (a) The Islamic experience from Muhammad to the decline of the Abbasid Caliphate, 570-945. (b) Islamic civilization in the period of the Crusades and the Ottoman Empire, 945-1789. (c) Nationalism and modernization in the modern Middle East, 1789 to the 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. The study of Chinese civilization from prehistoric times to the present with emphasis on institutional development, Chinese society, and the principal intellectual achievements. (a) Ancient period to 1689—Early and Middle Empire. (b) 1689 to 1912—Late Empire. (c) 1912 to present—Revolutionary Era.

335—4 HISTORY OF MODERN JAPAN. A study of Japan in the 19th and 20th centuries with particular reference to its relationships with the Western World. An emphasis on the traditional versus the Western-inspired elements in Japan in modern times.

338—8 (4,4) HISTORY OF GREECE. (a) Hellenic history. (b) 401-133 B.C.

341—8 (4,4) HISTORY OF RELIGION IN WESTERN CIVILIZATION. (a) Religion in European history. (b) Religion in the United States. A study of religious institutions, ideas, and practices in Western civilization and their relationship to society.

342—8 (4,4) HISTORY OF CANADA. A study of the origins, and political, economic, and social development of the modern Canadian state. (a) French period to Dominion status (1867). (b) Modern Canada since 1867.

352—12 (4,4,4) HISTORY OF LATIN AMERICA. (a) Colonial Latin America. (b) Latin America from 1800 to 1914. (c) Latin America from 1914 to the present.

355—4 ITALIAN UNIFICATION AND WORLD WAR I. A study of the men, movements, and ideas which led to the formation of the Italian nation and the events which led Italy into World War I in 1915.

358—8 (4,4) HISTORY OF SCIENTIFIC DISCOVERY. (a) To 1500. (b) 1500 to 1900.

372—12 (4,4,4) HISTORY OF RUSSIA. (a) 900-1801—The Early Empire. (b) 1801-1914—The Late Empire. (c) Since 1914—War, Revolution, and Soviet Russia.

385—4 THE CITY IN UNITED STATES HISTORY. A study of the importance of the city in United States history.

390—4 THE WOMEN'S RIGHTS MOVEMENT IN THE UNITED STATES. A history of the struggle women have had in the United States for legal, political, economic, and social rights. Attention to leaders in the movement as well as the influence of and connection with other reform movements.

400—4 PROSEMINAR IN COMPARATIVE HISTORY. The application of the method of comparative history to one or more of the following themes: colonial rule, revolutions, nationalism, frontiers, immigrations, slavery, civil war, racial conflict, industrialization, urbanization, socialism and labor, depressions, imperialism. Open to students in the history honors program and to others with consent of instructor.

401—8 (4,4) HISTORY OF THE SOUTH. (a) The Old South. (b) The New South. An intensive study of the social, economic, political, and cultural developments of the South.

405—4 THE AMERICAN CIVIL WAR. Emphasis upon the clash of national and sectional interests: economic, political, and military aspects of the conflict.

406—4 POST CIVIL WAR AMERICA: 1865-1896.

407—4 THE BLACK URBAN EXPERIENCE, 1820-1965. A history of blacks in American cities, with special emphasis upon the period from 1820 through 1965. The course investigates the internal life of black communities, as well as their relationships to the larger society.

408—8 (4,4) HISTORY OF THE ANCIENT NEAR EAST. (a) Earliest times to 1200 B.C. (b) 1200 B.C. to 330 B.C.

410—2 to 5 SPECIAL READINGS IN HISTORY. Supervised reading for students with sufficient background. Registration by special permission only. Offered on demand. Prerequisites: minimum of 4.0 average in history, consent of chairperson.

412—8 (4,4) INTELLECTUAL HISTORY OF THE UNITED STATES. (a) To 1865. (b) Since 1865.

414—8 (4,4) HISTORY OF EASTERN EUROPE. (a) 1815-1918. An analysis of the rise of nationalism with emphasis on the problems of the Austro-Hungarian Monarchy. (b) Since 1918. An analysis of the problems of the Succession States.

415—12 (4,4,4) EARLY MODERN EUROPE. (a) Renaissance. (b) Reformation. (c) Age of Absolution and Enlightenment.

419—16 (4,4,4,4) HISTORY OF ENGLAND: 1509 TO THE PRESENT. (a) Renaissance and Reformation England—1509-1714. (b) Birth and Growth of Industrial England—1714-1867. (c) England Since 1867. (d) Special Topics in English History.

420—4 THE FRENCH REVOLUTION. A sketch of the passing of feudalism in France, the background and development of the revolutionary movement, and the Napoleonic period.

424—12 (4,4,4) MODERN EUROPEAN THOUGHT. (a) From Absolutism to Revolution. (b) Socialism, Nationalism, and Liberalism. (c) Totalitarianism and the Ideology of Despair.

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. A study of the 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. A history of the origins and developments of relations between the Arab world and Israel.

428—4 THE AGE OF JACKSON. Origins, background, and development of that phase of American democracy associated with the Jacksonian era. The political, social, and economic history of the years 1815-1844 in detail.

429—4 MAN AND SOCIETY IN EAST ASIAN HISTORY. A study of the changing attitudes towards the rights of the individual as opposed to the rights of society in selected East Asian countries such as China and Japan.

430—12 (4,4,4) LATE MODERN EUROPE. (a) Age of Revolution, 1815-1880. (b) 1880-1918. (c) Since 1918. Age of Dictatorships.

433—4 WORLD WAR I AND ITS AFTERMATH: 1914-1921. A description and analysis of the origins of war, its course, and its results. Along with the discussion of military action, attention will be given also to the political, social, and economic effect of the war, relating to world-wide revolutions of 1917-1921.

434—4 THE MIDDLE EAST IN WORLD AFFAIRS. A study of select problems relevant to contemporary times, e.g., the Great Powers and the Middle East, Arab socialism, oil and economics, Islam in the modern world.

435—12 (4,4,4) TWENTIETH CENTURY AMERICAN HISTORY. (a) 1896-1921. (b) 1921-1945. (c)1945 to present.

437—8 (4,4) AMERICAN MILITARY HISTORY. (a) The development of American military institutions and their place in American society to 1914. (b) The increasing power and influence of the military establishment in an era of global conflict.

440—8 (4,4) HISTORY OF AMERICAN DIPLOMACY. (a) To 1919. (b) Since 1919.

445—4 THE RUSSIAN REVOLUTIONS: 1900-1930. A study of the revolutions and civil war of 1917-1921 within the context of the problems which Russia encountered under the Tsarist regime, the Tsarist government's efforts to solve them, and the extent to which the Soviet government continued or changed Tsarist policies. Delineation of the relationship between Russian and Communist elements in shaping Russian Communism.

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.

447—4 PROBLEMS IN RUSSIAN SOCIAL AND CULTURAL HISTORY. An overview of Russian cultural history concentrating on such problems as the schism and the Old Believers, the mir, definition of the role of the autocrat, the police, and law in Russian society. Prerequisite: one course in Russian studies.

452—4 HISTORICAL RESEARCH. The rules of historical research studied and 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) An in-depth study of the problem of nineteenth century France which led from an empire to a democratic republic. (b) A study of France in the twentieth century.

454—4 BIOGRAPHY IN AMERICAN HISTORY. Outstanding leaders and their contributions to the history of the United States. Attention to historical writers who specialize in biography.

455—4 MEN AND WOMEN OF MODERN EUROPE. A biographical history course. A study of the lives and contributions of leading figures of the eighteenth, nineteenth, and twentieth centures.

456—8 (4,4) RECENT GERMAN HISTORY. (a) Germany from the close of the Napoleonic Wars through unification. (b) Germany from the Second Empire through World War II.

460—12 (4,4,4) SOCIAL AND INTELLECTUAL HISTORY OF THE MIDDLE AGES. (a) 500-1000. (b) 1000-1250. (c) 1250-1500.

465—4 CHINESE COMMUNIST REVOLUTIONS. Revolutionary changes brought about by the Chinese Communist Party since its creation in 1921. Attention to the role played by such leaders as Mao Tse-tung.

471—8 (4,4) HISTORY OF MEXICO. (a) Spanish conquest to the death of Juarez. (b) Death of Juarez to the present.

473—8 (4,4) THE CARIBBEAN AREA. (a) Island States of the Caribbean. (b) Central American Area.

477—8 (4,4) HISTORY OF AMERICAN BUSINESS. (a) The

development of corporations, stock markets, banks and agriculture to the Civil War. (b) American business from 1860 to the present.

485—4 ORIGINS AND HISTORY OF WORLD WAR II. An examination of the causes and development of World War II, with emphasis on military operations and diplomatic aspects. Lectures combined with intensive reading, discussions, and films.

SOCIAL WORK

200—4 INTRODUCTION TO SOCIAL WORK. A preprofessional introductory course designed to acquaint the student with the major aspects of the profession of social work and to provide him/her with the opportunity to evaluate his or her interest in continuing training for the profession.

282—2 FIELD LABORATORY IN SOCIAL WORK. A supervised field laboratory placement in selected social service settings designed to give prospective social workers observational and helping experiences whereby they can evaluate their potential for social work service and their interest in the profession and, in addition, enhance their understanding of the field of social welfare. Four hours per week in field setting, one hour per week in classroom. Prerequisite: 200 or concurrent enrollment.

375—4 SOCIAL WELFARE AS A SOCIAL INSTITUTION. Interdependence of social, cultural, political, and economic factors in the history, theory and practice of social welfare, with special reference to development of the social work profession in response to welfare problems. Prerequisite: 200.

381—4 THE FIELD OF SOCIAL WORK. A preprofessional course intended to acquaint the student with the philosophy, theoretical base, scope and aims of the helping services and of social work as a helping service profession. Prerequisite: 200.

382—4 ANALYSIS OF SOCIAL WORK ORGANIZATIONS. Examination of contemporary urban social welfare organizations in their attempt to meet the economic and social needs of the recipients. The structure, function, and auspices of public and voluntary organizations. Social welfare organizations in their broad context and their adequacy in meeting common and unique human needs. Prerequisite: 200.

383—4 BASIC INTERPERSONAL HELPING PROCESSES. The beginning practice skills course in the social work program. Designed to introduce the student to the knowledge, skills and values required for effective professional social work practice, and to provide structured opportunities for students to begin to experience themselves as helpers. Prerequisite: 200 or consent of instructor.

385—8 (4,4) HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT. Integration of psychological and sociological perspectives on human functioning in a practice format, with application to families, groups and large social systems. Prerequisites: (a) 200, introductory courses in sociology and psychology; (b) 385a.

389—2 to 8 INDEPENDENT STUDY IN SOCIAL WORK.

400—2 to 4 SPECIAL TOPICS. Elective study of a specific field of professional practice, or special topic from a social work perspective, (i.e., medical social work, income maintenance and welfare policy, social work with the handicapped). Consult Schedule of Classes for specific topics offered in a particular quarter. This course may be repeated as often as desired. NOT FOR GRADUATE CREDIT.

475—4 SOCIAL WELFARE POLICY ANALYSIS. Develops and expands critical and analytical understanding of social welfare policy development, implementation and its impact on service delivery. Focus on local communities and agencies with consideration to state and federal influences. Prerequisite: 375 or consent of instructor.

480—4 SOCIAL WORK THEORY AND METHODS I. Designed to develop further understanding of basic concepts and principles encompassing the core of values and knowledge generic to social work practice. Emphasis on translation of this core into practice skills. A problem solving framework consisting of problem identification, problem assessment, analysis and planning for intervention, intervention, and evaluation of intervention, provides a model within which specific practice skills are introduced, practiced, and learned. Skills emphasized are interpersonal and planning skills designed to facilitate competence in social work practice. Prerequisites: 375, 381, 383.

481—4 SOCIAL WORK THEORY AND METHOD II. Theory, rationale, and practice of casework, group work, social welfare organization, and the roles of supervision, administration, and research in relation to each. Case material study and discussion with field observation and practice. Prerequisite: 480.

482—6 or 12 FIELD INSTRUCTION. Educationally directed field instruction with social work supervision in a community setting. 150 clock hours for 6 credit hours: 300 clock hours for 12 credit hours. Weekly discussion meetings are held on campus. Prerequisites: 480 and 481 or consent of instructor.

490—4 SENIOR SOCIAL WORK SEMINAR. A summarizing course. Designed to prepare the graduating senior for entry into employment of choice or graduate education. Format to be determined by individual instructor and class body. NOT FOR GRADUATE CREDIT. Prerequisites: 481, consent of instructor.

SOCIOLOGY

Sociology courses are numbered on the basis of their classification into one of the topical categories. This classification is intended to assist students in selecting courses and programs of study. The student should recognize that many courses could be placed into other categories in addition to the one in which it has been placed. In order to determine the category of a particular course found in the catalog, the student should use the last two digits of the course number and the following numbering classification. For example, if the last two digits fall within the 10-19 range, the course is considered to be a methods or statistics course. The classification scheme is used for 300-, 400-, and 500-level courses in the Sociology Department.

00-09 Social Problems and Intergroup Relations
10-19 Methods and Statistics
20-29 Social Psychology
30-39 Social Organization and Structure

40-49 Social Institutions
50-59 Theory and Knowledge
60-69 Social Change and Collective Behavior
70-79 Crime, Deviancy and the Legal Process
80-89 Demography and the Human Ecology
90-99 General and Applied Sociology and Individual Courses

300—4 CONTEMPORARY SOCIAL PROBLEMS. An examination of a number of American social problems, including theoretical analyses of those problems and some attention to methods of researching problems.

301—4 SOCIAL THEORY AND METHODS OF INQUIRY. An examination of the relations between theory and research. Emphasis on substantive concerns of sociology, and the role of theory and methods in exploring those concerns and acquiring an understanding of the world.

303—4 INFORMATION/SURVIVAL. An examination in systematic theoretical form of the role of information in promoting human survival and well-being. The effects of symbols, population size, centrality, technology, codification, and motivation on the scale of human cooperative systems along with causes of problems and their solution.

304—4 RACE AND ETHNIC RELATIONS. Racial and cultural contracts and conflicts; causes of prejudice; status and participation of minority groups; national and international aspects of racial, ethnic, and minority problems.

305—4 LOCAL URBAN PROBLEMS. General examination of urban problems as they exist in the local community. Problems of welfare, race, city government, federal program administration, with emphasis on the city of East St. Louis, Illinois.

310—4 INTRODUCTORY SOCIAL STATISTICS. (Same as Government 310.) An introduction to descriptive and inferential statistics. Among topics are: frequency distributions and their graphic representations, the normal curve, measures of central tendency and dispersion, measures of association, the tabular presentation of multivariate data, probability, estimation and hypothesis testing.

312—4 SOCIAL RESEARCH METHODS. An introduction to the fundamentals of measurement, research design, and data analysis. Among topics are: problem formulation, issues in measurement and scale construction, the logic of analysis and the methods for determining causal relations among variables, alternative research designs (such as experimental design, survey research, field research, content analysis, and use of archival data) and methods of data collection and analysis, and the interrelationships of theory and research. Prerequisite: 310 or equivalent.

321—4 INDIVIDUAL AND SOCIETY. The process of socialization in infancy, childhood, and adolescence; development of habits; attitudes, sentiments; emergence of the self; integration of the individual and society.

334—4 SOCIAL STRUCTURAL CONSTRAINTS IN SOCIAL INTERACTION. A model of social structure emphasizing competing and contradictory normative expectations at the micro-sociological level; structural resources and mechanisms for ameliorating these contradictions in the role-set and status-set; role distance; accounts; secondary adjustments. Prerequisite: 321 or consent of instructor.

335—4 URBAN SOCIOLOGY. The rise, development, structure, culture, planning, and problems in early and modern cities.

338—4 INDUSTRIAL SOCIOLOGY. Social organization and processes within the formal and informal structure of the industrial unit; research and experimental materials concerning social determinants of morale, status, and role of the worker.

340—4 THE FAMILY. The family in historic and contemporary society; evolution of the modern family; change in family functions, structures, and roles.

341—4 SOCIOLOGY OF RELIGION. Functions of religious institutions in society and their relationship to other major social institutions, their role in social control and group solidarity.

342—4 SOCIOLOGY OF EDUCATION. Methods, principles, and data of sociology applied to the school situation; relation of the school to other institutions and groups.

361—4 COLLECTIVE BEHAVIOR. The behavior of people as a part of large groups and aggregates; includes theories of collective behavior and the study of such phenomena as crowds, mobs, panics, disasters, rumors, and fads and fashions.

371—4 POPULATION AND MIGRATION. Characteristics of population, problems of growth, composition, distribution, differential fertility, international and internal migration.

372—4 CRIMINOLOGY. The nature of crime; criminal statistics; causal factors; theories and procedures in prevention and treatment.

373—4 INTRODUCTION OF CRIMINAL JUSTICE. An introduction to the American system of criminal justice, seeking an understanding of the nature and social impact of the legal process as it concerns crime and criminality. Among topics in detail are: police operations; police-community relations; corruption and misuse of force; criminal prosecution; negotiated justice; court operations, and sentencing.

381—4 POPULATION AND MIGRATION. Characteristics of population, problems of growth, composition, distribution, differential fertility and internal migration.

390—2 to 4 (8 total) SOCIOLOGICAL PERSPECTIVES. An investigation, from a sociological perspective, of various topics of contemporary interest to students. Provides a short (2½ or 5 weeks) but thorough study of such topics (e.g., ideology, humor, suicide, secrecy). Consult Schedule of Classes for specific topics and credit hours offered each quarter. Majors and minors may take up to 8 hours.

392—4 SOCIAL CONTROL. An examination of the forms of, techniques of, and responses to social control in modern society. Social control at different levels of social organization including face-to-face interaction, sustained groups, bureaucratic organization, and social control at the societal level.

394—4 COMMUNITY ORGANIZATION. Factors involved in community organization; types, aims, and objectives; community analysis; individual case study of specific community.

396—1 to 5 READINGS IN SOCIOLOGY. Supervised reading in selected subjects. Prerequisite: consent of chairperson.

402—4 SOCIAL AND CULTURAL ASPECTS OF THE AFRO-AMERICAN EXPERIENCE. An examination of the experiences of black people in America; a comparison of the African cultural modes of their origin and the essentially European cultural modes black people encounter in America; the economic, political, and social factors in past and current Afro-American history.

404—4 WORLD FUTURES. An examination of alternative world futures given present world problems and potentialities. The world as a social system and the world's futures as seen through such means as science fiction, empirical studies, and simulation techniques. Planning for the future.

407—4 SOCIOLOGY OF DRUG USE. A survey of drug use and abuse with emphasis on the sociological implications for institutions in the United States; an analysis of not only the behaviors associated with use but also the social and legal response to such use.

408—4 THE ROLE OF WOMEN IN AMERICAN SOCIETY. An analysis of the role of women in historic and contemporary American society, alternative roles of women, traditional socialization patterns, and the consequences for society of women's changing roles.

409—4 URBAN SOCIAL PROBLEMS. A focus on some of the major social problems found in contemporary urban life. Of particular concern are the problems of race relations, poverty, ghettoization, urban decay, urban education, and political structures and responses. Includes both micro and macro analyses of the urban situation. An attempt to relate the structural conditions of American urban life to the problems that are conventionally viewed as personal troubles or characteristic of particular groups.

410—4 INTERMEDIATE SOCIAL STATISTICS. (Same as Government 410.) Descriptive and inferential statistical techniques with computer applications. Basic algebra recommended. Proficiency examination available. Prerequisite: 310, its equivalent, or consent of instructor.

411—4 ADVANCED SOCIAL STATISTICS. (Same as Government 411.) Intermediate and advanced statistics focusing on multivariate techniques such as factor analysis, analysis of covariance, multiple regression, path analysis, and models. Prerequisite: 410 or consent of instructor.

412—4 ALTERNATIVE RESEARCH DESIGNS. An examination and comparison of the important research designs and methods of data collection in sociology. Among the designs considered are: experimental and quasi experimental designs, survey research design, and field research. Prerequisite: 310 or 410 or consent of instructor.

422—4 NEGOTIATING SOCIAL REALITY. Humans characterized from the pragmatic perspective; emphasis on the creative response to problems posed by social situations; role bargaining; altercasting; self-presentation; interactional strategy; social exchange. Prerequisite: 321 or 334 or consent of instructor.

430—4 SOCIAL ORGANIZATION. An examination of the bases of social organization as both process and existence; reviews wide range of theoretical perspectives, and focus of classical theory on social organization; analyzes major kinds of organization, system types, and processes (e.g., institutionalization, stratification, bureaucratization, nationalization, communalization).

431—4 COMPLEX ORGANIZATIONS. Analysis of formal and informal organization. Theories of function and structure, with reference to the work of Weber, Barnard, Simon, and others. Comparative analysis of various kinds of organizations: factories, schools, prisons, hospitals, churches, voluntary associations. Pressures toward equilibrium and change.

435—4 SOCIAL INEQUALITY. Social inequality with respect to status, income, and power as these vary among societies. Factors affecting the degree of inequality in a society and the consequences of inequality and social class on individuals and societies.

438—4 PROFESSIONS IN MODERN SOCIETY. An analysis of the forces involved in the professionalization of occupations in modern society and the problems accompanying this phenomenon; the structural characteristics of professional occupations; issues involved in the regulation and control of professions; problems confronting professionals working within various work contexts such as bureaucracies; the education and training of professionals; and patterns of conflict within and between professional occupations. Among specific professions examined are: medicine, dentistry and the allied health professions; teaching; law; the military; social work; and others.

441—4 HEALTH, ILLNESS AND SOCIETY. An examination of the social and social-psychological determinants of morbidity and mortality; cultural and social responses to symptoms and pathology; patient-practitioner relationships; the hospital as a social system; the social organization of health occupations; patterns of use of health services; and issues in the organization and delivery of health care on a societal level.

444—4 SOCIOLOGY OF LAW. Analysis of the formation of law, its implementation, relationship to social change, and the interconnections between the judicial system and the other institutions of society. Comparison of legal systems in primitive, medieval, and industrialized societies.

451—4 CLASSIC SOCIAL THEORIES. An examination of the theories that are the basis for modern capitalism and socialism including the work of Adam Smith, Karl Marx, Max Weber, and Thorstein Veblen.

454—4 CURRENT SOCIOLOGY. A survey of important trends in contemporary sociology and social thought and an examination of the social organization of sociology as a profession.

456—4 CONTEMPORARY SOCIOLOGICAL THEORY. An introduction to paradigms of sociology. The major paradigms covered include the social action, the social facts, and the social behaviorist paradigms. The major types of theory include symbolic interactionism and functional, interaction, exchange, and conflict theory.

461—4 SOCIAL CHANGE. An examination of the processes of social change in the modern world; culture lag and conflict of norms; individual and social problems arising from conflicting systems of social values and cultural norms.

462—4 SOCIAL MOVEMENTS. A sociological study of modern social movements; social and cultural backgrounds; forms of expression and organization; social structure of social movements, their role and function in modern society.

470—4 SOCIOLOGY OF DEVIANCE. Comparative theoretical orientations to the study of deviance; the relationship between deviant and conforming behavior, deviance as a social product; the effect of societal reaction on deviance; the development of deviant subcultures; selected deviances.

472—4 TREATMENT AND PREVENTION OF CRIME. Principles of penology; history of punishment and prisons; criminal law, police function, criminal courts; the prison community; the juvenile court, and related movement.

473—4 VICTIMOLOGY. An introduction to the study of war, crime, inequality, racism, sexism, and other social conditions as victim-generating forces in society. Among questions asked are: Who are the victims? How are they victimized? What processes determine patterns, trends, and reactions to victimization?

494—4 MARRIAGE COUNSELING. Survey and analysis of the field of marriage counseling; assessment of current practices and techniques; case studies and supervision. Prerequisite: consent of instructor.

OTHER ACADEMIC PROGRAMS

DELINQUENCY STUDY AND YOUTH DEVELOPMENT CENTER

Professors:
Hughes, T. R.
Jacobson, J. A.
Reuterman, N. A. (Director)

Associate Professors:
Stein, J. R.
Stikes, C. E.

Assistant Professors:
Levy, E. R. Levine
Pooley, R. C.
Quillian, B. F.

Instructor:
Reidelberger, J. J.

The Delinquency Study and Youth Development Center has a long history of involvement with human services problems. Public service and applied research expertise are provided by the Center to a variety of public and private agencies at the local, state and national level. Demonstrative programming for youth, in-service training of professionals and paraprofessionals, regional and national conferences, and human services needs assessment are current and typical activities.

In addition to public service and applied research, the Center offers a Bachelor of Arts or Bachelor of Science degree in Human Services. The Human Services major is an interdisciplinary four-year program designed to prepare students to function constructively, at an entry level, in the helping professions. The helping professions are defined as the services and programs offered in the related areas of mental health, corrections, employment, welfare and law enforcement.

The emphasis of the Human Services program is on classroom and field experiences that will acquaint students with the scope, diversity, and needs of people and agencies within the broad context of human services. Students are exposed to the overall social, political, and economic aspects of human service systems within an academic framework that is committed to meeting the unique and individual interests of each student. Generally, linkages exist between the Human Services program and the public service and applied research components of the Center. Such linkages provide students with unique opportunities to learn through actual experience.

Instruction in the Human Services program, as well as the public service and applied research activities, is provided by the faculty of the Delinquency Study and Youth Development Center. This faculty consists of a nine-member interdisciplinary team of social scientists. Psychology, sociology, education, law, counseling, criminal justice, theology, political science, and human development comprise the current expertise of Center faculty.

In addition to undergraduate eduation the Center offers graduate credit to students working toward an advanced degree in a related discipline. Provision may also be made for credit to be granted to participants in workshops and institutes sponsored by the Center.

Career Opportunities

Graduates in Human Services are employed by a diversity of agencies and organizations in a wide variety of job positions. Specific careers include: counselor, deputy sheriff, youth worker, probation officer, planner, research coordinator, patrolman, social service director, mental health worker, caseworker, and so forth. Areas of employment include: Department of Public Aid, Police Departments, Mental Health Centers, Poverty Programs, Drug and Alcohol Abuse Centers, Court Services, etc.

Degree Requirements

Bachelor of Science, Bachelor of Arts Degrees, Human Services

General Studies Requirements (Waive GSS-8.)	60
Requirements for Major in Human Services	48
Human Services 101, 320, 401a	12
Human Services elective hours[1]	36
Minor	25-40
Electives	59-44
	192

[1]No more than a total of 12 hours of independent study will apply toward the human services major.

Students seeking a Bachelor of Arts degree should follow the program outlined above, adding 12 hours of foreign language.

Minor Requirements

A minor in human services consists of a minimum of 28 hours of course work in human services. These 28 hours must include 101 and 312; 401a, 401b, 401c, 490, 491, 492 may not be taken for credit toward a minor.

COURSES

HUMAN SERVICES

101—4 INTRODUCTION TO HUMAN SERVICES: HELPING RELATIONSHIPS. An introduction to the general field of human services. A review of the philosophical basis of the helping relationships as interpreted by the social and behavioral sciences. Prerequisite: consent of adviser.

301—4 COMMUNICATIONS IN HUMAN SERVICES. A review and critical examination of verbal and nonverbal and symbolic communication as related to human services via lecture,

class discussion, audio-visual aids, and various communication exercises. Prerequisite: consent of adviser.

302—4 PROBLEMS IN HUMAN SERVICES. A survey and analysis of selected problem areas which relate to the field of human services (e.g., racism, criminal justice, mental health, women's rights). An integration of small group approaches and lecturing for the purpose of identifying and analyzing problems and planning strategies for change. Prerequisite: consent of adviser.

310—4 HUMAN SERVICE SYSTEMS: AN APPROACH TO THE FIELD. A critical examination of the administrative and organizational dimensions of human services. Prerequisite: consent of adviser.

311—4 HUMAN SERVICE SYSTEMS: AN INDIVIDUAL ANALYSIS. An in-depth exploration of one of the human services systems (e.g., criminal justice, mental health, etc.) and identification of subsystems and how they interface. The purpose is to demonstrate the utility of the systems approach. Prerequisite: consent of adviser.

312—4 FIELD STUDY IN HUMAN SERVICES. Brief placement of students in human service agencies and organizations. Involves a weekly seminar to compare, contrast, and examine the interrelatedness of these agencies. Prerequisite: consent of adviser.

320—4 BASIC RESEARCH METHODS IN HUMAN SERVICES. An introduction to the research process and the scientific method. Hypothesis development and testing, methods of data collection, and selected methods of data analysis. Emphasis on an applied research in human services settings. Prerequisite: consent of adviser.

330—4 LEGAL ASPECTS OF HUMAN SERVICES. An examination of legal concepts and issues as they relate to the Human Services practitioner (e.g., equal protection, due process, right of privacy and confidentiality). Time is also devoted to teaching the student the fundamentals of legal research as well as how he or she can best effectuate his or her role in court proceedings. Prerequisites: 24 hours in Human Services; consent of adviser.

401a,b,c—12 (4,4,4) PRACTICUM IN HUMAN SERVICES. Student placement in a human service agency or organization with intensive supervision by an individual faculty member as well as agency representative. It is anticipated that students will be able to gain practical experience and apply their academic knowledge during practicum. Practicum provides each student with the opportunity to utilize the kinds of skills acquired in the total program. Practicum projects are based on the specific career interests of each student and are supervised by the staff member closest to that interest area. Research, field placement, and a practicum report are required. Students are encouraged to take the practicum courses during their senior year. NOT FOR GRADUATE CREDIT.

402—1 to 8 SEMINAR: SELECTED TOPICS. Seminar discussions devoted to human service systems. Content varies depending upon the interest of the students and faculty. Prerequisite: consent of adviser and instructor.

404—4 VOLUNTEER PROGRAMS IN JUVENILE COURT SETTINGS. An evaluation of the economic, judicial, and social issues leading to the Volunteer Probation Movement. Techniques for organization and assessment of community-based volunteer programs related to youth corrections. The purpose of the course is to acquaint students with the historical development, the purpose, structure, function, operation, and procedures for the implementation of volunteer programs for dealing with youthful offenders in trouble with the law. Prerequisite: consent of instructor.

405—4 THE ETIOLOGY OF JUVENILE DELINQUENCY. An in-depth survey of various factors which have been proposed as having a causative relationship to juvenile crime. A variety of theoretical positions regarding delinquency are critically examined and evaluated in light of relevant research in the area. Acquaintance with the wide variety of delinquency causes which have been proposed and critical appraisal of a number of the more important theoretical positions. Prerequisite: consent of adviser.

408—4 TREATMENT MODALITIES IN CORRECTIONS. A survey of the treatment modalities currently being applied in the human services. Prerequisite: consent of adviser.

409—4 COMMUNITY BASED PROGRAMS: CORRECTIONS IN THE COMMUNITY. Presentation of the rationale for community-based programming for the offender and exploration of existing and potential programs. Focus on group care homes, half-way houses, foster care, expanded use of probation, youth service bureaus, youth hostels, and other community-based programs directed toward the juvenile and adult offender. Prerequisite: consent of adviser.

410—4 ADVANCED RESEARCH IN HUMAN SERVICES. An applied statistics course which acquaints students with a variety of statistical techniques and tests, both parametric and nonparametric. Emphasis on the appropriate use of various tests in solving a variety of research problems in human services. The use of computers in research. Prerequisites: 320, consent of adviser.

411—4 SURVEY OF ADVANCED TREATMENT MODELS IN HUMAN SERVICES. An indepth survey of treatment and growth models currently being applied in a variety of human service settings. This course is a continuation and expansion of 408. This course is designed to help students understand the various treatment models, and is not intended to teach students how to perform the various psychotherapeutic techniques. Prerequisites: 101, 408, consent of adviser.

490—1 to 12 INDEPENDENT PROJECTS IN THE HUMAN SERVICES. Independent projects in human services. Prerequisites: consent of adviser and instructor, senior status.

491—1 to 8 DIRECTED READINGS IN THE HUMAN SERVICES. Directed readings in human services. Prerequisites: consent of adviser and instructor, senior status.

492—1 to 12 INDEPENDENT RESEARCH IN HUMAN SERVICES. The design and implementation of a research project with the consultation of a faculty member. Prerequisites: 320, consent of adviser and instructor, senior status.

ENVIRONMENTAL RESOURCES TRAINING CENTER

Bryant, J. O. Jr. (Director)
Anderson, D. M.
Benear, A. K.
Castle, S. A.
Harris, N. A.
Hollingsworth, R. L.
Rohr, R. C.
Wooters, C. T.

The Environmental Resources Training Center (ERTC) is designated by the Illinois Environmental Protection Agency as the state center for training of personnel involved in water quality control facility operation, maintenance and management. The ERTC occupies new facilities located on New Poag Road on the SIUE campus. The Center's facilities are designed, equipped, and staffed specifically to provide environmental pollution control facility operation's personnel training in the most current technology and procedures for treatment of both potable water supplies and wastewaters. In addition to classrooms and an auditorium, the ERTC facilities include:

- fully equipped wet chemistry teaching labs
- teaching lab for instrumental analysis
- library/media support center
- self instruction lab
- pilot scale water and wastewater equipment
- 0.3 million gallon per day wastewater treatment plant

The ERTC teaches treatment principles and emphasizes their practical application to plant operation and maintenance through a combination of lecture, laboratory and in-plant sessions. Training classes emphasize hands-on application in the laboratory and in the treatment plant of principles taught during lectures.

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 and training 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.

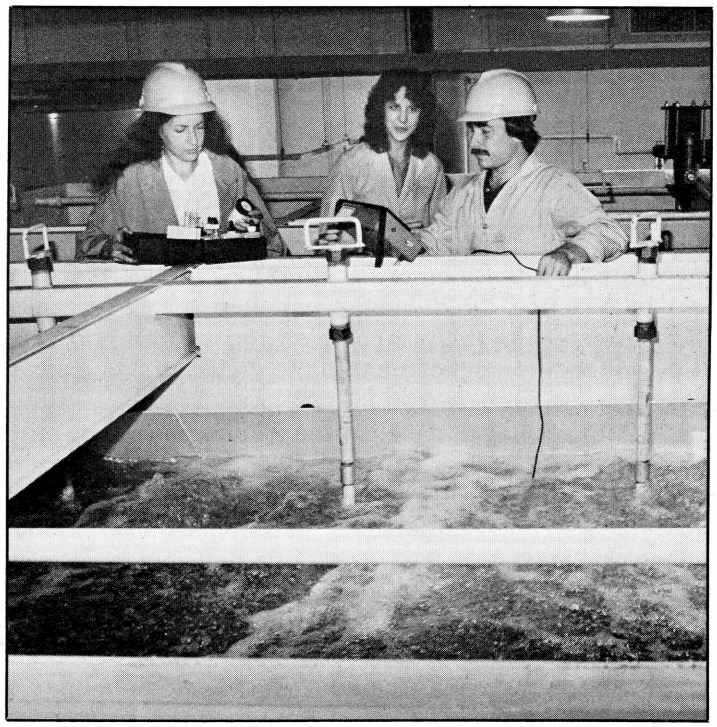
The ERTC offers numerous courses, seminars, workshops, and institutes each quarter at both on-campus and off-campus sites. The ERTC also offers a full-time one-year program at the ERTC facility which leads to a Certificate of Completion in Water Quality Control Operations.

WATER QUALITY CONTROL OPERATIONS

Water must be treated and disinfected before it is safe and acceptable for distribution to the public for drinking, cooking, bathing, and other uses. Wastewater, which is water that has been used by the public, must be collected and treated before it can be discharged back into streams, rivers, and lakes.

Elaborate and complex systems are needed to pump, treat, disinfect, and distribute potable water for public use and to collect, pump, treat, disinfect, and dispose of wastewater. For many years, the population suffered many diseases, such as diphtheria, typhoid fever, and cholera because of unsafe water. Many streams, rivers, and lakes were badly polluted making them unfit for drinking, boating, swimming, or fishing. The construction and operation of water treatment systems and water pollution control facilities have eliminated many of these problems.

Water quality control operators are the people who practice the art and science of controlling, operating, maintaining, and managing water supply and wastewater treatment systems. The water quality control operator is responsible for protecting the health and welfare of the population by assuring that treatment systems perform properly and produce safe water all the time. Water quality control operators make sure that people do not get sick from drinking water and that our streams, rivers, and lakes are not polluted. They determine that water is clean and safe for use in recreation, as water supply sources, and for other purposes. Because the responsibilities are so great, Illinois and most other states require that water quality control operators be licensed before they can operate a plant.



The water quality control operator operates and maintains water treatment equipment; controls processes by adjusting flows, chemical additions, and treatment processes; performs laboratory tests to check on the quality of

the water and to determine how the treatment plant must be controlled; maintains records on plant and equipment performance and reports to the public and state regulatory agencies on water quality.

Career Opportunities

Career opportunities in the field of Water Quality Control Operations are excellent. Based on data from the Illinois Environmental Protection Agency, Illinois water supplies and wastewater treatment plants will need as many as 400 additional trained and certified operators each year. On a national scale, as many as 7700 career openings will be available each year. These are conservative estimates because they do not include the needs of industrial facilities and other potential employers of trained water quality control operators.

The key word to this is "trained" personnel. The ERTC's Water Quality Control Operations training program trains students for entry-level positions as water quality control operators. In 1980, starting salaries for water quality control operators ranged from $800 to $1,200 per month ($9,600 to $14,400 annually). Water quality control operators, who with work experience advanced to the position of superintendent, earned an average salary of $21,915 in 1980.

ERTC training prepares technicians who will be responsible for the day-to-day operation, control, and maintenance of water quality control facilities. ERTC training is task oriented and stresses development of operational skills through hands-on practice.

ADMISSION AND RETENTION

ERTC considers the total individual in 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 if satisfied that they have demonstrated the ability to complete the program successfully and to find employment in the water quality control field.

ERTC requires that the applicant submit a written self-evaluation and three personal references. A series of language and math skills proficiency examinations are administered and evaluated for final applicant screening. Those applicants whose basic skills deficiencies are so great that their chance of success in the program would be minimal are not admitted.

ERTC requires that students remain in good academic standing for program retention. ERTC requires that a student maintain a cumulative 3.00 grade-point average (on a scale of 5.00) for Good Standing. Upon successful completion of the program, a Certificate of Completion will be awarded by a faculty awards committee.

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 about the program and application forms may be obtained by writing to: Career Program Coordinator, Environmental Resources Training Center, Southern Illinois University at Edwardsville.

ORIENTATION

An orientation session, which is held the week before classes begin, helps new students adjust to the campus community quickly and comfortably so that academic and social experiences at the University and ERTC will be as rewarding as possible. The orientation program will provide all required procedures that new students must complete before starting classes, including placement testing, a tour of the SIUE campus, and all other information about special services provided for students by the University. Specific information about this orientation program will be sent when you apply for admission.

CURRICULUM

This ERTC program, which can be completed in only four quarters (one year) of full-time study, includes training in both water supply and wastewater treatment operations. Students receive classroom and laboratory instruction and practice operations in hands-on training on the 30,000 gallons per day pilot plants, which are located in the ERTC facility, and the 300,000 gallons per day, full-scaled conventional activated sludge wastewater treatment plant which the ERTC operates for SIUE. In the final quarter of study, trainees are placed in treatment facilities for ten weeks to gain actual work experience.

Graduates of the program receive a Certificate of Completion from Southern Illinois University at Edwardsville and meet all educational requirements for licensing as a water quality control operator by the Illinois Environmental Protection Agency.

The ERTC program in Water Quality Control Operations stresses hands-on training. The theoretical aspects of water quality control presented in lecture sessions are supplemented by actual experience in laboratories, shops, and treatment plants. Practical experience in all facets of water supply and wastewater treatment processes, operations, maintenance, quality control, and administration are provided. The curriculum, which provides 1,555 total contact hours of instruction, is divided into the following areas:

Water Supply Operations (335 hours)

This series of courses offers instruction in water treatment methods, equipment, maintenance, and

process control. Hands-on training using the ERTC pilot facilities is a major part of the course sequence. Classroom and laboratory instruction is supplemented with field trips to water supply systems.

Wastewater Operations (335 hours)

This series focuses on the operation, maintenance, equipment and process control of wastewater treatment plants. The ERTC pilot facilities are utilized extensively for hands-on training. Field trips to operating wastewater treatment systems supplement classroom and laboratory sessions.

Water Quality Control Laboratory Testing (260 hours)

All testing requirements for both water and wastewater treatment facilities are taught. Hands-on training is provided for each testing parameter required for monitoring, reporting, water quality control, process control, and operations in both water supply and wastewater treatment systems.

Water Quality Control Facilities Maintenance (225 hours)

This series stresses maintenance of mechanical, electrical, and instrumental equipment in water quality control facilities, as well as collection and distribution systems. The ERTC pilot facilities are used for these courses. Hands-on training is a key element in this series of courses.

Supervised Work Study (400 hours)

During the final quarter of the water quality control operations program, students will be placed in a local treatment facility. This supervised work experience will expose students to all facets of systems operation.

Course Sequence

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 separate certificates of completion in Water Supply Operations and Wastewater Treatment Operations on a part-time basis. Persons may complete the requirements for the appropriate Certificate of Completion in approximately three years of part-time study.

The ERTC offers all courses necessary to complete the requirements for a certificate of completion as a series of workshops which are conducted at various locations throughout Illinois so that persons enrolled in the program as part-time students may conveniently schedule the necessary courses. 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 the student to wastewater treatment processes and their operation.

102 WATER SUPPLY OPERATIONS I. 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 the student 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 hands-on training sessions. Laboratory safety, proper care and use of glassware, equipment and chemicals, and record keeping are stressed.

105 MECHANICAL MAINTENANCE. In hands-on 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 math 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. The student learns to calculate detention time, efficiency, weir 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 the operator of a water quality control facility. Topics include improving basic reading skills, grammar, spelling, and written and oral communication skills. Technical writing skills are developed.

201 WASTEWATER OPERATIONS II. 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). In hands-on training sessions 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. 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 hands-on laboratory sessions. Field trips to operating facilities are included.

203 WASTEWATER LABORATORY. Provides hands-on 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 hands-on 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 hands-on shop sessions. Students learn to read and use electrical schematics and wiring diagrams.

301 WASTEWATER OPERATIONS III. 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 hands-on training sessions in this course.

302 WATER SUPPLY OPERATIONS III. 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 hands-on 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. Hands-on training with each system is stressed.

308 SYSTEM MAINTENANCE. 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 learned. 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.

EAST ST. LOUIS CAMPUS

Jason, E. F. (Director)
Cofield, A. (Assistant Director)

Assistant Professor:
Spearman, E. O.

Instructors:
Harmon, B.
Savage, A. C.

Lecturers:
Greene, R.
Thiam, M.

Visiting Lecturers:
Bennett, D. J.
Brown, E. L.
Burns, M. L.
Childers, P.
Coleman, A. L.
Danmole, L.
Epps, B.
Epps, W.
Flowers, L. K.
Gibson, J. D.
Green, M. K.
Harrison, P.
Whiteman, C. C.

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 Metro-East. The classrooms, laboratories, and library facilities support the offering of University credit courses locally. The East St. Louis Campus also provides meeting 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.

Beginning summer quarter 1982, the East St. Louis Campus will offer upper-division and graduate credit courses in selected programs that meet distinctive community needs, i.e., early childhood education, accounting and data processing, black studies, counseling, special education, nursing. Other courses will be added as requested. This academic program has been planned to facilitate degree completion by area residents. The list of courses to be offered will be available at registration for summer quarter.

The Office of Special Programs and Minority Affairs coordinates and directs academic support programs and service training programs, operated both on and off campus, which enable the University to provide quality education to all its constituency, to increase employment opportunities for area youth and adults, and to upgrade the quality of life for persons in Metro-East.

COMMUNITY SERVICE PROGRAMS

The East St. Louis Campus of SIUE is the source of many community service programs, academic and cultural, some of which initiate within the University and others which respond to requests for University assistance. Faculty and personnel are active in planning or assisting in the planning of many workshops, conferences, seminars, and programs designed to aid the citizens of Metro-East to enhance their lifestyles, to understand and cooperate with their city government and municipal services, to utilize the many state and federal agency services available to them, so as to function as aware and enlightened citizens in the general society.

The Performing Arts Training Center (PATC). This community service component provides a unique approach to motivating and stimulating the unchallenged youth and adults of East St. Louis to develop alternative value systems and lifestyles through understanding and participating in the cultural and performing arts. The PATC is open to all residents of the area from children to adults and each participant is incorporated into the activity to the fullest extent possible. SIUE students from both campuses participate, but University enrollment is not required for entering into the PATC activity.

The unit sponsors two performing groups: the Performing Company and the Unity Ensemble. The Performing Company is concerned mainly with dance and interpretation of ethnic traditions and expressions of various celebrations and moods. This Company has gained a national reputation for excellence. The Unity Ensemble is concerned with dramatic intermingling of music, drama, and dance. The two groups maintain an active public service schedule of performances in the area schools which serve as intense motivational stimuli for young observers to broaden their horizons and develop their own creative potential.

Science Awareness: Science Academy. The Science Academy is a National Demonstration Upward Bound Project funded by the U.S. Office of Education. It is an alternative high school program for the eleventh and twelfth grades which is designed to provide highly motivated and capable students with the essential background in science, language arts, communications skills, and mathematics to enter and succeed in science-based baccalaureate fields of study. Students take their academic classes at the East St. Louis Campus, which is centrally located, but can still participate in social and extra-curricular activities at their home schools which accept the Academy credits toward the high school diploma. Some courses carry University credit which will be assigned upon matriculation. The ultimate objective of the Academy is to increase the number of minority persons engaged in professions and careers based on the sciences. The format of the Science Academy has been accepted by HEW as a model to be disseminated nationally for implementation by postsecondary schools in urban areas.

Music Program. The East St. Louis Campus offers instruction in music appreciation and performance, both credit and noncredit, to SIUE students, area citizens, and the Upward Bound and Science Academy students. This aca-

demic and community service has been made possible by the addition to the staff of two nationally acclaimed musician-artists who conduct classes and offer private lessons in performance. As an extension of community service, the Music Unit articulates with the area high schools in piano and band work, and is presently engaged in establishing a city band for East St.Louis.

OFFICE OF CONTINUING EDUCATION

Through the Office of Continuing Education, the University offers a variety of nontraditional approaches to earning University credit, as well as continuing education programs, noncredit classes, and public service activities. Many students attend classes at off-campus resident centers or enroll in credit classes offered in their communities. Evening and weekend classes offer scheduling flexibility to students who may find it difficult to attend class during the day. For additional information about continuing education activities, contact the Director by letter (campus box 84) or by telephone (692-3210).

RESIDENT CENTERS

Resident centers have been established at Scott Air Force Base, Greenville College, and at Litchfield, Illinois. Selected courses and degree programs, identical to on-campus programs in academic content and degree requirements, are offered at these locations. Further information regarding these courses and programs may be obtained by contacting the Assistant Director for Resident Centers in the Office of Continuing Education.

OFF-CAMPUS COURSES

Numerous courses are offered at off-campus sites in response to specific requests in order to meet particular programming needs in area communities. Institutions, agencies, or organizations interested in off-campus services or individuals wishing information about off-campus courses should contact the Office of Continuing Education.

EDUCARD

The EDUCARD program is a public service which allows individuals not enrolled at the University for credit to attend selected University classes on a space available basis at a very modest fee. EDUCARD is open to anyone from high school students to senior citizens who are simply interested in learning more about a particular area of study but who are not interested in academic credit or degrees. EDUCARD learners do not earn credit, and no official record is kept of their participation (no grade reports, transcripts, etc., are maintained). A library courtesy card and a student parking decal are available, and EDUCARD students may borrow textbooks from Textbook Service for undergraduate courses. The fee for EDUCARD is $15 per quarter. EDUCARD provides an economical and flexible opportunity for individuals to experience professional enrichment and personal growth. Applications and additional information are available from the Office of Continuing Education, Box 84.

NONCREDIT AND PUBLIC SERVICE ACTIVITIES

The Office of Continuing Education sponsors a wide variety of noncredit activities ranging from career and professional development programs to general noncredit classes for leisure and personal development. In addition, community service programs serve various groups in area communities including youth, women, and senior citizens.

OFFICE OF CONFERENCES AND INSTITUTES

Conferences and Institutes provides specialized program-planning services and meeting arrangements to private businesses, professional organizations, governmental 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 at various times during the year. Call Conferences and Institutes (692-2660) for additional information.

CENTER FOR URBAN AND ENVIRONMENTAL RESEARCH AND SERVICES

The Center for Urban and Environmental Research and Services has as its primary mission the development, coordination, and support of research and public service. Its major emphasis is on the Illinois portion of the St. Louis metropolitan region, although activities often cover a broader area and programs are directed toward an impact upon the general quality of urban life. It has undertaken projects in such fields as housing, pollution, public finance and administration, the arts, population, and community action. A major activity is the census data services provided to a wide range of users. The Center participates in cooperative ventures with other educational institutions and has developed and carried out a number of interdisciplinary activities involving persons outside the Center and outside the University. No specific curriculum or teaching program emanates from the Center.

The Center has a staff of eight professionals who come from varied disciplinary and experience backgrounds. In addition, the Center also offers short-term appointments to others in the University in order that they may pursue their research and service interests related to the Center program.

FOR FURTHER STUDY

Through the Graduate School, SIUE offers 34 degree programs, which are listed below. The Graduate School enrolls twenty percent of all the students at SIUE, and many of its degree candidates hold undergraduate degrees from SIUE.

MASTER OF ARTS

Behavioral Science
Biological Sciences
Economics
English
Geography
Government
History
Philosophy
Psychology
Sociology
Speech with specialization in: Speech Communication

MASTER OF BUSINESS ADMINISTRATION

MASTER OF CITY AND REGIONAL PLANNING

MASTER OF FINE ARTS

Art Education
Art Studio

MASTER OF MUSIC

Music Education
Music Performance

MASTER OF PUBLIC ADMINISTRATION

MASTER OF SCIENCE

Biological Sciences
Chemistry
Economics
Environmental Studies
Geography
Government
Management Systems
Mass Communications
Mathematics
Nursing
Physics
Psychology
Speech with specialization in: Speech Pathology and Audiology
Urban Affairs and Policy Analysis

MASTER OF SCIENCE IN EDUCATION

Business Education
Counselor Education
Educational Administration and Supervision
Elementary Education
Instructional Technology
Physical Education
Secondary Education with concentrations in:
- Art Education
- Biological Sciences
- Chemistry
- English
- Foreign Languages
- Geography
- Government
- History
- Mathematics
- Physics
- Reading
- Speech

Special Education

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

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William R. Norwood, Chairman	Elk Grove Village	1983
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Hollis L. White, Dean, School of Fine Arts & Communications
Carol Ann Keene, Dean, School of Humanities
Patricia Forni, Dean, School of Nursing
Thomas Anderson, Dean, School of Science & Engineering
Suzanne D. Jacobitti, Dean, School of Social Sciences
Hollis L. White, Dean, University College

SOUTHERN ILLINOIS UNIVERSITY AT EDWARDSVILLE FACULTY

EMERITUS FACULTY LISTING

ANDREE, Robert G., Emeritus Professor, Ed.D., 1942, Harvard University
BARDOLPH, Marinus P., Emeritus Professor, Ph.D., 1947, State University of Iowa
BEAR, David E., Emeritus Professor, Ed.D., 1958, Washington University
BISHOP, Myron C., Emeritus Professor, M.A., 1938, Ohio State University
BRIDWELL, James G., Emeritus Associate Professor, M.A., 1967, Southern Illinois University at Edwardsville
BUDDEMEYER, Evelyn, Emerita Associate Professor, B.S., 1927, Central Missouri State Teachers College
BURTON, Mabel G., Emerita Associate Professor, M.P.H., 1948, University of Minnesota
CAMPISI, Paul J., Emeritus Professor, Ph.D., 1947, University of Chicago
CARR, Morris, Emeritus Assistant Professor, M.S., 1942, University of Illinois
COLLIER, James E., Emeritus Professor, Ph.D., 1951, University of Nebraska
COX, Homer L., Emeritus Professor, Ed.D., 1955, Northwestern University
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
EDERLE, Helen, Emerita Professor, M.A., 1929, University of Illinois
FANNING, Florence A., Emerita Professor, M.A., 1934, University of Illinois
FRUEND, William F., Emeritus Professor, M.S., 1950, University of Wisconsin
FULLER, R. B., Emeritus University Professor
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
GWIN, James M., Emeritus Professor, Ph.D., 1949, Cornell University
HAINES, Harold, Emeritus Professor, M.A., 1962, University of New Mexico
HILEMAN, Olin, Emeritus Professor, Ed.D., 1962, George Peabody Teachers College
INGWERSON, Ina J., Emerita Associate Professor, M.S.N., 1962, Washington University
KAZECK, Melvin E., Emeritus Professor, D.Ed., 1953, Columbia University
KING, Donald, Emeritus Professor, Ed.D., 1962, University of Arkansas
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
KURTH, Rudolf O. E. W., Emeritus Professor, Ph.D., 1948, University of Berne
LEE, Charles A., Emeritus Professor, D.Ed., 1936, Columbia University
LIVINGSTON, Don A., Emeritus Professor, Ph.D., 1948, Saint Louis University
LUCK, David J., Emeritus Professor, Ph.D., 1947, University of Texas
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
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
PARRILL, Irwin H., Emeritus Professor, Ph.D., 1939, State University of Iowa
PELLEGRINO, Alfred G., Emeritus Professor, Ph.D., 1952, Université de Montréal
ROBINSON, James L., Emeritus Associate Professor, M.A., 1950, Northwestern University
ROSENTHAL, Herbert H., Emeritus Professor, Ph.D., 1955, Harvard University
RUFFNER, Ralph W., Emeritus Vice President, Ed.D., 1948, George Washington University
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
SMITH, Mary Belle, Emerita Professor, M.A., 1935, State University of Tennessee
SMITH, R. Dale, Emeritus Professor, Ph.D., 1939, University of Pittsburgh
SOPER, Daniel, Emeritus Professor, Ph.D., 1952, Syracuse University
SPAHN, Raymond J., Emeritus Professor, Ph.D., 1938, Northwestern University
TAYLOR, Marion, Emerita Professor, Ph.D., 1931, University of Iowa
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
WANTLING, Dale, Emeritus Professor, Ph.D., 1949, Ohio State University
WARREN, Edwin, Emeritus Professor, Ph.D., 1952, University of Michigan
WHEAT, Leonard B., Emeritus Professor, Ph.D., 1931, Columbia University
WILKINS, George, Emeritus Professor, M.A. 1940, University of Illinois
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
AHLBRAND, William P., Secondary Education, Ph.D., 1968, Washington University
ALLSUP, Gene D., Educational Administration, Ph.D., 1966, Southern Illinois University at Carbondale
ALTES, Jane A., Sociology, Ph.D., 1982, Saint Louis University
ALY, Hadi Hussain, Physics, Ph.D., 1960, University - United Kingdom
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., Engineering and Technology, Ph.D., 1961, Northwestern University
ANDRIS, James F., Foundations of Education, Ph.D., 1974, Indiana University
ARCHANGEL, Rosemarie, Health, Recreation and Physical Education, Ph.D., 1968, University of Iowa
ARNOLD, George, Engineering and Technology, Sc.D., 1964, Washington University
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., Management Systems and Sciences, Sc.D., 1971, Washington University
AULT, David E., Economics, Ph.D., 1969, University of Illinois

AUSTIN, James C., English Language and Literature, Ph.D., 1952, Western Reserve University
AXTELL, Ralph William, Biological Sciences, Ph.D., 1958, University of Texas
BADEN, Donald James, Elementary Education, Ed.D., 1973, University of Houston
BAGCHI, Deipica, Earth Science, Geography and Planning, 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
BAIN, Ralph L., Chemistry, Ph.D., 1964, Oregon State University
BAKER, William Bryan, Earth Science, Geography and Planning, Ph.D., 1958, University of Nebraska
BALTZELL, James H., Foreign Languages and Literature, Ph.D., 1952, Indiana University
BARKER, John A., Philosophical Studies, Ph.D., 1967, Tulane University
BARLOW, Hugh D., Sociology, Ph.D., 1973, University of Texas
BARRINGER, Robert L., Management Systems and Sciences, Ph.D., 1956, Massachusetts Institute of Technology
BEARD, Earl S., Historical Studies, Ph.D., 1953, University of Iowa
BELL, Doris E., School of Nursing, Ph.D., 1979, Saint Louis University
BENGTSON, Harlan H., Engineering and Technology, Ph.D., 1971, University of Colorado
BENJAMIN, James E., Management Systems and Sciences, Ph.D., 1960, University of Illinois
BENNEWITZ, William C., Mathematics, Statistics and Computer Science, Ph.D., 1957, University of Illinois
BERNARDI, Ray D., Business Education and Administrative Services, Ph.D., 1969, University of Oklahoma
BIGHAM, Eldon M., Health, Recreation and Physical Education, M.S., 1969, Southern Illinois University at Edwardsville
BIRNBAUM, Mary Ann, School of Nursing, Ph.D., 1977, Saint Louis University
BLACKHURST, Eric W., Special Education, Ed.D., 1977, University of Northern Colorado
BLACKLEDGE, Walter L., Management, Ph.D., 1951, University of Iowa
BLAIN, Robert R., Sociology, 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, Engineering and Technology, Ph.D., 1971, Purdue University
BOSS, Henry T., Secondary Education, Ed.D., 1955, Colorado State College
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
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
BROADBOOKS, Harold E., Biological Sciences, Ph.D., 1950, University of Michigan
BROWN, Julius, Engineering and Technology, 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
BRUBAKER, H. Bruce, Educational Administration, Ed.D., 1952, Indiana University
BRUGAM, Richard B., Biological Sciences, Ph.D., 1975, Yale University
BRUKER, Robert M., Secondary Education, Ph.D., 1972, Southern Illinois University at Carbondale
BUDDELL, Wilfred, Health, Recreation and Physical Education, M.S., 1968, Washington 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
CADY, Lois M., School of Nursing, M.S., 1962, University of Colorado
CALCAGNO, Philip M., Lovejoy Library, M.L.S., 1969, University of Illinois
CAMPBELL, Paul B., Accounting and Finance, Ph.D., 1981, University of California-Berkeley
CAMPBELL, Robert B., Sociology, Ph.D., 1956, University of Wisconsin
CAMPBELL, Wilbur L. Jr., Business Education and Administrative Services, 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, A.M., 1979, 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
CASSANELLI, Rino, Foreign Languages and Literature, M.S., 1972, Southern Illinois University at Edwardsville

CASSTEVENS, E. Reber, Management, M.S., 1970, Southern Illinois University at Edwardsville
CHEN, Ching-Chih, Historical Studies, Ph.D., 1973, Harvard University
CHENAULT, Joann, Counselor Education, Ed.D., 1958, University of Kentucky
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STAHNKE, Athur A., Government and Public Affairs, 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

STARR, Dartha F., Elementary and Early Childhood Education, Ph.D., 1971, Saint Louis University

STARR, Fay H., Psychology, Ph.D., 1964, University of Texas

STATLER, Luther D., Management, Ph.D., 1977, Saint Louis University

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STEELE, Linda Lillis, School of Nursing, M.S., 1975, Southern Illinois University at Edwardsville

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STEFFEN, Hans H., Management, Ph.D., 1960, University of Nebraska

STEIN, James R., Delinquency Study, Ph.D., 1973, Saint Louis University

STEINBERG, David, Mathematics, Statistics and Computer Science, Sc.D., 1968, Washington University

STEPHEN, G. Gregory, Mathematics, Statistics and Computer Science, Ph.D., 1969, University of New Mexico

STIKES, Charles E., Delinquency Study, Ph.D., 1974, Kent State University

STOPPE, Richard L., Speech Communication, Ph.D., 1966, Wayne State University

STRIEKER, Elizabeth L., School of Nursing, M.S.N., 1978, Saint Louis University

STRIPLING, Luther, Music, D.M.A., 1971, University of Colorado

STROHMEYER, Donald K., Earth Science, Geography and Planning, M.S., 1960, Kansas State University

STUEBER, Alan M., Earth Science, Geography and Planning, Ph.D., 1965, University of California-San Diego

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SULLIVAN, Alvin D., English Language and Literature, Ph.D., 1972, Saint Louis University

SULTAN, Paul E., Management, Ph.D., 1950, Cornell University

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SWAMY, Padmanabha N., Physics, Ph.D., 1963, Delhi University

SWEEZEY, Charles, Theater and Dance, M.F.A., 1974, Brandeis University

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TALLANT, Audrey M., Theater and Dance, M.F.A., 1977, California Institute of the Arts

TARPEY, Paul R., Management Systems and Sciences, Ph.D., 1979, Saint Louis University

TARWATER, William H., Music, Ph.D., 1958, Peabody College

TAYLOR, Donald L., Sociology, Ph.D., 1943, Duke University

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, Foundations of Education, M.A., 1967, Brigham Young University

TETERS, Barbara J., Government and Public Affairs, Ph.D., 1955, University of Washington

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., Earth Science, Geography and Planning, Ph.D., 1973, University of Tennessee

THORNTON, Charles A., Earth Science, Geography and Planning, Ph.D., 1970, University of Tennessee

TIRRE, Barbara, Mass Communications, M.A., 1966, Syracuse University

TRAXLER, Anthony J., Psychology, Ph.D., 1969, Pennsylvania State University

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 HORN, David R., Counselor Education, M.S., 1955, Oklahoma State University

VANCAMP, Leonard W., Music, D.M.A., 1964, University of Missouri

VERDERBER, Nadine L., Mathematics, Statistics and Computer Science, Ph.D., 1974, Ohio State University

VILHAUER, William W., Theater and Dance, Ph.D., 1965, University of Iowa
VIOLA, Ronald E., Chemistry, Ph.D., 1976, Pennsylvania State University
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, Mona Ruddy, School of Nursing, M.S.N., 1964, Washington University
WALLACE, Norval D., Engineering and Technology, Ph.D., 1967, Saint Louis University
WARD, Lynn D., School of Nursing, M.S.N., 1975, Southern Illinois University at Edwardsville
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
WEHLING, Leslie J., Secondary Education, Ed.D., 1964, Washington University
WEINGARTNER, James J., Historical Studies, Ph.D., 1967, University of Wisconsin
WEIR, James E., Management, Ph.D., 1976, University of Iowa
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 Systems and Sciences, Ph.D., 1969, Northwestern University
WESTEFIELD, Louis P., Government and Public Affairs, Ph.D., 1973, Washington University
WHITE, Hollis L., Speech Communication, Ph.D., 1950, University of Missouri
WHITE, J. Edmund, Chemistry, Ph.D., 1958, Indiana University
WHITESIDE, William R., Special Education, Ph.D., 1969, Southern Illinois University at Carbondale
WHITMORE, William J., Marketing, Ph.D., 1970, Ohio State University
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, Educational Administration, Ph.D., 1966, Claremont Graduate School
WILLIAMS, Darrell F., Urban Studies, Ph.D., 1974, University of Washington
WILLIAMS, Robert A., Elementary and Early Childhood Education, Ph.D., 1975, Georgia State University
WILLIAMSON, Ramon N., Music, Ed.D., 1963, Columbia University
WILLIS, William J., Mass Communications, M.A., 1975, East Texas State University
WILSON, Christina B., Biological Sciences, Ph.D., 1976, University of Kansas
WILSON, Glenn T., Management Systems and Sciences, Ph.D., 1969, Carnegie-Mellon University
WILSON, Howell K., Mathematics, Statistics and Computer Science, Ph.D., 1964, University of Minnesota
WILSON, Rudolph G., Secondary Education, B.A., 1964, Stanford University
WILTZ, Alcine J. III, Theater and Dance, M.F.A., 1967, University of Wisconsin
WINTER, Kamil, Mass Communications, Ph.D., 1963, University - Czechoslovakia
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., Earth Science, Geography and Planning, Ph.D., 1972, University of Tennessee
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
ZURHEIDE, Frederick W., Physics, M.S., 1959, Southern Illinois University at Carbondale

DIRECTORY

Below are offices students may need to call or visit, as indicated in the catalog. Building abbreviations are listed at the end of this listing.

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DEPARTMENT OF, PB Rm. 1220 692-3620

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411 E. Broadway, Rm. 2029 692-3000

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EVENING STUDENT SERVICES, Rendl 1207..... 692-2112

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FINANCIAL ASSISTANCE (see Student Work and Financial Assistance)

FOREIGN LANGUAGES AND LITERATURE, DEPARTMENT OF,
PB Rm. 2328 692-3510

FOREIGN STUDENT ADVISEMENT (see International Education)

GENERAL STUDIES PROGRAM (see Academic Advisement)

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Hours of Service (Recorded Message)..... 692-2602
Library Information Services 692-2603

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DEPARTMENT OF, Bldg. 2 Rm. 2328 692-2504

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Rendl Rm. 2105 692-3090

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STUDENT ACTIVITIES OFFICE, UC 692-2686

STUDENT RECORDS, Rendl 1207 692-2260

STUDENT GOVERNMENT,
Student Activities Center 692-3818

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CENTER, Bldg. 3 Rm. 3334 692-3032

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BUILDING ABBREVIATIONS

Bldg. 009	Environmental Resources Training Center
Bldg. 0124	Day Care Center (Tract House No. 24)
Bldg. 0165	Delinquency Study and Youth Development Center (Tract House No. 65)
Bldg. 0168	Cultural Arts and University Museums (Tract House No. 68)
Bldg. 0194	Wagner Complex, Edwardsville
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

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UNDERGRADUATE APPLICATION FOR ADMISSION

SIUE

Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1001

SIUE

Please complete all items on both sides of form and either print or type. The completed forms should be forwarded to the Admissions Office no later than 30 days prior to registration.

1. Applying for term beginning: (Check one box)
(Use numbers) Year ____
☐ Fall ☐ Spring
☐ Winter ☐ Summer

2. Applying as: (Check one box)
☐ First-Time Freshman ☐ Readmission
☐ Transfer

3. Social Security Number

4. Name: Last First Middle
Other names under which credentials may be received

5. Permanent Legal Home Address: Number and Street or Rural Route Apt No
Area Code & Telephone Number
City or Town | County | State (or Country) | Zip Code
Length of time at the above address

6. Are you a resident of Illinois? ☐ Yes ☐ No

7. Birth Date (Use numbers) Month Day Year

8. Birth Place: City State (or Country)

9. Are you a citizen of the United States? ☐ Yes ☐ No
If no, what country? _____
Type of Visa _____
Alien Registration Number _____

10. Have you served or are you serving on active duty with the Armed Forces? ☐ Yes ☐ No
(Use numbers)
From Month Day Year To Month Day Year

11. Mailing Address: (If different from permanent address) Number and Street or Rural Route Apt. No.
Area Code & Telephone Number
City or Town | County | State (or Country) | Zip Code

12. (Check one box) ☐ Parent ☐ Guardian ☐ Spouse
Last name First Middle
Area Code & Telephone Number
Number and Street or Rural Route (If different from permanent address) Apt No
Length of time at this address
City or Town | County | State (or Country) | Zip Code

13. Do you have any health problem which this University should be aware of? If so, explain briefly (response is voluntary):

14. List proposed major (if undecided, write undecided).

15. *List in chronological order all schools at which you have registered, beginning with high school.* TRANSFER STUDENTS MUST REQUEST THE REGISTRAR OF EACH INSTITUTION PREVIOUSLY ATTENDED TO SEND AN OFFICIAL TRANSCRIPT DIRECTLY TO THE ADMISSIONS OFFICE. NEW FRESHMAN STUDENTS MUST HAVE A TRANSCRIPT SENT FROM THE HIGH SCHOOL OF GRADUATION.

Name of High School and College(s)	City	State	Dates Attended or Attending	Diploma or Degree and Date (College Hours Completed)
1.				
2.				
3.				
4.				
5.				

OFFICE USE ONLY

FINAL ACTION

ADMITTED

RANK

ACT COMP

TOP 10%

VETERAN

RESIDENCY

SPECIAL PROGRAM

TRANSCR TO G. S.

CODED

DATE

ADMIT AND HOLD

5455-115

TURN PAGE

10/81

CERTIFICATION

This certification must be signed and dated by the Applicant before action can be taken on this application.

I understand that withholding information requested on this application or giving false information may make me ineligible for admission to the University or subject to dismissal. I certify that the statements I have made on this application are correct and complete.

Signature _____ **Date** _____

Your response to the following is voluntary. The information is requested so that this institution may demonstrate its compliance with Federal regulations.

(Check one box) ☐ American Indian ☐ Black American ☐ Caucasian American ☐ Oriental American ☐ Spanish Surnamed American ☐ Other

TO BE COMPLETED BY YOUR HIGH SCHOOL COUNSELOR OR PRINCIPAL
DOES NOT APPLY TO STUDENT WHO HAS GRADUATED

Name of High School	**Number and Street**
City or Town	**State (or Country)**

This is to certify that the rank in class at the close of the stated semester for the student named on this application is:

_____ (Rank) / _____ (Class size) **at the end of the** _____ **semester.**

Comments or Remarks:

_____ **SIGNATURE AND TITLE OF CERTIFYING OFFICER**

_____ **DATE**

NOTICE

Southern Illinois University at Edwardsville is an equal opportunity/affirmative action employer and administers all of its educational and employment programs in conformity with State and Federal laws prohibiting discrimination based upon sex, race, national origin, age, handicap and other proscribed categories, including Title VI (1964 Civil Rights Act) and Title IX (Higher Education Act), Title IV (General Education Provisions Act) and Section 504 of the Rehabilitation Act of 1973. Inquiries regarding affirmative action in admissions, administration and employment should be directed to the Affirmative Action Office, 3312 Rendleman Building, Southern Illinois University at Edwardsville, Edwardsville, Illinois 62026-1001.

Admissions & Records
Southern Illinois University at Edwardsville
Edwardsville, IL 62026-1001